

## EAST SIDE NEIGHBORHOOD CONNECTIVITY PLAN



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### **EXECUTIVE SUMMARY**

# An oasis of open space

on the southeast side of Chicago, Big Marsh Park is a 297-acre natural area and bike park that draws visitors to enjoy bicycling and outdoor recreation. This report presents a vision to creating a network of high-quality, low-stress transportation facilities that will enable people to walk, bicycle, and enjoy improved access to nature and the scenic beauty of Big Marsh Park.

A key recommendation contained within this report is the proposal to construct a new entrance on the east side of Big Marsh Park near 116th Street and Torrence Avenue. In addition, recommendations include proposed improvements spanning more than 10 miles of roadways, increase access to the Calumet River, and help to connect some of the highest quality open spaces and natural areas on the southeast side of Chicago.

This report proposes more than \$100 million in transportation network improvements to increase accessibility for thousands of residents and visitors traveling from the areas of Hegewisch, Pullman, Jeffrey Manor, Veterans' Park, and Trumbull Park.

#### **OVERVIEW**

#### Vision

Every resident and visitor to the City of Chicago deserves the experience and delight that open space and outdoor recreation can provide. As a 297-acre natural area, Big Marsh Park offers one of the most stunning examples of purposeful reclamation of former industrial space to be enjoyed as an outdoor recreation destination. To improve access to one the most impressive natural areas in Chicago, this report presents a vision to creating an interconnected, high-quality network of low-stress transportation facilities to Big Marsh Park. Strategic transportation improvements will enable people to walk, bicycle, and enjoy improved access to nature and the scenic beauty of Big Marsh.

Big Marsh is an exciting and memorable place to visit, and this report seeks to make it accessible to residents on all sides of the park. By making the park accessible from all directions and for users of all modes, ages, and abilities, Big Marsh can improve connections with its neighbors, increase opportunities for outdoor recreation, and remain respectful of the native species, habitats, and environmental resources of the area.

Big Marsh and its stakeholders envision a collaborative relationship between our industrial neighbors and those who wish to enhance the area's natural resources. By improving connections between our recreation spaces and transportation networks maintained by others, we aim to make Big Marsh Park more accessible for bicyclists and pedestrians, providing more comfort and protection from heavy vehicle traffic.



Torrence Avenue Bridge over the Calumet River

## **Purpose**

The purpose of this report is to identify transportation improvements in and around Big Marsh Park to facilitate improved and more enjoyable to access the park.

The entrance to Big Marsh Park is located at 11559 S. Stony Island Avenue. Residents who live closest to this entrance are located on the southeast side of Chicago. The park entrance is approximately 2.5 miles from the nearest home in the area, making every round trip to the park a minimum 5 miles long. This places the existing entrance out of reach for most walking and bicycling trips.

In order to create a more connected regional attraction for Big Marsh Park and its neighbors, this report analyzes existing transportation networks, gaps and barriers that limit connectivity. A key objective of this plan is to consider a location for an additional entrance on the east side of the park, which would improve walking and bicycling connections on the southeast side.

The area's high quality natural resources are a key feature for what attracts visitors, and their preservation are of critical importance when considering the type and location of transportation investments.

#### **Relevant Plans**

## Active Transportation Alliance Regional Trails Plan

This plan identifies a desired trail connection along Lake Calumet. Created as a vision for a connected trail network, Trail Connect Chicagoland laid the foundation for overcoming obstacles of missing connections to other trails and key destinations.

The plan is guided by the ultimate goal of a well-connected, seamless, low-stress, and equitable regional trail network that makes it easy for every Chicagoland resident to walk and bike for transportation and recreation.

## **Big Marsh Access Action Plan**

The Active Transportation Alliance prepared an action plan that identified priorities for improving access to Big Marsh Park as a complement to the Chicago Park District's plan for improving park facilities at Big Marsh.

## **CDOT Streets for Cycling Plan**

The Chicago Department of Transportation's plan for a 645-mile bike network identifies Big Marsh Park in the Far South section of the plan. Since the plan's adoption, buffered bike lanes have been installed on Stony Island Avenue

connecting to the main entrance to Big Marsh Park. Additional bicycle facilities are recommended on 130th Street and 103rd Street.

### **CDOT Trails and Corridors Plan**

The 2022 update to the citywide trails and corridors plan shows an emphasis on active and potential projects in the vicinity of Big Marsh Park. On and off-street bike connections along Torrence Avenue, 130<sup>th</sup> Street, and the Lake Calumet Trail are a few of the future corridors indicated by CDOT.

## CMAP Regional Greenways and Trails Plan

The CMAP regional plan envisions a network of continuous greenway and trail corridors, linked across jurisdictions, providing scenic beauty, natural habitat, and recreational and transportation opportunities.

As of 2019, 3,164 miles have been constructed as part of this plan in Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry, and Will counties, making it 42.7% complete. This plan includes recommendations for connections on the southeast side of Chicago.



City of Chicago Trails and Corridors Map. Source: Chicago Department of Transportation

## **Connecting Cook County**

Cook County's Long Range Transportation Plan identifies a commitment toward an increasingly connected and multimodal transportation network. The County is currently preparing a Master Bike Plan that will guide the development of adding bicycle facilities along County highways and closing gaps within other areas in Cook County.

## Illinois International Port District Master Plan

The Illinois International Port District (IIPD) Master Plan was adopted in 2021 and proposes a vision to develop the Port through 2050. A key recommendation in this plan is the inclusion of a trail along Lake Calumet with a trail bridge with direct access into Big Marsh Park from the Port District. Long-Term Scenario for the eastern portion of IIPD property south of Big Marsh Park. Source: IIPD Master Plan, CMAP.

# Lake Calumet Trail Feasibility Study

The feasibility study prepared for the Illinois International Port District (IIPD) proposed a trail that would connect planned and proposed bicycle facilities in Pullman, Lake Calumet, and Big Marsh Park. The preferred alignment crosses at the narrowest point of where the Calumet River enters Lake Calumet, and travels along the shore of Lake Calumet to Big Marsh Park.

## Riverdale Multimodal Transportation Plan

The Riverdale Community Area multimodal transportation plan was approved by the plan's Steering Committee in January 2019. A key recommendation from this plan was the addition of a walking and bicycling connection along 130th Street over the Bishop Ford Freeway (I-94).

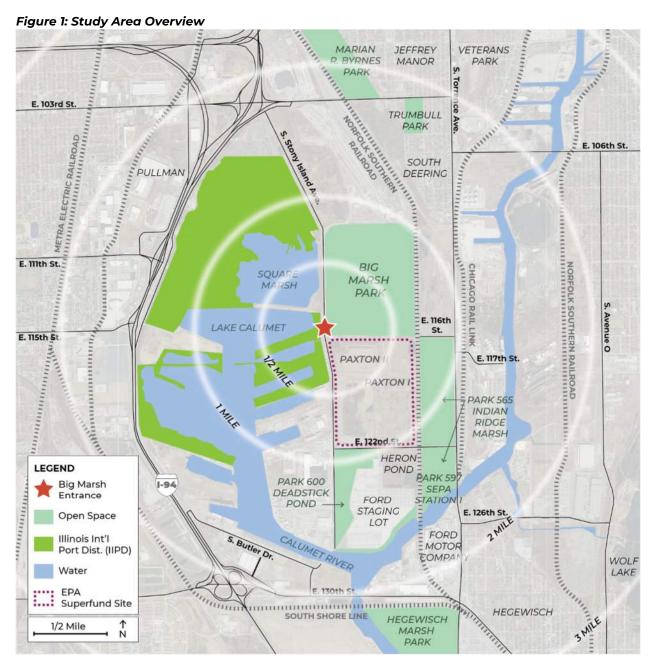
## Southeast Chicago Area Wide Plan

Prepared by the Chicago Park District, this plan focused on transforming former brownfield sites into parks, including what is now Big Marsh Park.

### STUDY AREA OVERVIEW

The study area shown in **Figure 1** is centered on Big Marsh Park, a dynamic 297-acre park containing beautiful, high quality natural resources. The study area limits are 103<sup>rd</sup> Street to the north, 130<sup>th</sup> street to the south, Calumet River to the east, and the Bishop Ford Expressway (I-94) to the west.

Nestled among its urban and industrial surroundings, Big Marsh Park is located on the far southeast side of the City of Chicago. The study area limits for this plan partially overlap with Chicago community areas of East Side, Hegewisch, and South Deering. These areas have a combined population of approximately 64,000 residents. Slightly less than half of these residents (40%) live within the study area.



While three miles is a typical distance to consider for potential walking and bicycling trips, this plan also looked beyond these limits when potential connections may be made to regional trails and networks in Pullman, Riverdale, and near the Indiana State Line (e.g. Major Taylor Trail, Burnham Greenway, William Powers State Recreation Area).

Within the study area, there are several open spaces owned and maintained by the Chicago Park District and security-restricted spaces under the jurisdiction of the Illinois International Port District. These are located near an active composting facility and two state-owned Superfund sites (Paxton I and Paxton II).

## **Key Destinations**

## Big Marsh Park

Big Marsh Park is a 297-acre property on the southeast side of Chicago. Also known as the Calumet Area Reserve, Big Marsh Park is under the jurisdiction of the Chicago Park District.

The vision of Big Marsh is to provide a new type of recreation in Chicago that marries habitat restoration with public use. Roughly 45 acres are developed for eco-recreation opportunities including hiking, adventure courses, and offroad biking. The Ford Calumet Environmental Center is located in Big Marsh Park as a community center and environmental learning facility.

#### **Pullman Historic District**

Pullman Historic District is the site of the first model, planned industrial community in the United States. The district had its origins in the manufacturing plans and organization of the Pullman Company. In 2015, the district was named a National Monument making it a component of the National Park System.

#### **Lake Calumet**

The Illinois International Port District (IIPD) moves more general cargo than any other port on the Great Lakes, with an annual total (waterborne) tonnage of over 19 million tons, maintaining Chicago's place among the top 36 ports in the nation.

Goods, products, natural resources, and finished goods are shipped via the Port throughout the world and are received from all corners of the globe.



Lake Calumet

## **Square Marsh**

Square Marsh is a 180-acre property located west of Big Marsh Park under the jurisdiction of Illinois International Port District. The IIPD is interested in conservation on this property, and as such there are no existing bicycle or pedestrian facilities to or through Square Marsh.

## Park 565, Indian Ridge Marsh

Park 565, also referred to as Indian Ridge Marsh, is an approximately 140-acre property located southeast of Big Marsh Park. It is located on both sides of 122nd Street west of Torrence Avenue. The Chicago Park District owns the land south of 122nd Street. North of 122nd Street, the park is leased to the Park District by the City of Chicago. There is currently a small length of boardwalk trail within the portion of the park that is south of E. 122nd Street.



Boardwalk and native plantings in Park 565/Indian Ridge Marsh

## Park 597, SEPA Station 1

Park 597, also known as Sidestream Elevated Pool Aeration (SEPA) Station 1, is an approximately 11-acre property owned by the Metropolitan Water Reclamation District (MWRD). SEPA Stations are manufactured waterfalls designed to aerate river water, thus improving water quality.

#### **Heron Pond**

Heron Pond is an 80-acre property located due south of Big Marsh Park under the jurisdiction of the City of Chicago. A Chicago Police Department gun range was previously located at Heron Pond but is no longer active. There are no existing bicycle or pedestrian facilities to or through Heron Pond.

#### Paxton I & II

North of Heron Pond, there are two landfill sites managed by the Federal Environmental Protection Agency (EPA) and the Illinois EPA. Within the property, there is a composting landfill. The Paxton landfill site is a Federally regulated Superfund Site.

## Park 600, Deadstick Pond

Park 600, also known as Deadstick Pond, is a 65-acre property located south of Big Marsh Park. The Chicago Park District has an active lease for this property from the MWRD. There are no existing bicycle or pedestrian facilities to or through Park 600/Deadstick Pond.

### Marian R. Byrnes Park

Marian R. Byrnes Park an approximately 140-acre property located north of E. 103<sup>rd</sup> Street under the jurisdiction of the Chicago Park District. There are existing asphalt trails, gravel and mulch trails, wetlands and woodlands. Currently one on-site grant has been awarded to continue making recreational improvements within the park. Previously multiple grants have focused on ecological restoration.

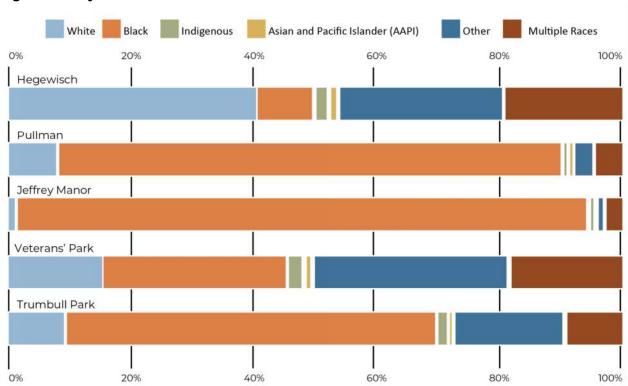
### Wolf Lake State Recreation Area

Wolf Lake State Recreation State Recreation Area is a 508-acre property, of which 419-acres are water. Wolf Lake State Recreation Area includes Wolf Lake and William Powers State Recreation Area and is located southeast of Big Marsh Park. Wolf Lake is under the jurisdiction of the Illinois Department of Natural Resources and the William Powers State Recreation Area including the overlook to Wolf Lake is under the jurisdiction of Cook County Forest Preserve.

## **Community Context**

Those who live closest to Big Marsh Park would benefit the most from improved walking and bicycling connectivity. These areas include Hegewisch, East Side, and South Deering. Neighborhoods within South Deering include Jeffrey Manor, Veterans' Park, and Trumbull Park. Pullman, which is located west of I-94, also is included in the analysis, as planned trail improvements through the Illinois International Port District could place these users within reach of Big Marsh Park. Race by community area and neighborhood is shown in **Figure 2.** Ethnicity is shown in **Figure 3** to denote the share of residents who identify as Hispanic or Latino.

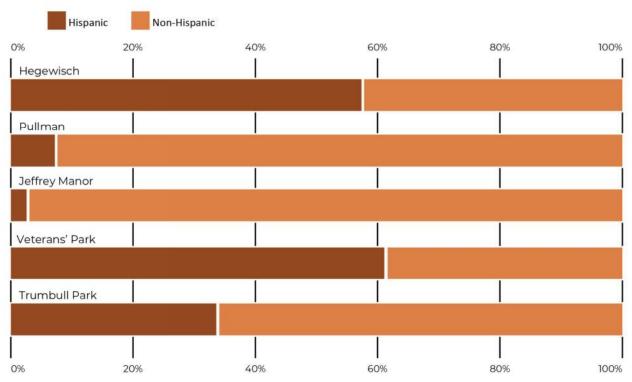
Figure 2: Study Area Race



Community Area	Neighborhood	Population	White	Black	Indig- enous	AAPI*	Other	Multi- Race
Heg	gewisch	9,988	41.65%	9.13%	1.70%	0.64%	27.23%	19.64%
Pι	ıllman	6,820	7.96%	84.46%	0.16%	0.13%	2.86%	4.43%
	Jeffrey Manor	5,690	0.95%	97.00%	0.18%	0.02%	0.69%	3.15%
South Deering	Veterans' Park	5,313	15.94%	30.70%	2.15%	0.32%	32.26%	18.63%
	Trumbull Park	2,507	9.25%	62.03%	1.40%	0.12%	17.99%	9.21%
*Asian and Pacific Islander								

Source: United States Census, 2020

Figure 3: Study Area Ethnicity



Community Area	Neighborhood	Population	Hispanic or Latino	Not Hispanic or Latino
Heg	ewisch	9,988	57.70%	42.30%
Pu	llman	6,820	7.23%	92.77%
	Jeffrey Manor	5,690	2.41%	97.59%
South Deering	Veterans' Park	5,313	61.36%	38.64%
	Trumbull Park	2,507	33.75%	66.25%

Source: United States Census, 2020

### **EXISTING TRANSPORTATION NETWORK**

## **Roadway Characteristics**

The transportation network surrounding Big Marsh Park is maintained by several agencies, including the City of Chicago, Cook County, and the Illinois Department of Transportation (IDOT). Existing roadway characteristics are shown in **Figure 4**. Roadway and Railroad Jurisdiction is shown in **Figure 5**.

Figure 4: Roadway Characteristics

	Agency of Jurisdiction	Automobile Travel Lanes	Posted Speed	Annual Average Daily Traffic (AADT) <sup>1</sup>	Bike Facility	Sidewalk
Bishop Ford Freeway (I-94)	IDOT	6	55	147,000	No	No
103 <sup>rd</sup> Street	Cook County / Chicago	4	35	25,400	No	Yes
106 <sup>th</sup> Street	IDOT	4	30	8,050	No	Yes
116 <sup>th</sup> Street	Chicago	2	30	< 300	No	No
117 <sup>th</sup> Street	Chicago	2	30	< 300	No	No
122 <sup>nd</sup> Street	Chicago	2	30	4,800	No	No
126 <sup>nd</sup> Street	Chicago	2	30	6,459	No	Yes
130 <sup>th</sup> Street	IDOT / Chicago	4	35	23,500	Sidepath (partial)	Yes
Torrence Avenue	IDOT / Chicago	4	35	17,200	No	Yes
Stony Island Avenue	Chicago	2	30	1,700	Yes (Buffered Bike Lanes)	No
Avenue O	IDOT / Chicago	4	30	12,800	No	Yes
Butler Drive	Chicago	2	30	~ 800	No	No

Source: IDOT.

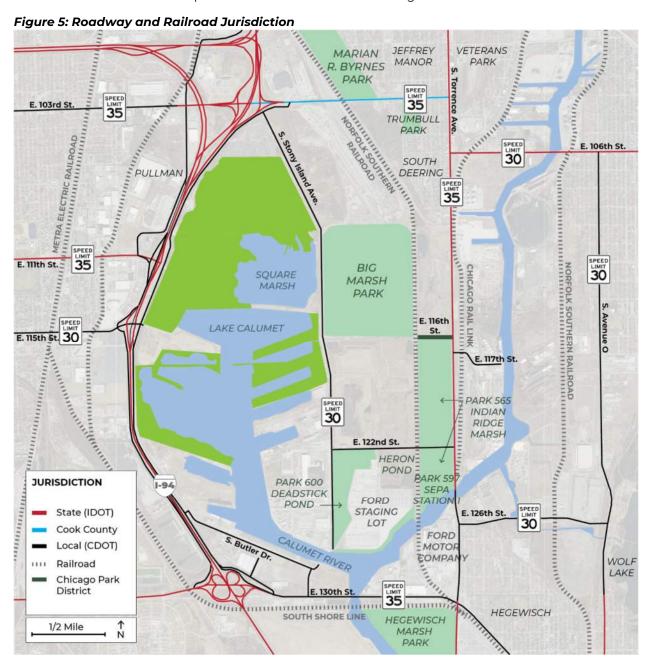
#### Norfolk Southern Railroad

The Norfolk Southern Railroad is located along the eastern edge of Big Marsh Park. There is one atgrade road-rail crossing in the study area at 122nd Street. Other crossings involve a roadway bridge at 103rd Street and railroad bridge at 130th Street. 116th Street between Torrence Avenue and the railroad tracks is an unimproved right-of-way that is under the jurisdiction of the Chicago Park District.

<sup>1.</sup> Annual Average Daily Traffic (AADT) Data provided by IDOT was collected in 2018-2019.

Railroads often act as barriers, as roadway-rail crossings are spaced far apart, and the addition of new roadway-level railroad crossings is rare. New roadway-rail crossings can create conflicts for user safety, and blocked roadway-rail crossings create traffic congestion for roadway users as well as negatively impact railroad operations.

The Norfolk Southern Railroad right-of-way near 116th Street is approximately 60 feet wide. Any proposed improvement near the railroad would need to be constructed on property outside of the railroad right-of-way, but could include a bridge over the railroad tracks. Proposed grade-separated improvements (e.g. a bicycle pedestrian bridge) over the Norfolk Southern Railroad would require a 25-foot vertical clearance from top of rail to the underside of the bridge.



## **Level of Traffic Stress**

Level of Traffic Stress (LTS) is a qualitative measure to describe how stressful a roadway feels from the perspective of a bicyclist. An LTS score is based on roadway width, posted speed, number of lanes, and amount of separation between a bicyclist and automobile traffic.

Low-stress roadways (LTS 1 or 2) generally require fewer changes in order to be considered attractive and comfortable for most potential users. Higher speed, higher stress roadways (levels 3 and 4) are stressful for nearly everyone (including those driving), and even the most confident on-road bicyclists would be sharing a road with high speed traffic. In these cases, bicycle facilities that are physically separated from roadway are treatments that can make roadways more inviting and comfortable for everyone.

- LTS 1: Roadways are low-stress, low-speed facilities like many neighborhood streets and cul-desacs. Most residential streets in the study area are LTS 1.
- LTS 2: Roadways are shared facilities with posted speeds under 30 miles per hour or roads with bike lanes and posted speeds under 35 miles per hour.
- LTS 3: Roadways are shared roads under 35 miles per hour or roads with bike lanes and posted speeds under 40 miles per hour.
- LTS 4: Roadways are any shared roadway with posted speeds at or above 35 miles per hour and roadways with bike lanes and posted speeds at or above 40 miles per hour.
- LTS is not assigned to interstates because pedestrian and bicyclist traffic is prohibited.

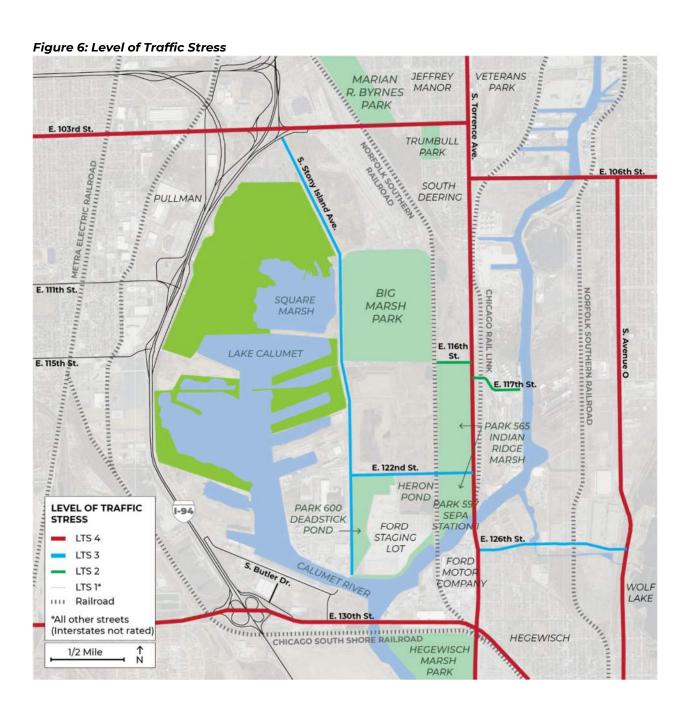
The photographs below show examples of roadways in the study area and their associated LTS. A roadway Level of Traffic Stress map is shown in **Figure 6**.



104th Street near Torrence Avenue, LTS 2. Source: Google Maps



Torrence Avenue at 130th Street, LTS 4.



## **Bicycle and Pedestrian Facilities & Gaps**

Existing bicycle and pedestrian facilities are shown in Figure 7.

- Buffered bike lanes on Stony Island Avenue between 122nd Street and 103rd Street
- A sidepath on the south side 130th Street between the east bank of the Calumet River and Torrence Avenue
- A sidepath on the north side of 126th Street between Torrence Avenue and Avenue O
- A sidepath on the east side of Torrence Avenue between 126th Place and the Torrence Avenue Bridge at the Calumet River
- Bike lanes on 100th Street between Torrence Avenue and Indianapolis Avenue (US 41)

These bicycle facilities do not currently connect to each other. In terms of pedestrian-specific infrastructure, pedestrians are permitted to use sidepaths, but cannot use bike lanes. Sidewalk gaps are shown in to highlight where there is no pedestrian infrastructure, which is a barrier to pedestrian access to Big Marsh Park.

Pedestrian infrastructure *gaps*, defined as the lack of sidepaths or sidewalks, are present in the following locations and are shown in red in **Figure 7**:

- Stony Island Avenue between 122nd Street and 103rd Street. While there are bike lanes along this section, there are no pedestrian facilities of any kind.
- 103rd Street between the Metra Electric District Railroad Tracks and Stony Island Avenue (sidewalks to the east of this location terminate 230' east of Stony Island Avenue)
- 116th Street and 117th Street between the Norfolk Southern Railroad and Calumet River
- Torrence Avenue (nearly all) between the Torrence Avenue bridge at the Calumet River and 110th Street
- 122nd Street between Stony Island Avenue and Torrence Avenue
- 130th Street between the western limit of the study area (extending all the way into Riverdale) and Torrence Avenue
- Avenue O (nearly all) between 130th Street and 114th Street (relatively new sidewalks exist along the south half of the block of Avenue O between 118th Street and 117th Street).

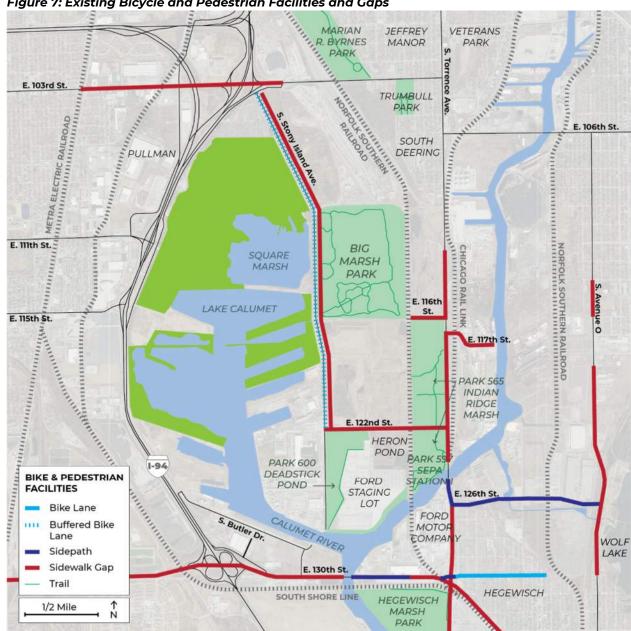


Figure 7: Existing Bicycle and Pedestrian Facilities and Gaps

## **Crash Analysis**

Crash data were reviewed for years 2016 – 2020, the most recent five-year period for which crash data are available. During this period, 2,639 crashes were reported in the study area. Crashes by type reported in the study area are shown in **Figure 8.** A map of crashes by location is shown in **Figure 9**.

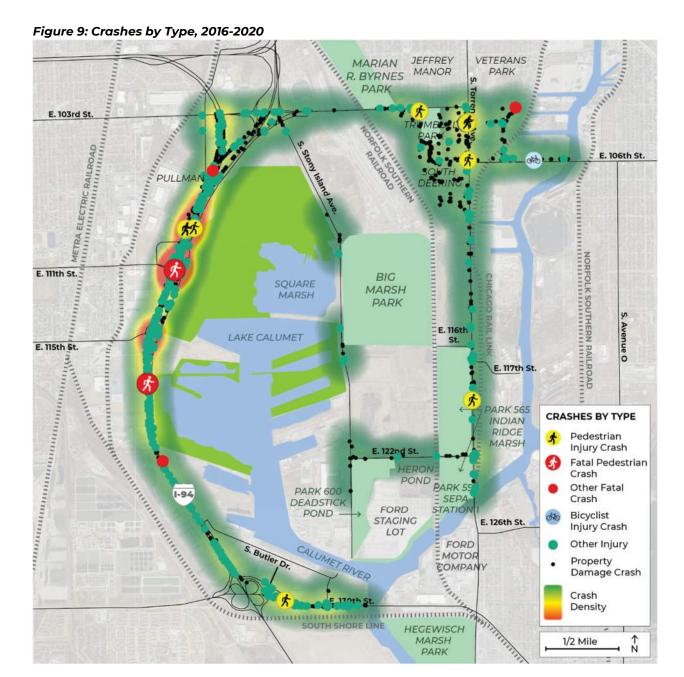
A summary of this analysis is provided below. While bicycle and pedestrians are involved in a minority share of total crashes, they are overrepresented in injury crashes and are more likely to be seriously injured or killed when involved in a crash.

- 2,639 crashes were reported in the study area between 2016 and 2020.
- 10 of these 2,639 crashes were fatal crashes, 2 of which were pedestrian fatalities.
- 54 reported crashes resulted in serious injury to one or more persons involved.
- 1 crash involved a bicyclist which also involved injury to the bicyclist.
- 12 pedestrian crashes were reported, 2 were fatal and 9 involved injury to the pedestrian (75% pedestrian crash-to-injury rate).
- While bicycle and pedestrian crashes make up only 0.50% of all crashes within the study area, they represent 19% of all injury crashes and 20% of all fatal crashes.

Figure 8: Crashes by Type (2016 - 2020)

	2016	2017	2018	2019	2020	Total
All Crashes	453	495	592	551	548	2,639
All Fatal Crashes	0	3	3	1	3	10
All Injury Crashes	8	11	16	14	5	54
Bike Crashes	0	0	1	0	0	1
Bike Fatalities	0	0	0	0	0	0
Bike Injuries	0	0	1	0	0	1
Pedestrian Crashes	3	0	4	4	1	12
Pedestrian Injuries	3	0	3	3	0	9
Pedestrian Fatalities	0	0	1	0	1	2

Source: IDOT. Disclaimer: Motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s).



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## **Walk Score and Bike Score**

Walk Score and Bike Score are qualitative measures that assign a score of 0 to 100 to areas based on their proximity to key destinations and the presence of infrastructure to support walking and bicycling. Scores for each neighborhood in the study area are shown in **Figure 10**.

#### Walk Score

Walk Score is a system that defines how pedestrian-friendly an area is by awarding weighted points to amenities within a five to 30-minute walk. Walk Scores between 0-49 are assigned to car-dependent areas that require a car for most errands. Scores between 50-69 are somewhat walkable where some errands can be accomplished on foot, and Scores above 70 are very walkable where most errands can be accomplished on foot.

## **Bike Score**

Bike Score is a similar system to Walk Score and assigns scores to areas based on presence of bicycling infrastructure, road connectivity, and the number of bike commuters. Bike Scores between 0-49 are somewhat bicycle friendly with minimal bike infrastructure, Bike Scores between 50-69 are moderately accessible with some bike infrastructure, and Bike Scores above 70 are very bicycle friendly where bicycling is a convenient form of transportation for most trips.

Figure 10: Neighborhood Walk and Bike Score

Neighborhood	Walk Score (#/100)	Bike Score (#/100)
Hegewisch	51	56
Pullman	44	49
South Deering	45	45
Jeffrey Manor	56	48
Veterans' Park	48	49
Trumbull Park	26	36

Note: Walkscore.com is a tool that assigns a rating to locations based on proximity to services and key destinations. It is designed to show how walkable or bicycle friendly an area may be perceived. It is intended to serve as a supplement to other factors and should be considered in context of other variables, such as posted speed, presence of facilities, and crashes.

## **Transit Facilities and Truck Traffic**

Transit service has the potential to provide connections to Big Marsh Park. Additionally, the ability to bring a bicycle onto transit extends the potential reach for visitors traveling to the park. Existing facilities and service for Metra, CTA, and Pace are shown in **Figure 11**.

Figure 11: Study Area Transit



#### Metra

There are four Metra stations along the Metra Electric District, which are located along the western side of the study area. Stations are located at 103<sup>rd</sup> Street (Rosemoor), 107<sup>th</sup> Street, 111<sup>th</sup> Street (Pullman), and Kensington / 115<sup>th</sup> Street.

All of these stations are located west of the Bishop Ford Freeway (I-94) and are approximately 4-5 miles from the entrance to Big Marsh Park. A proposed IIPD shared use trail along the shore of Lake Calumet would reduce this distance to approximately 2 miles from the nearest Metra Station.

#### CTA & Pace

CTA operates 12 routes in the study area: J14, 15, 26, 28, 30, 71, 100, 106, 111a, 115, 353, and 358. Pace operates Route 353 runs along Doty Avenue and provides connection to the study area from the north and southwest.

The nearest CTA Station is the Red Line 95<sup>th</sup> Street Station, located 5.5 miles from Big Marsh on 95th Street adjacent to the Dan Ryan Expressway (I-94). The CTA Stony Island Garage Terminal is located 2 miles from Big Marsh Park, near the southern terminus for the CTA Route J14 Jeffrey Jump. CTA's planned extension of the Red Line to 130th Street would place the nearest Red Line Station 4.4 miles from Big Marsh Park.

### Ford Plant Truck Routes

The Ford Motor Company is an industrial neighbor whose manufacturing activities generate a unique daily traffic pattern between the factory on Torrence Avenue and its storage lot on 122nd Street. Every day, vehicles produced in the factory are driven along Torrence Avenue, across the Calumet River bridge, and parked in a storage lot located on 122nd Street between Stony Island Avenue and Torrence Avenue.

The vehicle staging lot is a 115-acre property located southwest of Big Marsh Park. Vehicles manufactured in this area are estimated to produce approximately half of the average daily traffic on Torrence Avenue, many of which are heavy vehicles.



Truck traffic on 122nd Street

## **Transit Score**

Transit Score is a measurement of the effectiveness of transit for an area. It is a function of frequency of transit routes and distance to the nearest stops. Transit Scores between 0-49 have few nearby public transportation options, Transit Scores between 50-69 have many nearby public transit options, and Transit Scores above 70 are convenient areas to use transit for most trips. Transit Scores for neighborhoods in the study area are shown in **Figure 12**.

Figure 12: Neighborhood Transit Score

Neighborhood	Transit Score (#/100)
Hegewisch	34
Pullman	62
South Deering	52
Jeffrey Manor	50
Veterans' Park	49
Trumbull Park	51

Note: Walkscore.com is a tool that assigns a rating to locations based on their proximity to services and key destinations. It is designed to show how walkable or bicycle friendly an area may be perceived. It is intended to serve as a supplement to other factors and should be considered in context of other variables, such as posted speed, presence of facilities, and crashes.

## **Planned and Programed Improvements**

Planned and programmed improvements under way in the vicinity of Big Marsh Park are shown in **Figure 13**.

#### 111th Street Bridge and Interchange Improvements

IDOT is working on interim bridge repairs for the III<sup>th</sup> Street Bridge over I-94. In a separate effort, IDOT is working on a planning study to improve the III<sup>th</sup> Street interchange at I-94 which would include bicycle facilities along III<sup>th</sup> Street, across I-94, and would connect to Doty Avenue. These improvements would provide bicycle and pedestrian connectivity along III<sup>th</sup> Street between the neighborhood of Pullman and the Illinois International Port District.

## **Big Marsh Park Improvements**

Improvements at Big Marsh park include new trails within the park, a wildlife observation platform, a camping area, and a picnic area within Big Marsh Park. Improvements to the trail network in Big Marsh Park were completed in August 2022.

#### **Butler Drive Improvements**

The Illinois International Port District has partnered with CCDOTH, IDOT, and RailWorks to reconstruct Butler Drive at Lake Calumet between E. 130<sup>th</sup> Street and the south bank of the Calumet River. Improvements are expected to be complete by 2023. Construction is not anticipated to impact connectivity to Big Marsh Park.

## **Burnham Multimodal Connector Project**

Cook County is working to complete the preliminary engineering study to connect northern and southern sections of the Burnham Greenway, closing a 2.5-mile gap in the trail network in southern Cook County. Closure of this gap will improve trail connectivity for users south of Big Marsh Park.

## CTA Red Line Extension to 130th Street

The Chicago Transit Authority (CTA) is extending the Red Line from its southern terminus at 95<sup>th</sup> Street to 130<sup>th</sup> Street. This will include 4 new stations at 103<sup>rd</sup> Street, 111<sup>th</sup> Street, Michigan Avenue, and 130th Street. Construction is anticipated to begin in 2025 with service beginning in 2029.

## **Doty Avenue Improvements**

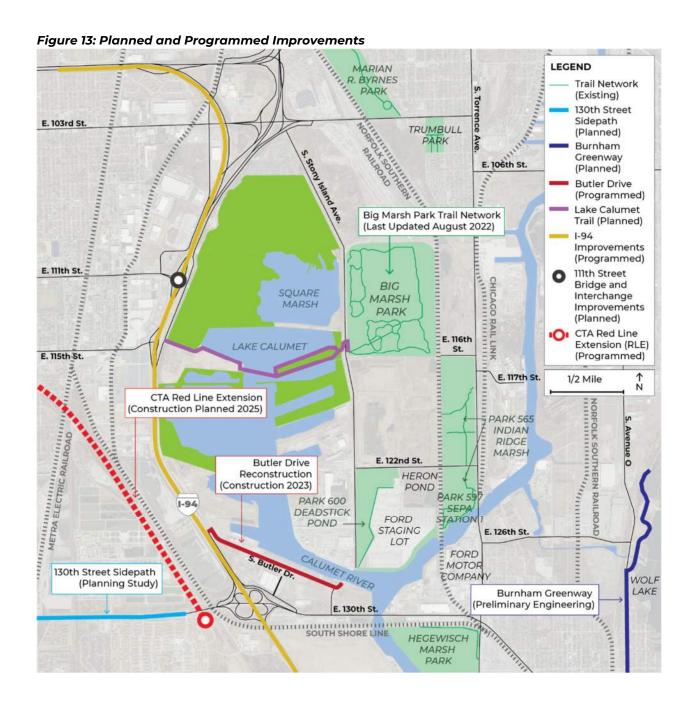
IDOT is working on a planning study for drainage improvements along Doty Avenue between Kensington Avenue and 110<sup>th</sup> Street to alleviate flooding along Doty Avenue and I-94.

## I-94: Martin Luther King Drive to US 6 (159th Street)

IDOT is working on a planning study to improve roadway conditions, drainage, and provide bridge and signage improvements along the I-94 corridor.

## Shared Use Path on 130th Street (Planning Study)

A planning study is under way to improve a shared use path on 130<sup>th</sup> Street between Indiana Avenue and Ellis Avenue, closing a gap in the Altgeld Gardens neighborhood within the Riverdale Community Area of Chicago.



## **ENVIRONMENTAL RESOURCES**

## **Floodplain**

FEMA floodplain maps 17031C0655J, 17031C0658J, 17031C0659K, 17031C0661J, 17031C0662J, 17031C0670J cover the entire project area and are shown in **Figure 14**. Parts of Big Marsh Park are located within 'Zone A' Special Flood Hazard Area, which is classified as a location with a 1% chance of flooding in a given year. The majority of the park and most roads fall outside Zone A, indicating minimal flood risk.

BIG
MARSH
PARK

## Wetlands

There are several wetlands within the study area, most of which are located on Park District property. For this study, data from the US Fish and Wildlife Service National Wetlands Inventory are shown in **Figure 15**.

Wetland impact regulations limit how much construction is feasible, and planned transportation improvements should minimize or mitigate impacts in the form of replacing or expanding the quality and size of wetlands within the same watershed to the maximum extent feasible. The Chicago Park District is completing wetland protection and improvement projects near Torrence Avenue and 116<sup>th</sup> Street.





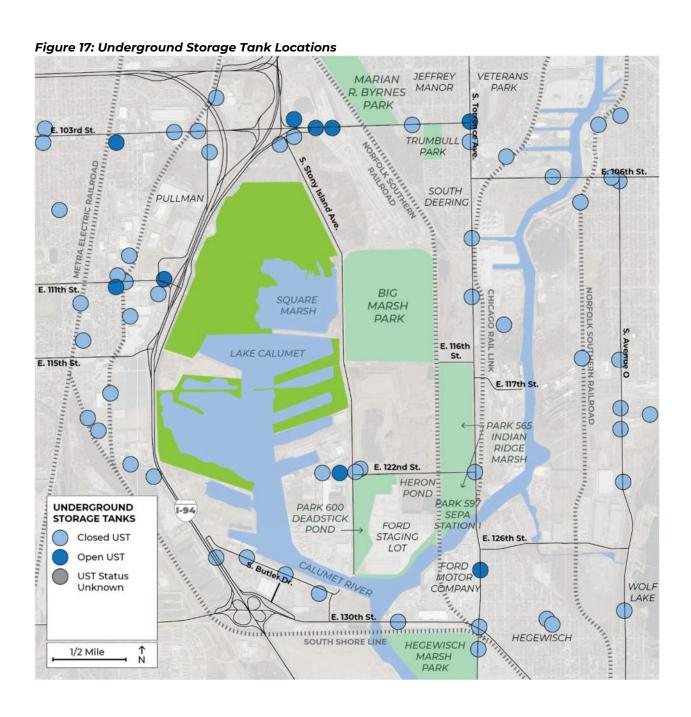
## **Suitable and Contaminated Soils**

A soils map and table are shown in **Figure 16** which identifies whether polluted or contaminated soils would be disturbed during construction. Known locations of underground storage tanks (UST) within the overall study area are shown in **Figure 17**. Underground storage tanks in the study area are located along I-94, 103<sup>rd</sup> Street, 106<sup>th</sup> Street, 122<sup>nd</sup> Street, 130<sup>th</sup> Street, Torrence Avenue, and Avenue O.

An investigation of soil quality and presence of USTs would be required for any proposed transportation improvement that uses federal funds. It is anticipated that special waste (e.g. contaminated soil) would need to be removed or remediated as part of planned sidewalk, sidepath, or roadway improvements in the area.

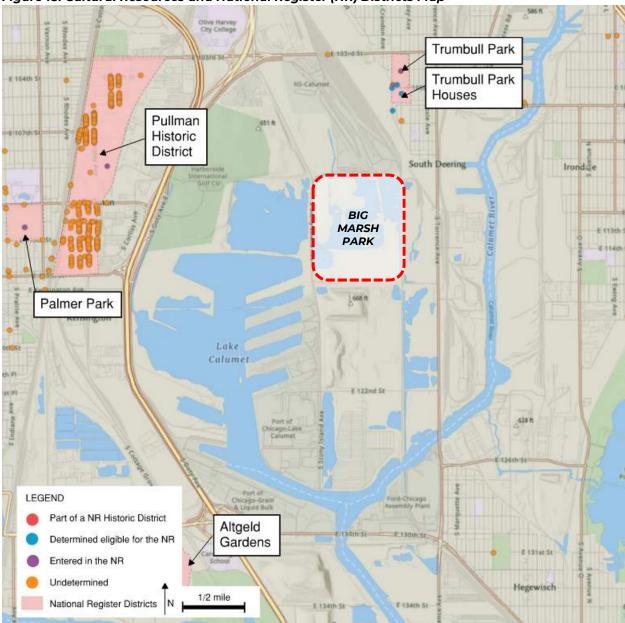
Figure 16: Soils Map





## **Cultural Resources**

A map of historical and archaeological resources is shown in **Figure 18**. When planning for transportation improvements, federally-funded projects would be required to avoid negative impacts to buildings, structures, sites, objects, or districts that are listed in the National Register (NR) of historic places. As a result, proposed improvements along 103rd Street would need to consider potential impacts to the Trumbull Park and Pullman Historic District NR districts.



## Threatened & Endangered (T&E) Species

An Ecological Compliance Assessment Tool (EcoCAT) analysis was used to determine what protected species may be present in the study area. While this plan does not confirm the presence of these species or their habitat, it is a useful tool to determine the potential for species or habitat impacts when considering proposed transportation improvements.

The following species may be present in the study area. While proposed improvements will occur mostly on existing roadways, biological surveys for projects in the study area may identify one or more of the following species:

- Black-Crowned Night Heron (Nycticorax nycticorax)
- Blanding's Turtle (Emydoidea blandingii)
- Common Moorhen (Gallinula chloropus)
- Few-Flowered Spike-rush (Eleocharis quinqueflora)
- Franklin's Ground Squirrel (Poliocitellus franklinii)
- Golden Sedge (Carex aurea)
- Grass-Leaved Pondweed (Potamogeton gramineus)
- Least Bittern (Lxobrychus exilis)
- Little Blue Heron (Egretta caerulea)
- Little Green Sedge (Carex viridula)
- Mountain Blue-Eyed Grass (Sisyrinchium montanum)
- Mudpuppy (Necturus maculosus)
- Osprey (Pandion haliaetus)
- Richardson's Rush (Juncus effuses)
- Western Banded Killifish (Fundulus diaphanous)
- Yellow-Crowned Night Heron (Nyctanassa violacea)
- Yellow-Headed Blackbird (Xanthocephalus xanthocephalus)
- Yellow-Lipped Ladies' Tresses (Spiranthes lucida)

## **ENGAGEMENT**

Engagement with stakeholders is of critical importance, as these improvements are most successful when they come from those who would most benefit. For this plan, Friends of Big Marsh convened a steering committee of:

- (1) Agency representatives who have jurisdiction over roadways or open spaces near where improvements are recommended
- (2) Residents and community leaders seeking improved walking and bicycling comfort and safety
- (3) Community leaders with knowledge of area industrial, commercial, and environmental issues that could be affected by improved walking and bicycling infrastructure

Engagement with these groups began during the existing conditions and exploration stage in order to ensure projects were developed with stakeholder input, and improve the quality, connectivity, and equity considerations for project development.

Recommendations within this report were vetted for their technical feasibility, consider potential environmental impacts, and connect the network to the communities and region at large.

## **Steering Committee**

The steering committee is comprised of the following agencies and representatives:

- Friends of Big Marsh (FOBM)
- Chicago Park District (CPD)
- Chicago Department of Transportation (CDOT)
- Chicago 7<sup>th</sup> Ward
- Chicago 10<sup>th</sup> Ward
- Cook County Department of Transportation and Highways (CCDOTH)
- Ford Motor Company
- Illinois Department of Transportation (IDOT)
- Illinois International Port District (IIPD)
- Norfolk Southern Railroad (NS)

#### Meeting #1

The first steering committee meeting was held on August 31, 2022 at the Ford Calumet Environmental Center in Big Marsh Park. The existing conditions report was presented to the steering committee and their feedback on the direction and key objectives of the project were surveyed and incorporated into the overall plan.

## Meeting #2

The second steering committee meeting was held on April 25, 2023 at the Ford Calumet Environmental Center in Big Marsh Park to present and collect feedback regarding proposed recommendations.

## **Agency Coordination Meetings**

Draft recommendations were provided to each roadway agency having jurisdiction in the study area (CDOT, CCDOTH, IDOT, Chicago Park District) for review and comment. Friends of Big Marsh met with each agency to review and discuss proposed improvements, and discuss factors affecting design and construction.

## **Park District Engagement**

The Friends of Big Marsh and the Chicago Park District hosted a Birds, Bikes, and Beats community event at Big Marsh Park on September 24, 2022. The consultant team attended the event to spread awareness and inform the public on the planned improvements in the overall study area.



Engagement poster, Friends of Big Marsh fundraising event, November 2022



Engagement poster, Birds, Bikes, and Beats event, September 2022

## **Print & Social Media Engagement**

Media content and public notices were prepared to align with release of documents, and were made available to a wider audience of partners and representatives from the following organizations:

- Active Transportation Alliance
- Calumet Area Industrial Commission
- Calumet Collaborative
- Calumet Heritage Project
- Chicago Department of Planning and Development (DPD)
- Chicago Park District
- Field Museum
- Lake Calumet Vision Committee
- Openlands
- Ozinga
- Southeast Environmental Task Force (SETF)
- Walsh Construction

### **KEY FINDINGS**

#### There is no east side entrance to Big Marsh Park

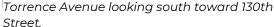
The southeast corner of Big Marsh Park is located where 116<sup>th</sup> Street meets the Norfolk Southern Railroad, and there is no crossing. Aerial power lines are located along the south side of 116<sup>th</sup> Street that extend up to and across the railroad tracks. Chicago Park District-led wetland improvements are in progress near the western end of 116<sup>th</sup> Street. A culvert crossing under 116<sup>th</sup> Street exists to direct wetland runoff in Park 565/Indian Ridge Marsh to the north.

There is no entrance to the park at this location. Residents living on the east side of the park currently have to travel around to the west side of the park. The nearest home to the Big Marsh Park entrance is 2.5 miles away, resulting in a minimum 5-mile round trip to the park. This is beyond reach for most walking and bicycling trips.

## There are no bicycle or pedestrian facilities on 122nd Street between Stony Island Avenue and Torrence Avenue

122nd Street is a two-lane roadway between Paxton Avenue and Torrence Avenue. While it does cross the railroad tracks, there are no sidewalks nor bicycle facilities, and heavy vehicle traffic is common on this roadway. Aerial power line poles are located close to the roadway edge.







130th Street Railroad Bridge over Torrence Avenue

There are buffered bike lanes on Stony Island Avenue, but they do not connect to other facilities. Tall grasses on both sides of the roadway limit visibility around curves, at entrances and along the roadway. The Ford Manufacturing Plant utilizes 122nd Street to transport recently manufactured vehicles from the plant to the staging lot, resulting in regular and frequent heavy vehicle traffic on a narrow roadway with limited width and reduced visibility.

### There are no bicycle facilities on Torrence Avenue

Torrence Avenue is a four-lane roadway on the eastern end of the study area. Aside from Stony Island Avenue, Torrence Avenue is the only other north-south roadway in the vicinity of Big Marsh Park. There is a sidepath along the east side of Torrence Avenue between 126th Street and the Torrence Avenue Bridge over the Calumet River, but it ends at the river.

An existing sidepath on the south side of 130th Street crosses over Torrence Avenue on a structure, and connects to bike lanes on 130th Street between S. Saginaw Avenue and Baltimore Avenue. Torrence Avenue is a high-stress roadway (LTS 4). Gaps in the sidewalk along Torrence Avenue create a disconnected network for pedestrians. While Saginaw Avenue runs parallel to Torrence Avenue between 130th Street and 126th Place, there is no connection to 126th Street, such that a local roadway

connection using Saginaw Avenue between 130th Street and 126th Street cannot be made by anyone walking or bicycling.

There is no entrance to the park at the southeast corner, and there is a pedestrian facility gap on Torrence Avenue between 116<sup>th</sup> Street and 108<sup>th</sup> Street. The gap in sidewalk limits the access to the key destinations in the study area.

### Stony Island Avenue lacks pedestrian facilities, and there is no pedestrian entrance to Big Marsh Park

Stony Island Avenue is a two-lane roadway with unpaved shoulders on the west side of Big Marsh Park. There are existing buffered bike lanes on Stony Island Avenue between 122nd Street and 103rd Street. There is a history of drag racing and speeding along Stony Island Avenue in this location.

Drag racing has been reported on Stony Island Avenue near the park. The roadway is secluded from urban areas, and the road is long and straight without driveways or cross streets for long stretches. Drag race participants park vehicles at either end of the roadway to scan for police patrols.

While buffered bike lanes along this section of Stony Island Avenue are some of the first on-street bike facilities installed in this area of the city, they are not connected to other bicycle facilities. A known history of drag racing and presence of heavy vehicles makes turning left in an on-street environment stressful for bicyclists. There are no pedestrian facilities on Stony Island and no marked crossing at the entrance to Big Marsh Park, nor at any other location along Stony Island Avenue.

## A more connected walking and bicycling network could bring approximately 11,300 additional residents within a 3-mile network distance of Big Marsh Park

Currently, 16,900 residents are located within a 3-mile roadway trip to the western entrance of Big Marsh Park.

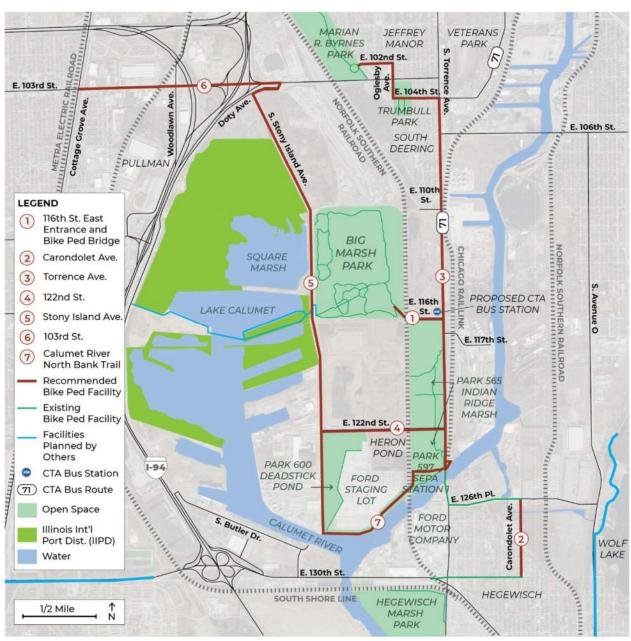
If a second entrance were constructed on the east side of the park and walking and bicycling facilities were provided to it, this would increase accessibility to the park by approximately 66%, placing an additional 11,300 residents within a potential 3-mile walking and bicycling distance of Big Marsh Park. The total combined population that would live within this distance would be 28,200 residents, slightly more than 50% of the total combined populations of residents living within the East Side and South Deering community areas.

#### RECOMMENDATIONS

To create a connected walking and bicycling network around Big Marsh Park, this report recommends improvement in seven (7) areas as shown in **Figure 19.** 

Proposed improvements include bike lanes, sidewalks, sidepaths, improved bus stops, and new trails. To implement these recommendations, changes are proposed to existing roadway widths, either through lane narrowing or the reconfiguration of automobile travel lanes and parking lanes. Unless otherwise stated, all recommendations are proposed to be implemented within existing right-of-way limits. Recommended projects can be pursued in any order; project numbers are assigned for reference only.

Figure 19: Recommended Transportation Improvements



#### 1. 116th Street - East Side Entrance & Bridge

#### Recommendation

Construct a new park entrance and bicycle-pedestrian bridge connecting Big Marsh Park to 116th Street.

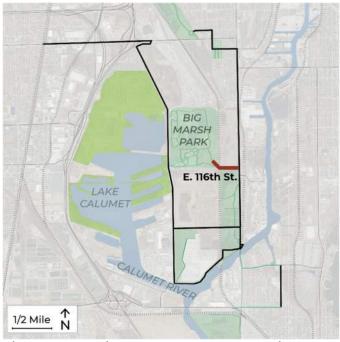


Figure 20: Location Map, 116th Street East Side Entrance & Bridge

#### **Existing Conditions**

- 116th Street is a public right-of-way under the jurisdiction of the City of Chicago. It is unpaved and is approximately 35' wide with a right-ofway width of approximately 66'.
- Utility poles and power lines are located along the south side of the road. There are fences on north side of the road.
- The Norfolk Southern railroad is located between Big Marsh Park and 116th Street. There are no railroad crossing gates at 116th Street.
- CTA Bus Route 71 terminates at a layover at the intersection of Torrence Avenue and 112th Street.

- **New Bridge.** Construct a new bicycle and pedestrian bridge over the Norfolk Southern railroad into Big Marsh park. The proposed bridge would be 16' wide. Its western footing of the bridge would be located inside the park and the eastern limit would be located on 116th Street. Based on a maximum design slope of 4%, and a minimum vertical clearance of 25' at the railroad tracks, the bridge would be approximately 625-650' long.
- Improve 116th Street. Between Torrence Avenue and the alley, it is recommended to pave 116th Street and install pavement markings for 11' travel lanes and install shared lane markings. Design of the proposed roadway would follow guidance for an urban local street.
- **Parking Area and Trailhead.** West of the alley, the proposed roadway should be designed as a trail with parking areas on each side. On the south side of the street, parking spaces would be provided for approximately 4 vehicles. On the north side, an improved area would be designated for placement of Chicago Park District storage containers or parking for maintenance equipment.
- **Relocate CTA Layover to 116th Street.** If space can be provided in the northwest corner of Torrence Avenue and 116th Street, propose that CTA consider relocating the Bus Route 71 layover from 112th Street to 116th Street for closer proximity to the proposed park entrance.

Figure 21: 116th Street – East Side Entrance & Bridge

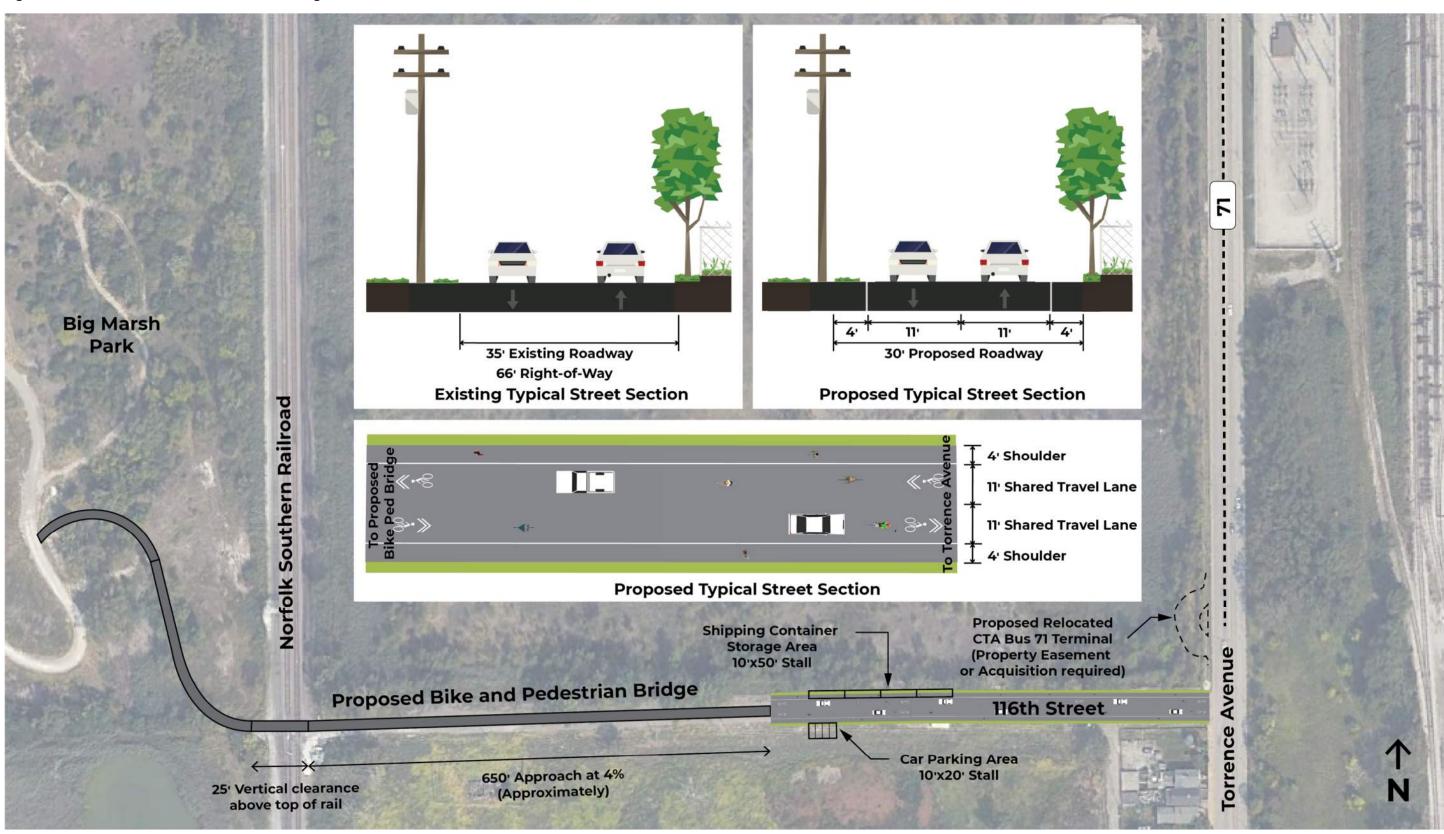


Figure 22: Planning Level Cost Estimate – 116th Street – East Side Entrance & Bridge

Item	Unit	Quantity	Uni	it Cost	To	tal Cost
Earthwork	CY	900	\$	150	\$	135,000
Tree Removal	EA	10	\$	750	\$	7,500
Remove Fence	LF	620	\$	20	\$	12,400
Install New Fence	LF	620	\$	80	\$	49,600
Wetland Mitigation	AC	0.1	\$	160,000	\$	16,000
Aggregate Base, 6"	SY	2400	\$	30	\$	72,000
Bituminous Pavement, 5"	SY	2400	\$	60	\$	144,000
Thermoplastic Pavement Markings	LS	1	\$	3,720	\$	3,720
Bridge Structure	SF	23200	\$	250	\$	5,800,000
Lighting	LF	2100	\$	90	\$	189,000
Construction Subtotal					\$	6,430,000
Contingency (30%)					\$	1,929,000
Phase I Engineering (10% Construction Cost)		\$	643,000			
Phase II Engineering (10% Construction Cost)	\$	643,000				
Phase III Engineering (10% Construction Cost)						643,000
Total Project Cost					\$	10,288,000

#### 2. Carondolet Avenue Improvements - 130th Street to 126th Place

#### Recommendation

Install shared lane markings, directional signs, and sidewalks along Carondolet Avenue between 130th Street and 126th Place. Improve the existing railroad crossing to accommodate pedestrians.



Figure 23: Location Map, Carondolet Avenue Improvements

#### **Existing Conditions**

- Carondolet Avenue is a two-lane roadway under the jurisdiction of CDOT.
- The roadway is approximately 27' wide, travel lanes are 11' wide, and the right-ofway is 60'.
- The average daily traffic (AADT) on Carondolet Avenue is 1,750. The posted speed limit is 15 mph.
- There are some sidewalks along the west side of Carondelet Avenue, but there are sidewalk gaps, including at the railroad tracks.

- Create a neighborhood greenway on Carondolet Avenue. Install shared lane pavement markings and directional signs on Carondolet Avenue between 130th Street and 126th Place to connect existing bike lanes on 130th Street with the existing sidepath on 126th Place.
- Add Sidewalks. Construct sidewalks to eliminate gaps along the west side of Carondolet Avenue, and improve the railroad crossing to include sidewalks and crossing gates for automobiles and pedestrians.
- Improve Bicycle and Pedestrian Crossing at 126th Place. Reconstruct the curb ramp in the northwest corner of the intersection of 126th Place and Carondolet Avenue to enable bicyclists to access the existing sidepath on 126th Place.
- **Direct Pedestrians and Bicyclists away from Torrence Avenue.** Due to width constraints and a high level of traffic stress and lack of ROW along Torrence Avenue, it is preferred to direct bicyclists and pedestrians toward Carondolet Avenue instead of Torrence Avenue between 130th Street and 126th Place.

Figure 24: Carondolet Avenue – 130th Street to 126th Place

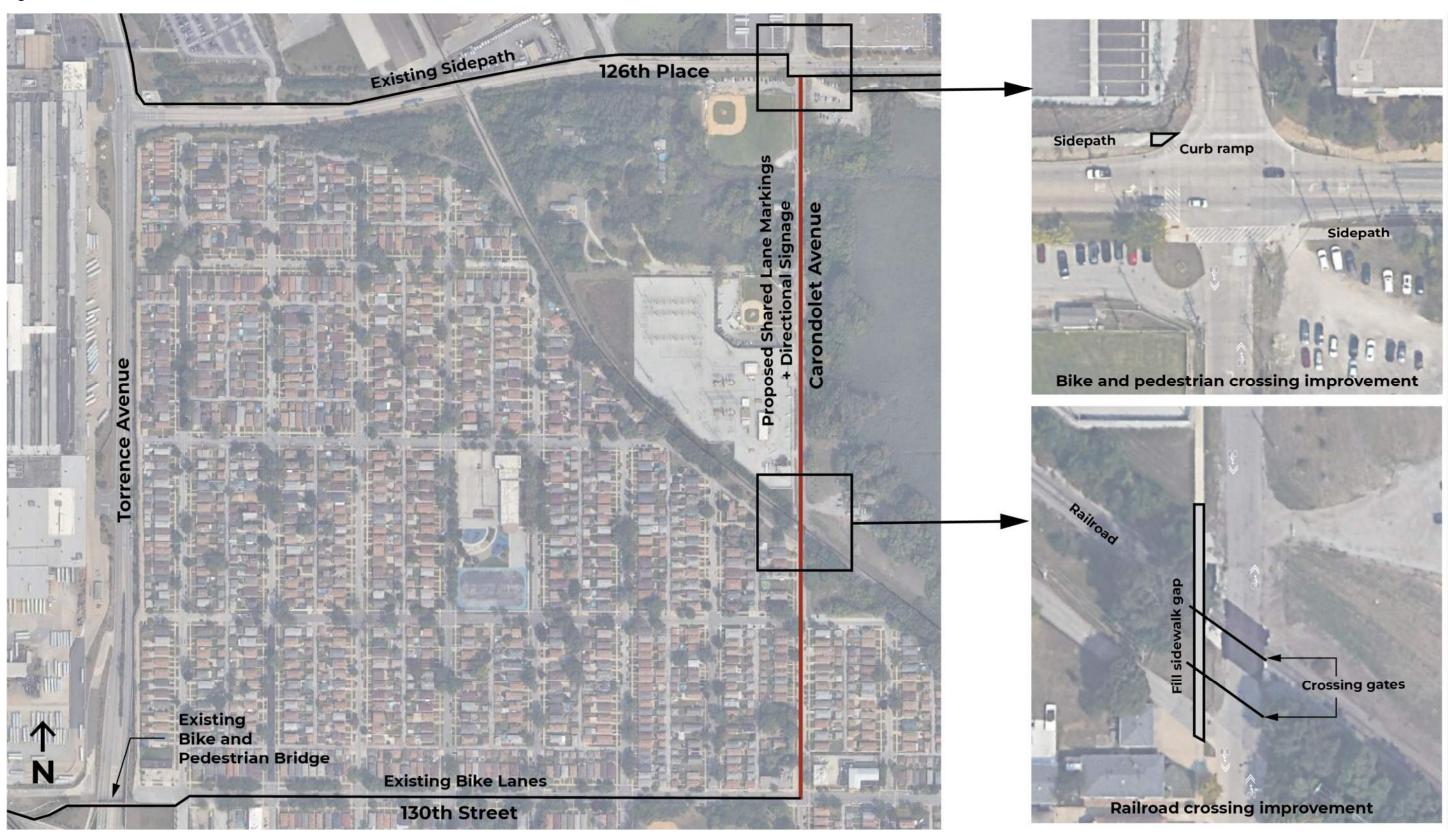


Figure 25: Planning Level Cost Estimate – Carondolet Avenue – 130th Street to 126th Place

Item	Unit	Quantity	Unit Cost		Tot	al Cost
5' Sidewalk	LF	340	\$	70	\$	23,800
Curb Ramp	EA	1	\$	3,000	\$	3,000
Railroad Crossing at Grade	LS	1	\$	200,000	\$	200,000
Thermoplastic Pavement Markings	LS	1	\$	5,400	\$	5,400
Directional Signs	LS	6	\$	70		500
Construction Subtotal					\$	232,000
Contingency (30%)					\$	70,000
Phase I Engineering (10% Construction Cost)					\$	23,200
Phase II Engineering (10% Construction Cost)						23,200
Phase III Engineering (10% Construction Cost)						23,200
Total Project Cost						371,600

#### 3A. Torrence Avenue - Calumet River to 122nd Street

#### Recommendation

Narrow lanes along Torrence Avenue between the north bank of the Calumet River and 122nd Street, and install a sidepath.

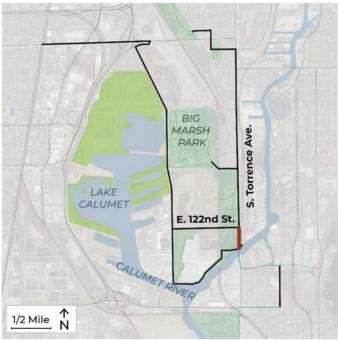


Figure 26: Location Map, Torrence Avenue Improvements, Calumet River to Park 597/SEPA Station 1 Entrance Drive

#### **Existing Conditions**

- Torrence Avenue is a four-lane roadway with an AADT of 17,200. The roadway is approximately 48' wide with a right-ofway of 66'. Automobile travel lanes are approximately 12' wide. The posted speed limit is 35 mph.
- Approximately half of the traffic on this section of Torrence Avenue is generated by vehicles driven between the Ford assembly plant and its parking lot on 122nd Street.
- There is an 8' wide sidewalk on the east side and a 5' sidewalk on the west side of the street between 126th Place and the Park 597/SEPA Station 1 entrance.

- Narrow Existing Travel Lanes, Install Sidepath and Barrier. Narrow existing travel lanes on Torrence Avenue from 12' to 11', and shift the east curb west by 2 feet. In the newly reclaimed space, install a 2' barrier and widen the sidewalk on the east side of Torrence Avenue to 8' Sidepath. Relocate roadway light poles to align with the back of the barrier.
- **Street Cleaning.** Regularly clean and maintain streets to prevent obstruction on sidepath by tall weeds and debris that force bike riders into the regular lanes.

Figure 27: Torrence Avenue – Calumet River to 122nd Street

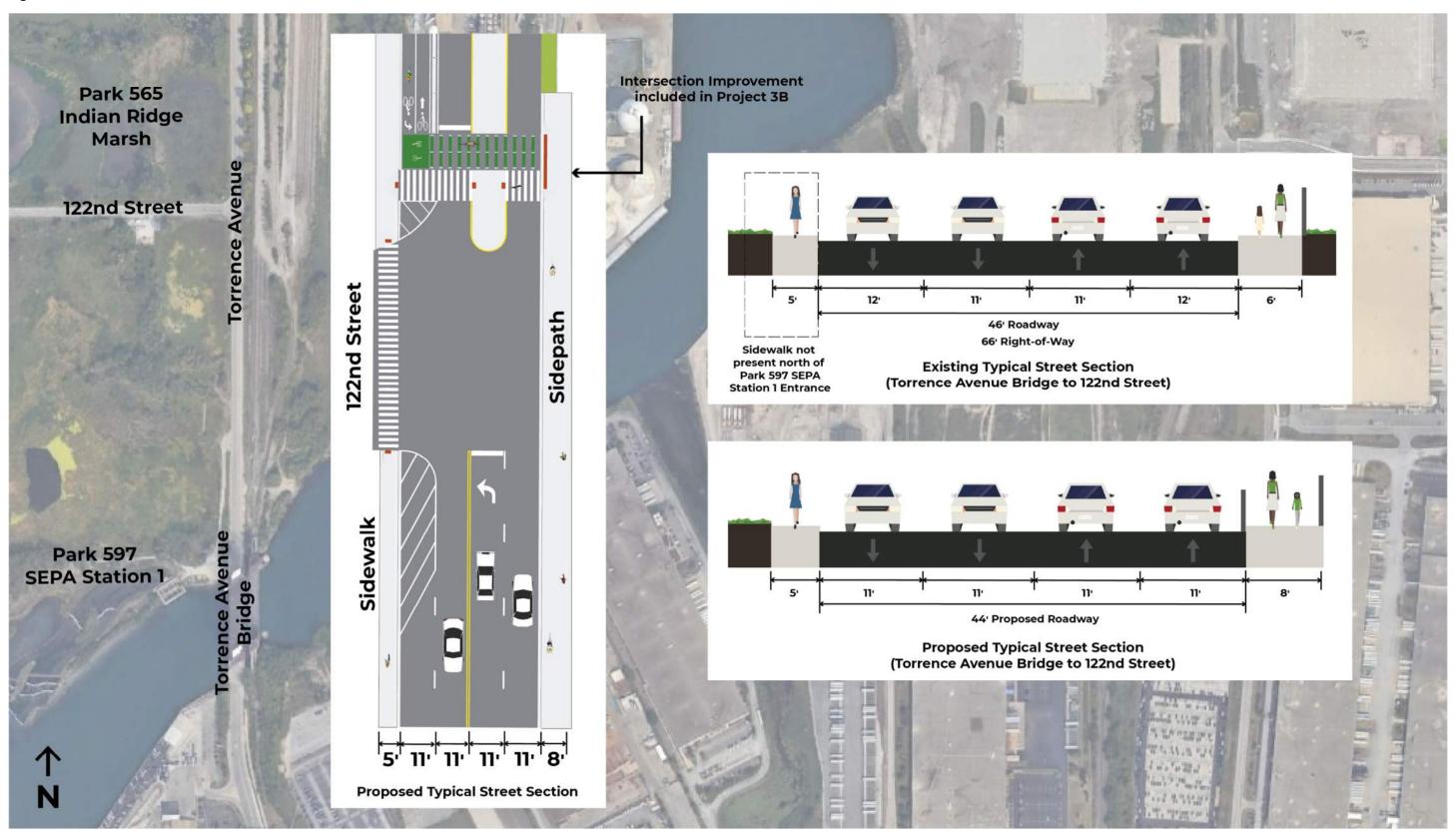


Figure 28: Planning-Level Cost Estimate – Torrence Avenue – Calumet River to 122nd Street

Item	Unit	Quantity	Unit (	Cost	Tot	al Cost
Full-Depth Pavement Removal	SY	400	\$	30	\$	12,000
Pavement Surface Removal 3"	SY	7100	\$	8	\$	56,800
Curb & Gutter Removal	LF	2900	\$	15	\$	43,500
Aggregate Base, 6"	SY	5800	\$	30	\$	174,000
Bituminous Pavement, 5"	SY	5800	\$	60	\$	348,000
Sidewalk Removal	SF	5720	\$	10	\$	57,200
Bituminous Pavement, 3"	SY	7100	\$	35	\$	248,500
B-6.12 Curb & Gutter	LF	1500	\$	50	\$	75,000
Barrier Wall	LF	1500	\$	450	\$	675,000
8' Sidepath	LF	1500	\$	50	\$	75,000
Curb Ramp	EA	4	\$	3,000	\$	12,000
Remove and Relocate Street Lighting	EA	15	\$	15,000	\$	225,000
Thermoplastic Pavement Markings	LS	1	\$	15,000	\$	15,000
Construction Subtotal					\$	2,017,000
Contingency (30%)					\$	606,000
Phase I Engineering (10% Construction Cost)	\$	201,700				
Phase II Engineering (10% Construction Cost)						201,700
Phase III Engineering (10% Construction Cost)						201,700
Total Cost						3,228,100

#### 3B. Torrence Avenue: 122nd Street to 110th Street

#### Recommendation

Reconfigure Torrence Avenue to a three-lane roadway, and use the reclaimed roadway width to install a two-way separated bike lane.

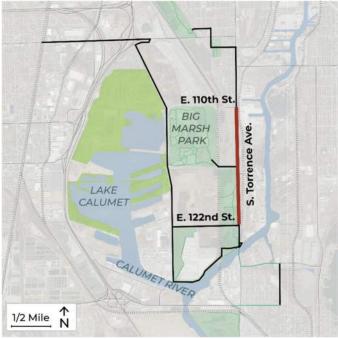


Figure 29: Location Map, Torrence Avenue Improvements, 112nd Street to 110th Street.

#### **Existing Conditions**

- Torrence Avenue is a four-lane roadway. The existing roadway width is approximately 48' and the right-of-way width is between 66' and 80'. Travel lanes are 12'.
- There are sidewalks along parts of the west side of Torrence Avenue. There are no sidewalks on the east side.
- CTA Bus Route 71 travels on Torrence Avenue between 106th Street and 112th Street. The existing layover for Route 71 is located on Torrence Avenue at 112th Street. There are bus stops on both sides of Torrence Avenue.
- The AADT on Torrence Avenue is 7,400 The posted speed limit is 35 mph..

- Roadway Reconfiguration. Convert Torrence Avenue from four travel lanes to three travel lanes, consisting of one 11' automobile travel lane in each direction and an 11' center left-turn lane. On IDOT roadways, an Access Justification Report (AJR) would be needed prior to approval of roadway reconfiguration.
- Add Sidewalks. Construct a 7' sidewalk on west side of the street.
- **Two-Way Separated Bike Lanes.** With the reclaimed width from the roadway reconversion, install a two-way separated bike lane along the west side of Torrence Avenue. Each bike lane would be 5' wide and the buffer between the bike lane and the travel lane would be 3' wide.
- Improve 122nd Street and 116th Street Intersections. Reconfigure the intersection of Torrence Avenue at 122nd Street and at 116th Street to include a high visibility crossing and median refuge on the north leg of each intersection, and mark a crossing on the west leg of each intersection. On the south leg of each the intersection, install a northbound left-turn lane. The signalized 116th Street intersection to establish enhanced marked crossing features such as Pedestrian Hybrid Beacon or Rectangular Rapid Flash Beason.
- **Street Cleaning.** Regularly clean and maintain streets to prevent obstruction on bike lanes by tall weeds and debris that force bike riders into the regular lanes.

Figure 30: Torrence Avenue – 122nd Street to 110th Street

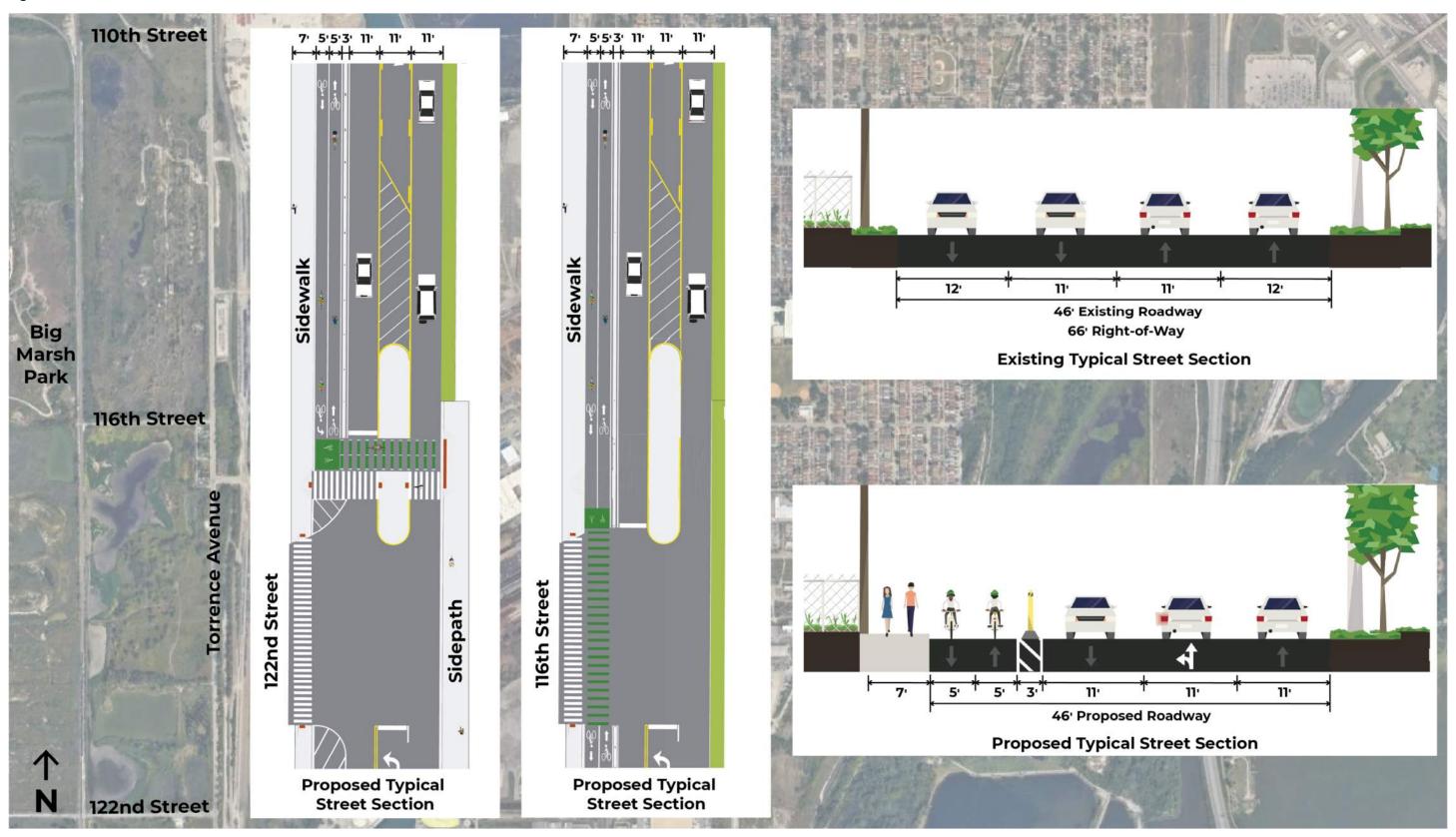


Figure 31: Planning-Level Cost Estimate – Torrence Avenue – 122nd Street to 110th Street

Item	Unit	Quantity	Unit	t Cost	Tot	al Cost
Pavement Surface Removal 3"	SY	40500	\$	8	\$	324,000
Bituminous Pavement, 3"	SY	40500	\$	35	\$	1,417,500
7' Sidewalk	LF	6500	\$	100	\$	650,000
5' Sidewalk	LF	600	\$	70	\$	42,000
Sidewalk Removal	SF	3000	\$	10	\$	30,000
Raised Median	SF	3300	\$	30	\$	99,000
Precast Separated Bike Lane Barrier	LF	8000	\$	30	\$	240,000
Plastic Bollards	EA	159	\$	75	\$	11,925
Curb Ramp	EA	8	\$	3,000	\$	24,000
New HMA Pavement (Bus Turnaround)	LS	1	\$	100,000	\$	100,000
Land Acquisition (Bus Turnaround)	LS	1	\$	100,000	\$	100,000
Traffic Signal (Torrence Avenue and 122nd Street	LS	1	\$	300,000	\$	300,000
Remove and Relocate Aerial Utility Poles	EΑ	28	\$	10,000	\$	280,000
Thermoplastic Pavement Markings	LS	1	\$	79,200	\$	79,200
Green MMA Pavement Markings	LS	1	\$	15,400	\$	15,400
Construction Subtotal					\$	3,713,000
Contingency (30%)					\$	1,114,000
Phase I Engineering (10% Construction Cost)	\$	371,300				
Phase II Engineering (10% Construction Cost)						371,300
Phase III Engineering (10% Construction Cost)						371,300
Total Cost					\$	5,940,900

#### 3C. Torrence Avenue: 110th Street to 104th Street

#### Recommendation

Reconfigure Torrence Avenue to a three-lane roadway, and use the reclaimed roadway width to install a two-way separated bike lane. Improve pedestrian crossings, sidewalks, and bus stops.

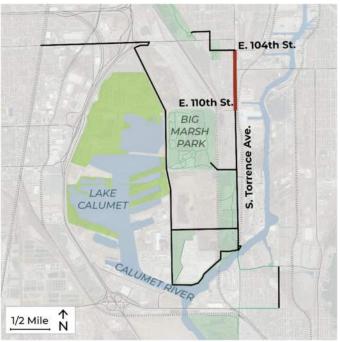


Figure 32: Location Map, Torrence Avenue Improvements, 110th Street to 103rd Street

#### **Existing Conditions**

- Torrence Avenue is a four-lane roadway that ranges in width from 48' to 56'. The right-of-way width is approximately 80'.
- Automobile travel lanes are 12' wide. The on-street parking lane is 8' where present.
- The AADT on Torrence Avenue is 7,400. The posted speed limit is 35 mph.
- Sidewalks are present along the west side of the street. There are sidewalks along parts of the east side of Torrence Avenue between 109th Street and 104th Street.
- There are CTA bus stops on both sides of Torrence Avenue.

- Roadway Reconfiguration. Convert Torrence Avenue to a three-lane roadway consisting of one 11' automobile travel lane in each direction and an 11' center left-turn lane. Install 8' on-street parking lanes on west side of the street. On IDOT roadways, an Access Justification Report (AJR) would be needed prior to approval of roadway reconfiguration.
- **Two-Way Separated Bike Lanes.** With the reclaimed width from the roadway reconversion, install a two-way separated bike lane along the west side of Torrence Avenue. Each bike lane would be 5' wide and the buffer between the bike lane and the travel lane would be 3' wide.
- Improve Bus Stops. Construct floating bus stops along the west side of Torrence Avenue at bus stops. The bus boarding islands would utilize the space between the bike lane and the travel lane.
- Improve Pedestrian Crossings. Establish enhanced marked crossings between existing bus stop pairs with features such as high visibility crosswalk between 110th Street and 104th Street. Consolidate low volume bus stops to locations that can be more readily improved.
- **Street Cleaning.** Regularly clean and maintain streets to prevent obstruction on bike lanes by tall weeds and debris that force bike riders into the regular lanes.

Figure 33: Torrence Avenue – 110th Street to 103rd Street

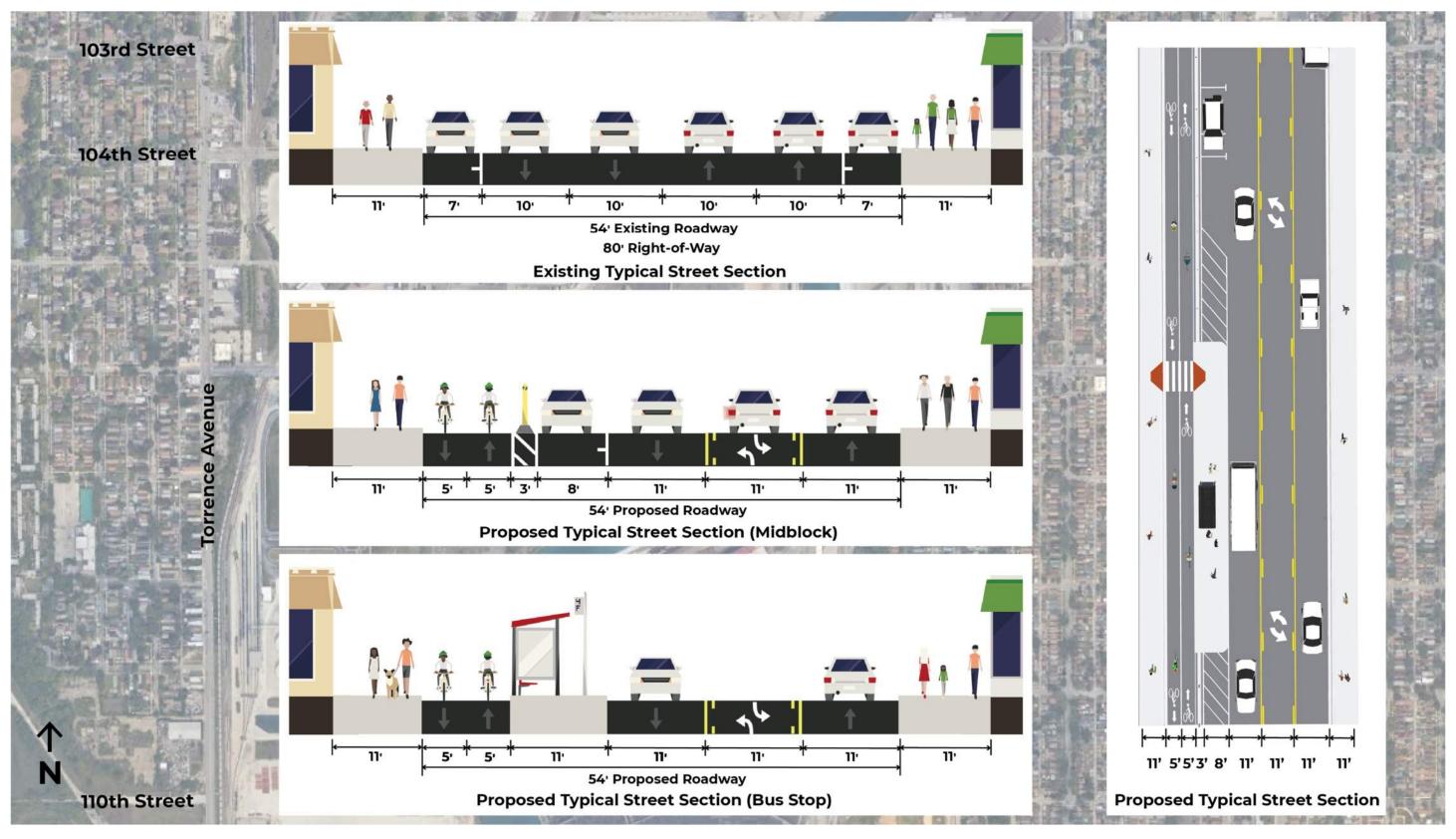


Figure 34: Planning-Level Cost Estimate – Torrence Avenue – 110th Street to 103rd Street

Item	Unit	Quantity	Un	it Cost	Tot	al Cost
Pavement Surface Removal	SY	23900	\$	8	\$	191,200
Bituminous Pavement, 5"	SY	23900	\$	60	\$	1,434,000
Raised Concrete Island	SF	6000	\$	30	\$	180,000
Precast Separated Bike Lane Barrier	LF	4000	\$	30	\$	120,000
Flexible Delineators	EA	80	\$	75	\$	6,000
Curb Ramp	EA	43	\$	3,000	\$	129,000
Thermoplastic Pavement Markings	LS	1	\$	61,000	\$	61,000
Green MMA Pavement Markings	LS	1	\$	24,500	\$	24,500
Construction Subtotal					\$	2,146,000
Contingency (30%)					\$	644,000
Phase I Engineering					\$	214,600
Phase II Engineering						214,600
Phase III Engineering						214,600
Total Cost					\$	3,433,800

#### 4. 122nd Street - Stony Island Avenue to Torrence Avenue

#### Recommendation

Add walking and bicycling facilities to 122nd Street.



Figure 35: Location Map, 122nd Street Improvements, Stony Island Avenue to Torrence Avenue

#### **Existing Conditions**

- 122nd Street is a two-lane minor collector roadway that is approximately 30' wide with an approximate right-of-way width of 66'. There is no curb and gutter.
- Near the crossing of the Norfolk Southern railroad, 122<sup>nd</sup> Street is approximately 37' wide with guardrails on both sides, and steep grades near existing wetlands.
- There are aerial power lines along the south side of 122<sup>nd</sup> Street, and there is an EPA site on the north side of the street.
- The AADT on 122<sup>nd</sup> Street is 4,800. The posted speed limit is 30 mph.

- **Reconfigure and Widen 122nd Street.** Narrow existing travel lanes from 12' to 11', Reconfigure the part of 122<sup>nd</sup> Street with existing guardrails between the Norfolk Southern railroad crossing and culvert to include curb and gutter, replacing the existing 4' shoulder on both sides of the street with a curb, gutter and 2' barrier guardrail. For the remaining part of 122<sup>nd</sup> Street, retain 4' shoulder on south side of the street and covert 5' shoulder to curb and gutter with buffer space.
- Add Bicycle Facilities. With the reclaimed space provided by eliminating open drainage and shoulders, construct a 10' shared use path along the north side of the street.
- **Street Cleaning.** Regularly clean and maintain streets to prevent obstruction on sidepath by tall weeds and debris that force bike riders into the regular lanes.

Figure 36: 122nd Street - Stony Island Avenue to Torrence Avenue

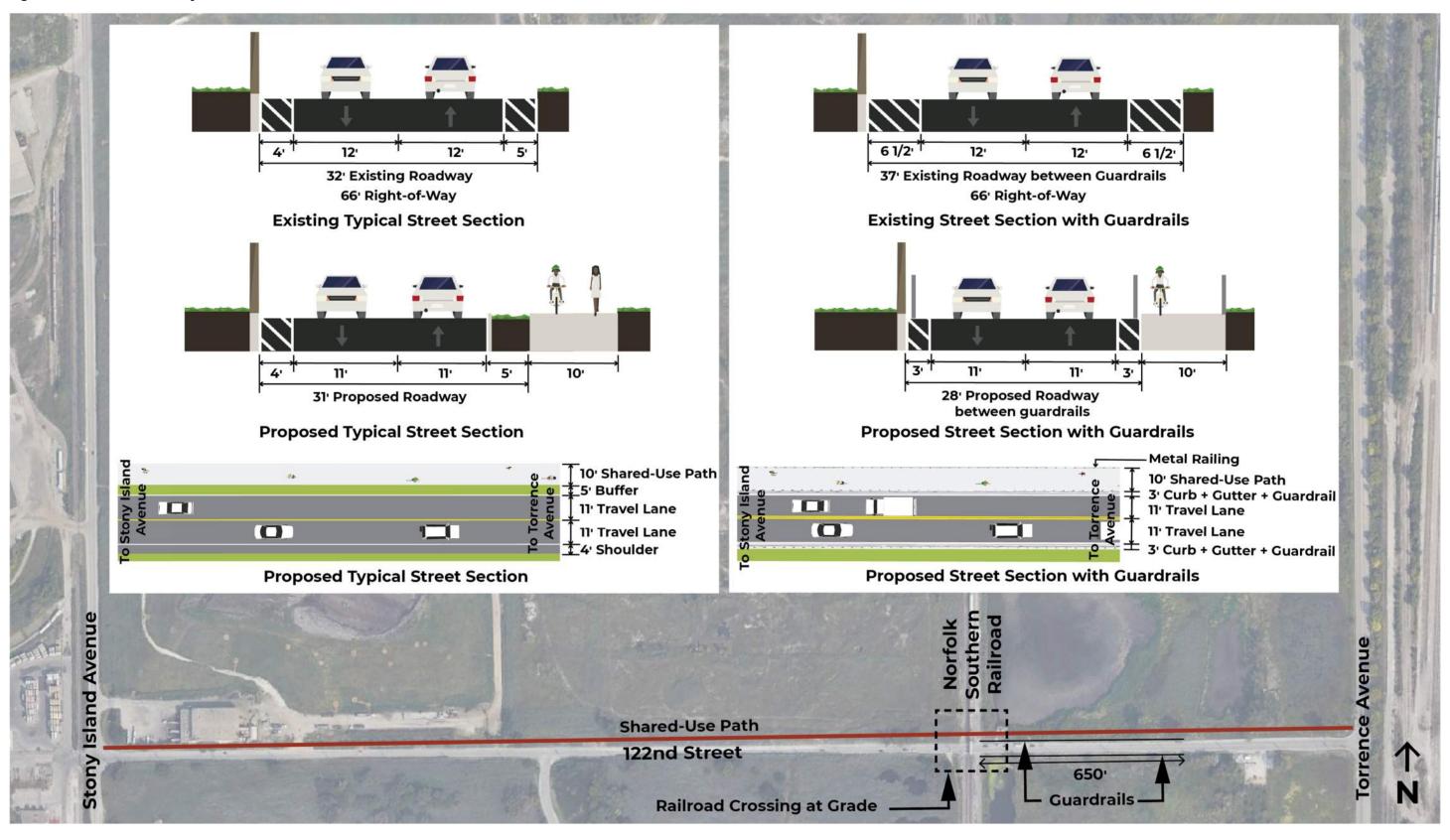


Figure 37: Planning-Level Cost Estimate – 122nd Street – Stony Island Avenue to Torrence Avenue

Item	Unit	Quantity	Unit	Cost	Tot	al Cost
Full-Depth Pavement Removal	SY	2700	\$	30	\$	81,000
Aggregate Base, 6"	SY	1600	\$	30	\$	48,000
Concrete Base PCC Base Course 10"	SY	1600	\$	100	\$	160,000
Bituminous Pavement, 2"	SY	1600	\$	25	\$	40,000
B-6.12 Curb & Gutter	LF	1300	\$	30	\$	39,000
Remove Guardrail	LF	1300	\$	10	\$	13,000
New Guardrail	LF	1300	\$	45	\$	58,500
New Bicycle-Pedestrian Railing	LF	640	\$	250	\$	160,000
Bike Protection for Guardrail	LF	640	\$	20	\$	12,800
10' Sidepath	LF	4400	\$	80	\$	352,000
Storm Sewer	LS	1	\$	86,100	\$	86,100
Wetland Mitigation	AC	0.5	\$	160,000	\$	80,000
Sidepath Railroad Crossing at Grade	LS	1	\$	150,000	\$	150,000
Pavement Surface Removal	SY	13200	\$	8	\$	105,600
Bituminous Pavement, 5"	SY	13200	\$	60	\$	792,000
Remove Fence	LF	1400	\$	10	\$	14,000
Remove and Relocate Aerial Utility Poles	EA	8	\$	10,000	\$	80,000
Tree Removal	EA	15	\$	750	\$	11,250
Thermoplastic Pavement Markings	LS	1	\$	17,000	\$	17,000
Construction Subtotal					\$	2,300,000
Contingency (30%)	\$	690,000				
Phase I Engineering (10% Construction Cost	\$	230,000				
Phase II Engineering (10% Construction Cost)						230,000
Phase III Engineering (10% Construction Cost)					\$	230,000
Total Project Cost					\$	3,680,000

# 5. Stony Island Avenue - Park 600/Deadstick Pond to 103rd Street/Doty Avenue

#### Recommendation

Reconfigure existing bike lanes and add pedestrian facilities to Stony Island Avenue.

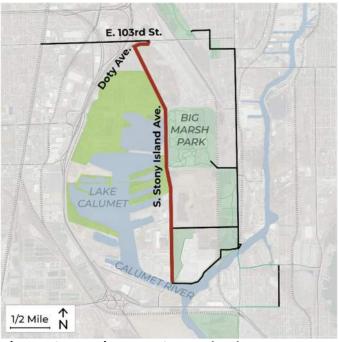


Figure 38: Location Map, Stony Island Avenue Improvements

#### **Existing Conditions**

- Stony Island Avenue is a two-lane minor collector roadway with an AADT of 1,700. There are buffered bike lanes on both sides of the street. The posted speed limit is 30 mph. The existing roadway is approximately 42' wide with a right-ofway width of 75'. There is no curb and gutter, no sidewalks, and no marked crossings.
- The Lake Calumet Trail feasibility study proposes a trail bridge that would cross over Stony Island Avenue. The bridge landing would be on the northeast corner of Stony Island Avenue at the entrance to Big Marsh Park.
- There are documented reports of drag racing and speeding along Stony Island Avenue.

- Resurface and Reconfigure Stony Island Avenue. Reconfigure the roadway to include one 11' automobile travel lane in each direction, and install a 11' sidepath on the east side of the roadway. The buffer between the sidepath and automobile travel lanes would be 5' and has curb with flexible delineators.
- Add Pedestrian Facilities. To ensure the sidepath is ADA-compliant, the cross slope of the pedestrian lane should not exceed 2% and curb ramps should be installed at the entrance to Big Marsh Park.
- **Doty Avenue Connection.** Construct a sidepath on north side of Doty Avenue between Stony Island Avenue and 103<sup>rd</sup> Street. Construct high visibility crosswalks at intersections.
- Install Directional, Map, and Gateway Signs. Install directional signs at the base of the bridge near the Big Marsh Park entrance, and include a trail map of the surrounding area (approximate limits include Wolf Lake to the east and the Major Taylor Trail to the west). Add a gateway sign to the proposed bridge over Stony Island Avenue.
- **Street Cleaning.** Regularly clean and maintain streets to prevent obstruction on bike lanes by tall weeds and debris that force bike riders into the regular lanes.

Figure 39: Stony Island Avenue and Doty Avenue

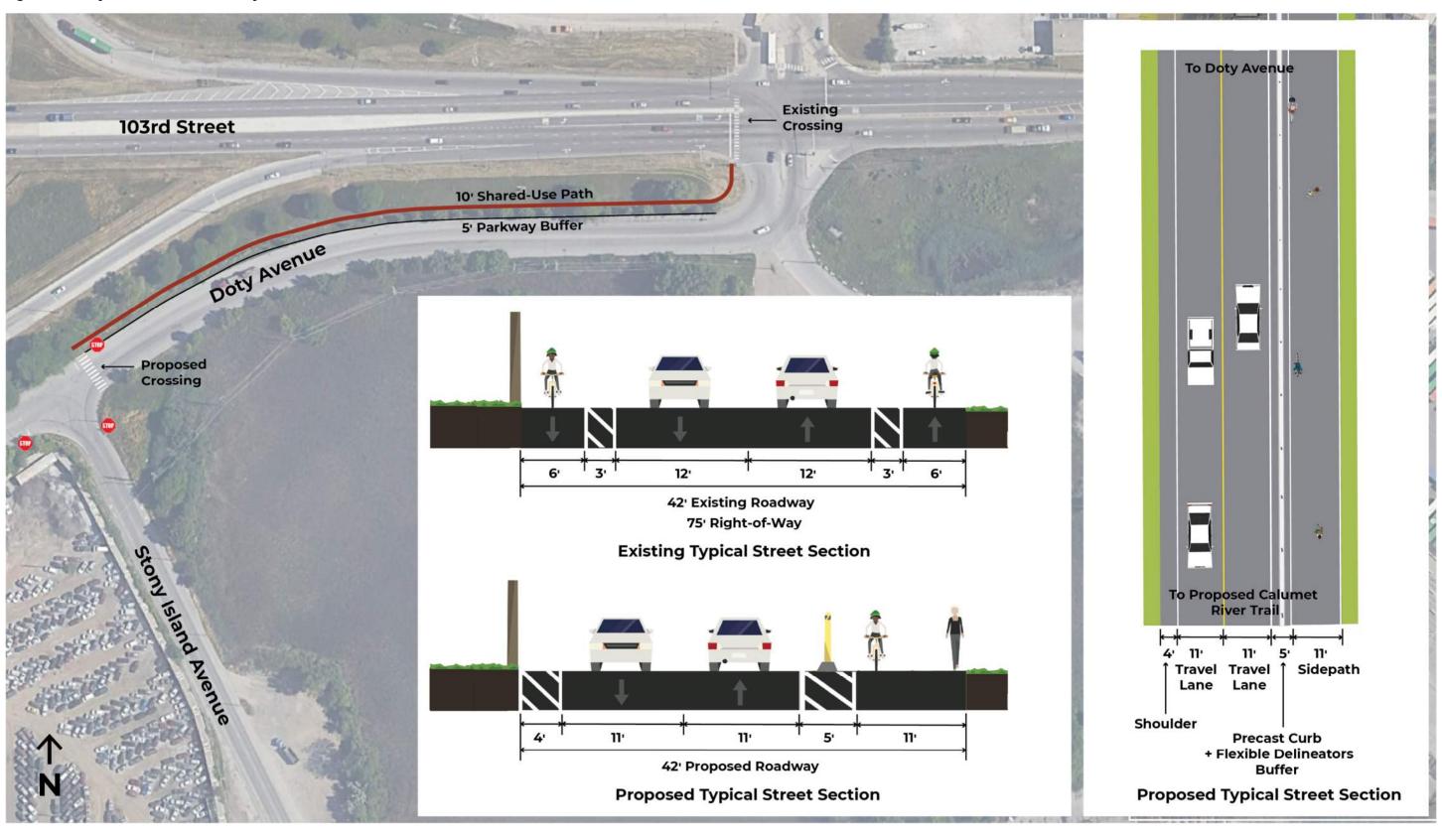


Figure 40: Planning-Level Cost Estimate – Stony Island Avenue and Doty Avenue

Item	Unit	Quantity	Uni	it Cost	Tot	al Cost
Pavement Surface Removal	SY	73900	\$	8	\$	591,200
Full-Depth Pavement Removal	SY	9400	\$	30	\$	282,000
Aggregate Base, 6"	SY	9400	\$	30	\$	282,000
Bituminous Pavement, 5"	SY	83300	\$	25	\$	2,082,500
10' Sidepath	LF	950	\$	80	\$	76,000
Curb Ramp	EA	2	\$	3,000		6,000
Precast Separated Bike Lane Barrier	LF	19200	\$	30	\$	576,000
Flexible delineators	EA	380	\$	75	\$	28,500
Remove and Relocate Street Lighting	EA	5	\$	1,000	\$	5,000
Tree Removal	EΑ	5	\$	750	\$	3,750
Thermoplastic Pavement Markings	LS	1	\$	158,400	\$	158,400
Green MMA Pavement Markings	LS	1	\$	24,500	\$	24,500
Construction Subtotal					\$	4,116,000
Contingency (30%)					\$	1,235,000
Phase I Engineering (10% Construction Cost)	\$	411,600				
Phase II Engineering (10% Construction Cost	\$	411,600				
Phase III Engineering (10% Construction Cost)						411,600
Total Project Cost					\$	6,585,800

#### 6A. 103rd Street - Cottage Grove Avenue to Woodlawn Avenue

#### Recommendation

Add bicycle facilities to 103rd Street.



Figure 41: Location Map, 103rd Street Improvements

#### **Existing Conditions**

- 103rd Street is a four-lane minor arterial roadway under the jurisdiction of CDOT between Cottage Grove to Woodlawn.
- The AADT of 103rd Street is 13,800 between Cottage Grove to Woodlawn.
- The roadway is approximately 40-44' wide with an 80' right-of-way.
- There are CTA bus stops on both sides of the street.

- Roadway Reconfiguration. Convert 103<sup>rd</sup> Street from four travel lanes to three travel lanes, consisting of one 11' automobile travel lane in each direction and a 11' center left-turn lane.
- One-Way Separated Bike Lanes. With the reclaimed width from the roadway reconversion, install one-way separated bike lane along both sides of 103rd Street. Each bike lane would be 5' wide and the buffer between the bike lane and the travel lane would be 2' wide.
- **Improve Bus Stops.** Construct bus boarding area along both sides of 103rd Street at bus stops. Bus boarding area would utilize the parkway space between the bike lane and the sidewalk. Improve associated crossings that are not near marked crossings and intersections.
- **Street Cleaning.** Regularly clean and maintain streets to prevent obstruction on bike lanes by tall weeds and debris that force bike riders into the regular lanes.

Figure 41: 103rd Street - Cottage Grove Avenue to Woodlawn Avenue

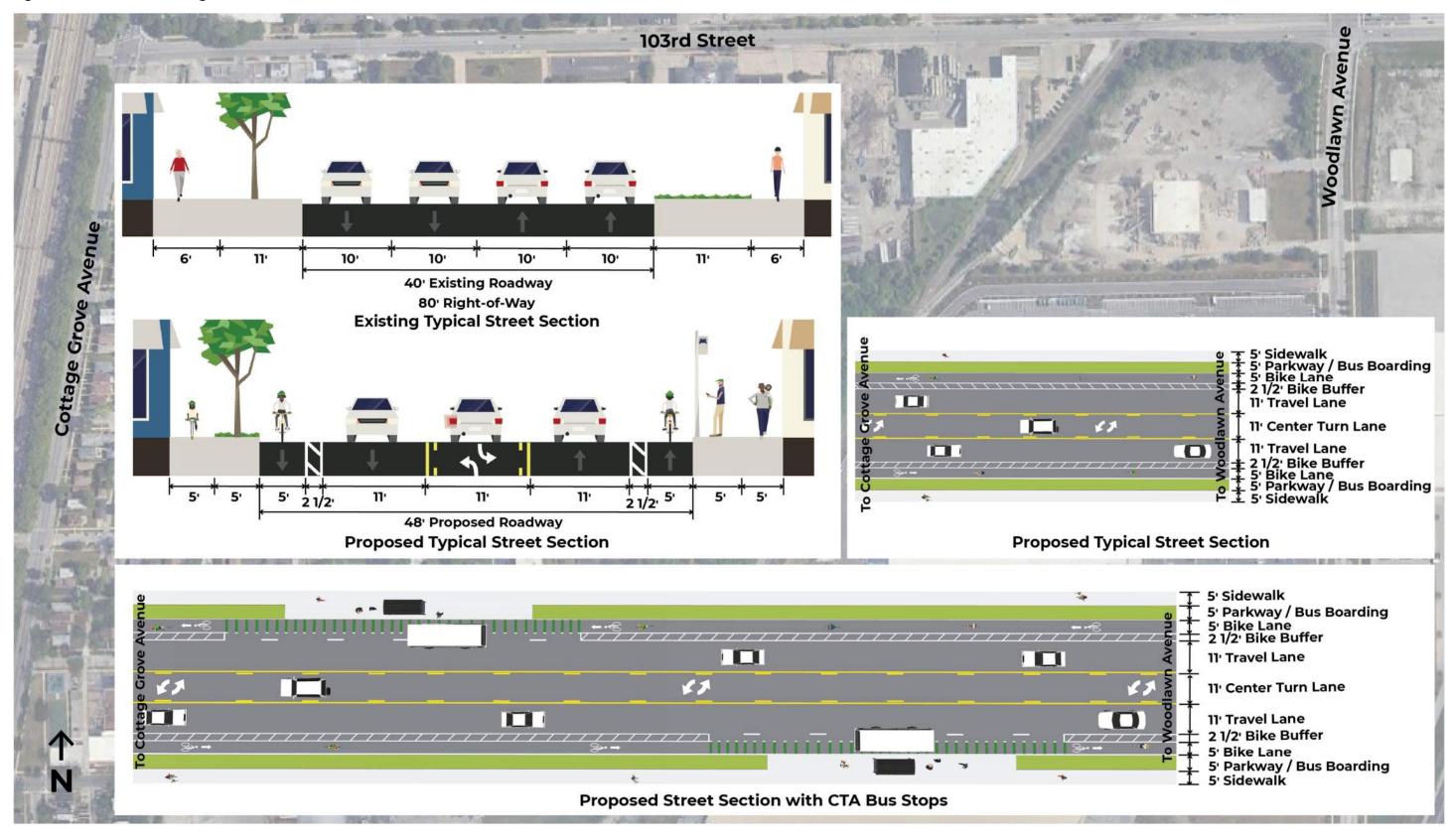


Figure 43: Planning-Level Cost Estimate – 103rd Street – Cottage Grove Avenue to Woodlawn Avenue

Item	Unit	Quantity	Unit	Cost	Total Co	ost
Curb & Gutter Removal	LF	6600	\$	15		99,000
Sidewalk Removal	SF	26400	\$	10	2	264,000
Pavement Surface Removal	SY	14700	\$	8		117,600
Aggregate Base, 6"	SY	3000	\$	30		90,000
Bituminous Pavement, 5"	SY	17600	\$	25	2	440,000
B-6.12 Curb & Gutter	LF	6600	\$	30		198,000
5' Sidewalk	LF	6600	\$	70	4	462,000
Bus Boarding Area	LF	900	\$	70		63,000
Landscaping (incl. topsoil, sod, trees)	SY	3700	\$	10		37,000
Curb Ramp	EA	4	\$	3,000		12,000
Railroad Crossing at Grade	LS	1	\$	150,000		150,000
Remove and Relocate Aerial Utility Poles	EA	20	\$	10,000	2	200,000
Remove and Relocate Street Lighting	EA	40	\$	8,000	-3	320,000
Tree Removal	EA	25	\$	750		18,750
Thermoplastic Pavement Markings	LS	1	\$	47,000		47,000
Green MMA Pavement Markings	LS	1	\$	55,300		55,300
Construction Subtotal					2,!	574,000
Contingency (30%)					1	772,200
Phase I Engineering (10% Construction Cost)	:	257,400				
Phase II Engineering (10% Construction Cost	2	257,400				
Phase III Engineering (10% Construction Cos		257,400				
Total Cost						,118,000

#### 6B. 103rd Street - Woodlawn Avenue to Doty Avenue

#### Recommendation

Add bicycle facilities to 103rd Street and connect with the proposed sidepath on Doty Avenue.

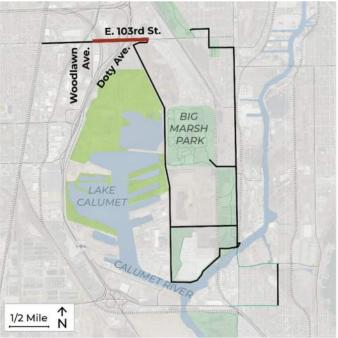


Figure 44: Location Map, 103rd Street Improvements

#### **Existing Conditions**

- 103rd Street is a four-lane minor arterial roadway under the jurisdiction of IDOT (Woodlawn to Doty) and Cook County (Doty to Oglesby).
- The AADT of 103rd Street is 15,800 (Woodlawn to Doty) and 25,400 (Doty to Oglesby).
- The roadway is approximately 40-44'
  wide with an 80' right-of-way. There are
  no sidewalks on 103rd Street between
  Woodlawn and Doty and partial
  sidewalks between Doty and Oglesby.
- There are CTA bus stops on both sides of the street and a CTA bus terminal is located on the north side of 103rd Street at Doty Avenue serving routes 26, 106, and 111A.

- Add a Sidepath to 103rd Street between Woodlawn and Doty Avenue. Widen the existing sidewalk on the north side of 103rd Street to a 10' sidepath. Narrow the existing 10' parkway to 5'.
- Reconfigure 103rd Street and the Interchanges. Eliminate westbound travel lane on 103rd Street at intersection with Stony Island Avenue. Convert the intersection into a single point interchange and eliminate free-flow ramps on north side of 103rd Street and Stony Island Avenue intersection. Construct high visibility marked crossings and pedestrian signal heads at the realigned signalized intersections with the proposed sidepath on the north side of 103rd Street. Reconstruct the Olive Harvey College entrance drive. The proposed three lane section of 103rd Street between Cottage Grove and Woodlawn converts back to the existing four lane section between Woodlawn Avenue and Doty Avenue. On IDOT roadways, an Access Justification Report (AJR) would be needed prior to approval of roadway reconfiguration.
- **Complete Sidewalk Gap on 103rd Street.** Complete sidewalk gap on south side of 103rd Street from east end of the 103rd Street bridge to Doty Avenue intersection.
- Construct Crosswalk and Ramps at 103rd Street and Doty Avenue Intersection. There are existing pedestrian signals on south side of 103rd Street and Doty Avenue intersection. Construct crosswalk and ramps to connect sidewalk on south side of 103rd Street and proposed sidepath on Doty Avenue and proposed sidepath on north side of the 103rd Street.

Figure 45: 103rd Street - Woodlawn Avenue to Doty Avenue

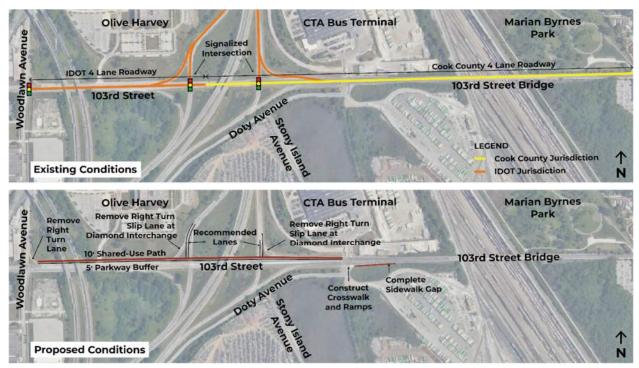


Figure 46: Planning-Level Cost Estimate – 103rd Street – Woodlawn Avenue to Doty Avenue

10' Sidepath	LF	3500	\$	80		280,000
Landscaping (incl. topsoil, sod, trees)	SY	2000	\$	10		20,000
Curb Ramp	EA	16	\$	3,000		48,000
5' Sidewalk	LF	950	\$	70		66,500
Interchange Modifications	LS	1	\$	3,500,000		3,500,000
Remove Right-turn Lane	LS	1	\$	352,000		352,000
Underpass Retaining Wall	LF	120	\$	1,000		120,000
Thermoplastic Pavement Markings	LS	1	\$	31,500		31,500
Green MMA Pavement Markings	LS	1	\$	17,500		17,500
Construction Subtotal						4,436,000
Contingency (30%)						1,330,800
Phase I (10% Construction Cost)						443,600
Phase II (10% Construction Cost)						443,600
Phase III (10% Construction Cost)		443,600				
Total Cost						7,098,000

# 6C. 102nd Street/Oglesby Avenue/104th Street - Marian Byrnes Park to Torrence Avenue

#### Recommendation

Implement a neighborhood greenway on 104th Street, Oglesby Avenue and 104th Street between Marian Byrnes Park and Torrence Avenue.

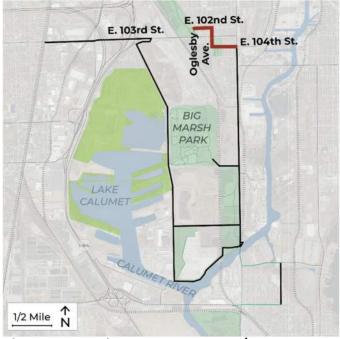


Figure 47: Location Map, 102nd Street/Oglesby Avenue/104<sup>th</sup> Street Improvements

#### **Existing Conditions**

- 102nd Street, Oglesby Avenue and 104th Street are two-lane local roadways under the jurisdiction of City of Chicago. There are sidewalks on both sides of 102nd Street, Oglesby Avenue and 104th street.
- 104th Street is connected through the Trumbull Park greenway. Trumbull Park is under the jurisdiction of the Chicago Park District.
- 102nd Street connects to Marian Byrnes Park on the western end of the street.

- Create a Neighborhood Greenway on 102nd Street, Oglesby Avenue and 104th Street. Install pavement markings and directional signs to connect Marian Byrnes Park to Torrence Avenue at 104th Street. The neighborhood greenway would connect through Trumbull Park as proposed in Figure 47.
- Improve Bike and Pedestrian Crossing. Install high visibility bike and pedestrian crossing and update pedestrian signal heads at 103rd Street and Oglesby Avenue.
- **Construct a Trail Connection.** Construct a 150' long trail inside Marian Byrnes Park to connect the existing trail network of the park to the proposed greenway on 102nd Street.

Figure 48: 102nd Street/Oglesby Avenue/104<sup>th</sup> Street Improvements – Marian Byrnes Park to Torrence Avenue



Figure 49: Planning-Level Cost Estimate – 102nd Street/Oglesby Avenue/104th Street Improvements – Marian Byrnes Park to Torrence Avenue

Item	Unit	Quantity	Unit Cost		Total Cost	
14' Sidepath/Trail	LF	150	\$	100		15,000
Thermoplastic Pavement Markings	LS	1	\$	29,400		29,400
Directional Signs	LS	16	\$	70		1,120
Construction Subtotal	-	•			4	46,000
Contingency (30%)						13,800
Phase I (10% Construction Cost)						4,600
Phase II (10% Construction Cost)						4,600
Phase III (10% Construction Cost)						4,600
Total Cost					\$	74,000

#### 7. Calumet River Trail

#### Recommendation

Construct a trail on the north bank of the Calumet River between Park 600/Deadstick Pond and Park 597/SEPA Station 1.

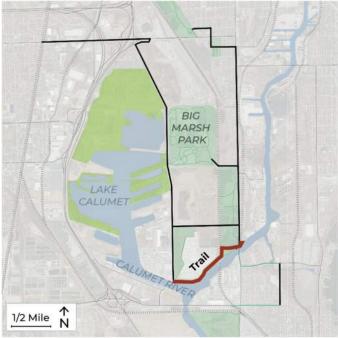


Figure 50: Location Map, Proposed Calumet River Trail

#### **Existing Conditions**

- The Chicago Park District owns property along the north side of Calumet River between Park 600/Deadstick Pond and the Torrence Avenue Bridge.
- The Norfolk Southern railroad crosses the Calumet River between the Ford assembly plant parking lot and Park 597/SEPA Station 1.
- The Park District wants to improve connectivity between the natural areas of Park 600/Deadstick Pond, Heron Pond, and Park 565/Indian Ridge Marsh.

- **Construct a New Trail.** Construct a 10' paved trail and 2' path shoulders/clearance on both sides of the trail along the north bank of the Calumet River between Stony Island Avenue and Torrence Avenue. A part of the new trail would use and improve the existing paved pathway within the Chicago Park District property.
- Construct Underbridge Structures. The proposed trail would start at the south end of Stony Island Avenue and travel under the Norfolk Southern Railroad along an underbridge connection toward Park 597/SEPA Station 1 parking lot and continue east under the Torrence Avenue Bridge along an underbridge connection, and would connect to the existing pathway located on east side of the Torrence Avenue. The connection would help close the loop within the larger bicycle and pedestrian network to take bicyclists and pedestrians back to the Big Park Marsh to the north.

Stony Island Avenue **Norfolk Southern Railroad** Torrence Avenue 122nd Street Park 565 **Indian Ridge** Park 600 **Deadstick Pond** Marsh Trail connects to existing pathway **Park 579** SEPA Station 1 Proposed Trail Trail outside

**CPD** site

Legend

Figure 51: Proposed Calumet River Trail

Figure 52: Planning-Level Cost Estimate – Proposed Calumet River Trail

**Existing Path** 

Item	Llnit	Quantity	Hni	t Cost	To	tal Cost
	1	- J				
Full-Depth Pavement Removal	SY	32000	\$	30	\$	960,000
Earthwork	CY	1500	\$	670	\$	1,005,000
14' Sidepath/Trail	LF	6500	\$	100	\$	650,000
Tree Removal	EA	50	\$	750	\$	37,500
Lighting	LF	6500	\$	90	\$	585,000
Wetland Mitigation	AC	0.50	\$	160,000	\$	80,000
Retaining Wall	LF	2400	\$	2,000	\$	4,800,000
Underbridge Structure	SF	4200	\$	150	\$	630,000
Construction Subtotal					\$	8,748,000
Contingency (30%)					\$	2,625,000
Phase I Engineering (10% Construction Cost)					\$	874,800
Phase II Engineering (10% Construction Cost)						874,800
Phase III Engineering (10% Construction Cost)						874,800
Total Project Cost					\$	13,997,400

Place

Chicago Park District (CPD)

**Proposed Trail** - - Existing Path

### **Cost Estimate Summary**

Figure 53: Planning-Level Cost Estimate Summary by Projects

Recommendation	Pro	Project Cost		
1. 116th Street and Bridge Improvements	\$	10,288,000		
2. Carondolet Avenue Improvements	\$	371,600		
3. Torrence Avenue Improvements				
3A. Torrence Avenue - 126th Place to 122nd Street	\$	3,228,100		
3B. Torrence Avenue - 122nd Street to 110th Street	\$	5,940,900		
3C. Torrence Avenue - 110th Street to 104th Street	\$	3,433,800		
4. 122nd Street Improvements	\$	3,680,000		
5. Stony Island Avenue and Doty Avenue Improvements	\$	6,585,800		
6. 103rd Street Improvements				
6A. 103rd Street - Cottage Grove Avenue to Woodlawn Avenue	\$	4,118,000		
6B. 103rd Street - Woodlawn Avenue to Doty Avenue	\$	7,098,000		
6C. 102nd Street/Oglesby Avenue/104th Street from Marian Byrnes Park to				
Torrence Avenue	\$	74,000		
7. Calumet River Trail	\$	13,997,400		
Summary Cost, All Recommendations	\$	58,816,000		

Figure 54: Planning-Level Cost Estimate Summary by Agency having Jurisdiction

Agency	Program Cost	
Chicago Department of Transportation (CDOT)	\$	14,829,400
2. Carondolet Avenue Improvements		
4. 122nd Street Improvements		
5. Stony Island Avenue and Doty Avenue Improvements		
6A. 103rd Street - Cottage Grove Avenue to Woodlawn Avenue		
6C. 102nd Street/Oglesby Avenue/104th Street from Marian Byrnes Park to Tor		
Illinois Department of Transportation (IDOT)	\$	16,861,600
3A. Torrence Avenue - 126th Place to 122nd Street		
3B. Torrence Avenue - 122nd Street to 110th Street		
3C. Torrence Avenue - 110th Street to 104th Street		
6B. 103rd Street - Woodlawn Avenue to Doty Avenue (portion of the project)		
Cook County	\$	2,839,200
6B. 103rd Street - Woodlawn Avenue to Doty Avenue (portion of the project)		
Chicago Park District	\$	24,285,400
1. 116th Street and Bridge Improvements		
7. Calumet River Trail		
Summary Cost, All Recommendations	\$	58,816,000

#### **Implementation Strategies**

Proposed transportation improvements in this plan are structured into 7 recommendations. Each recommendation can seek a set of funding opportunities.

1. 116th Street Improvements and Bike Ped Bridge

116<sup>th</sup> Street is a local street and the City of Chicago is the agency having jurisdiction of the roadway. The improvements can be a candidate for Illinois Transportation Enhancement Program (ITEP) funds, or the Surface Transportation Program - Local (STP-L) from federal funding. Invest in Cook can be a non-federal source to match the federal program. The 116<sup>th</sup> Street Bike Ped Bridge is a candidate for ITEP or the next capital funding that would follow Safe Streets and Roads for All.

2. Carondolet Avenue between 130th Street and 126th Place

Improvements on Carondolet Avenue can seek IDNR Coastal Management funding or Invest in Cook as the non-federal source. New funding sources like Chi-Cal Rivers Fund by National Fish and Wildlife Foundation (NFWF) can be explored.

3. Torrence Avenue between 126th Place and 103rd Street

Proposed improvements to Torrence Avenue would require review and approval by IDOT as the agency having jurisdiction of the roadway. These improvements would be a candidate for Illinois Transportation Enhancement Program (ITEP) funds, or the Surface Transportation Program – Local (STP-L). The Congestion Mitigation and Air Quality (CMAQ) Improvement Program can also be a potential funding source.

4. 122nd Street between Stony Island Avenue and Torrence Avenue

122nd is a local roadway under the jurisdiction of CDOT. The improvements can be a candidate for Illinois Transportation Enhancement Program (ITEP) funds, or the Surface Transportation Program – Local (STP-L). IDOT Competitive Freight Program can be explored.

5. Stony Island Avenue between 130th Street and 103rd Street

Stony Island Avenue is a local CDOT roadway. The improvements can be a candidate for Illinois Transportation Enhancement Program (ITEP) funds, or the Surface Transportation Program – Local (STP-L).

6. 103rd Street between Cottage Grove Avenue and Torrence Avenue

103rd Street is under the jurisdiction of IDOT and Cook County. The improvements can be a candidate for Illinois Transportation Enhancement Program (ITEP) funds, or the Surface Transportation Program - Local (STP-L) from federal funding. Invest in Cook can be a non-federal source to match the federal program.

7. Calumet River North Bank Trail between Park 600/Deadstick Pond and Park 597/SEPA Station 1

The proposed new trail can be a candidate for the Surface Transportation Program – Shared (STP-Shared) that can be developed by the City of Chicago and the Chicago Park District. Potential non-federal funding sources can be the Transportation Alternatives Program (TAP-L) or the IDNR Federal Recreational Trails Program (RTP). New funding sources like Chi-Cal Rivers Fund by National Fish and Wildlife Foundation (NFWF) can be explored.

#### **Design Guidelines**

In identifying recommended improvements, this plan utilizes the following design guidelines based on jurisdiction of each roadway involved. Primary design guidelines are provided by IDOT, and are supported by other guidelines that must be followed for projects seeking federal funding for construction.

#### **ADA and PROWAG**

Regardless of jurisdiction or funding source, all facilities must also adhere to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) or the Public Rights of Way Access Guidelines (PROWAG) to ensure that recommended facilities are designed for users of all ages and abilities. IDOT, CDOT, and federal agency manuals include references to these guidelines where relevant.

#### **IDOT Bureau of Bridges and Structures (BBS)**

Guidelines for improvements on bridges and structures are provided in the BBS, which governs the design of improvements on Torrence Avenue at the Calumet River, 103rd Street over the Norfolk Southern (NS) Railroad, and the proposed trail under the NS Railroad bridge over the Calumet River.

# IDOT Bureau of Design and Environment (BDE)

Design criteria for roadways under the jurisdiction of IDOT follow the Bureau of Design Environment (BDE) govern the design of recommendations on Torrence Avenue, 130th Street, and sections of 103rd Street that intersect with Stony Island Avenue.

#### City of Chicago Bikeway Design Guidelines

CDOT also maintains a guide for specific applications and solutions involving City-owned streets, which provides additional design details beyond those contained in manuals published by IDOT. This includes specific guidance for separated bike lanes, intersections, on-street parking, and the design of bus stops and bus stop boarding islands.

# IDOT Bureau of Local Roads and Streets (BLRS)

Guidelines for local agency roadways (CDOT, Cook County, Chicago Park District) follow guidance from the IDOT BLRS Manual, which is required for any projects that seek federal funding. This affects recommendations on Stony Island Avenue, 116th Street, 122nd Street, Carondolet Avenue, and the proposed trail along the Calumet River.

#### **Supplemental Guidance**

The above guides also reference supplemental guidance that may be found in publications by the American Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), and National Association of City Transportation Officials (NACTO).