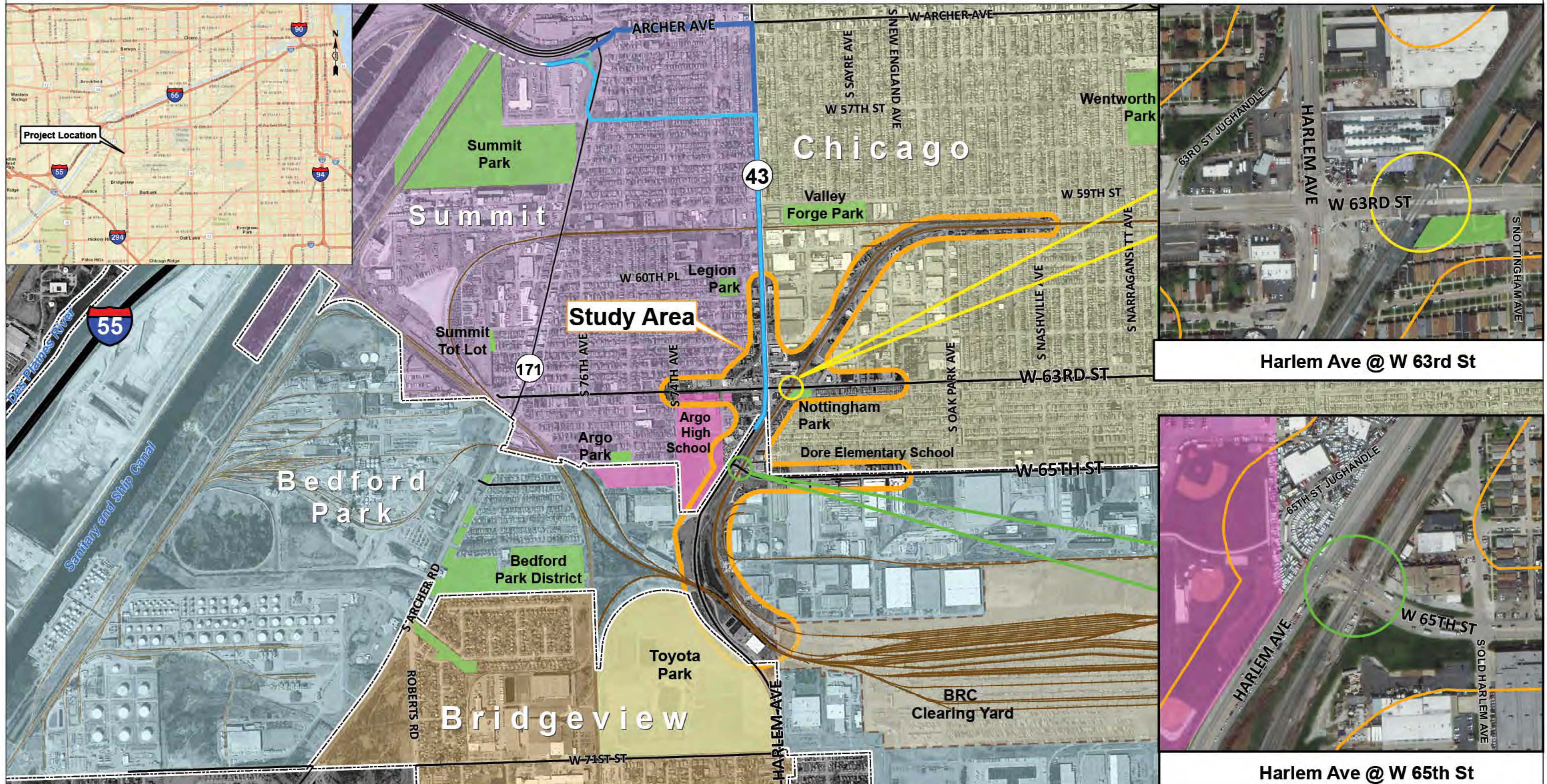
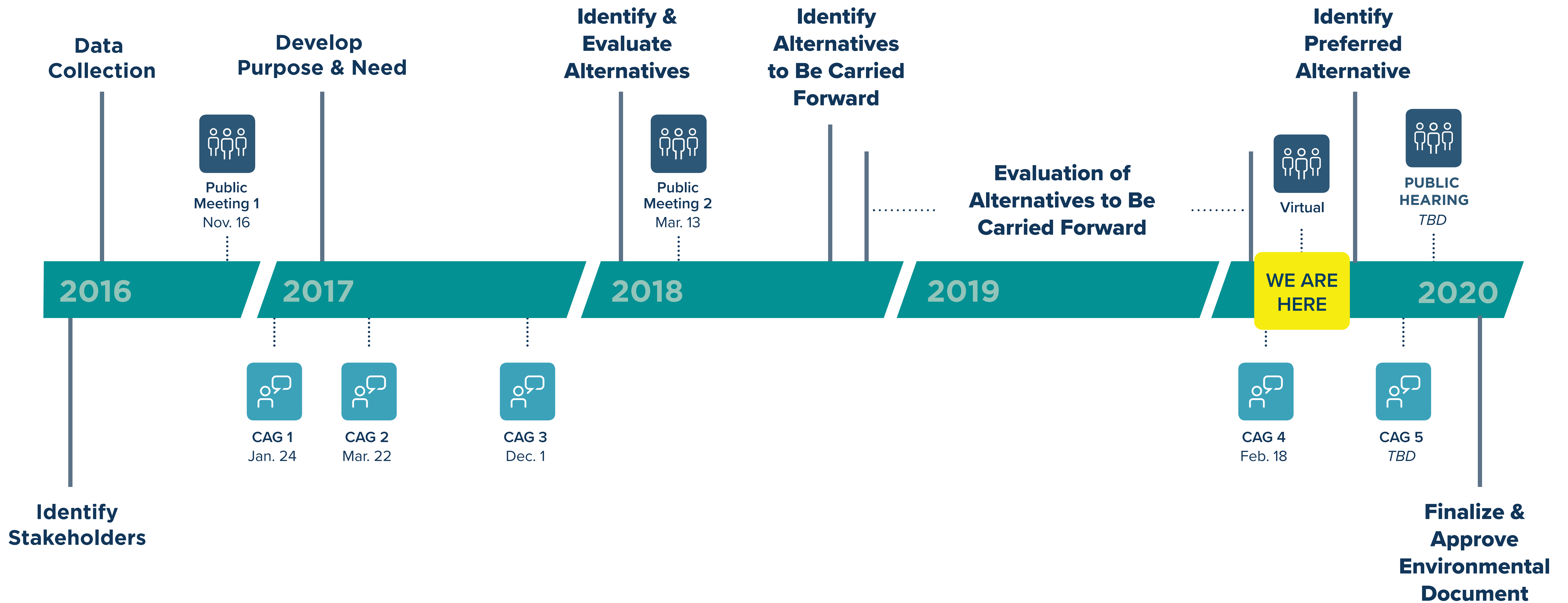


# Project Location Map





# Phase I Process



**PUBLIC  
MEETINGS**



**COMMUNITY ADVISORY GROUP  
(CAG) MEETINGS**

# Project Development Process

## PLANNING STAGE

anticipated completion 2020

**Preliminary  
Engineering &  
Environmental  
Studies**

## DESIGN STAGE

24-36 months

**Contract Plan  
Preparation &  
Land Acquisition**

*Funding identified*

## CONSTRUCTION STAGE

24-36 months

**Project  
Construction**

*Funding identified*

NOTE: This improvement is included in the Department's FY 2021-2026 Proposed Highway Improvement Program. Current engineering efforts are targeted to enable a contract letting in the later years of the multi-year program contingent upon plan readiness, land acquisition, and funding availability through future annual legislative appropriations.

# Purpose and Need Statement

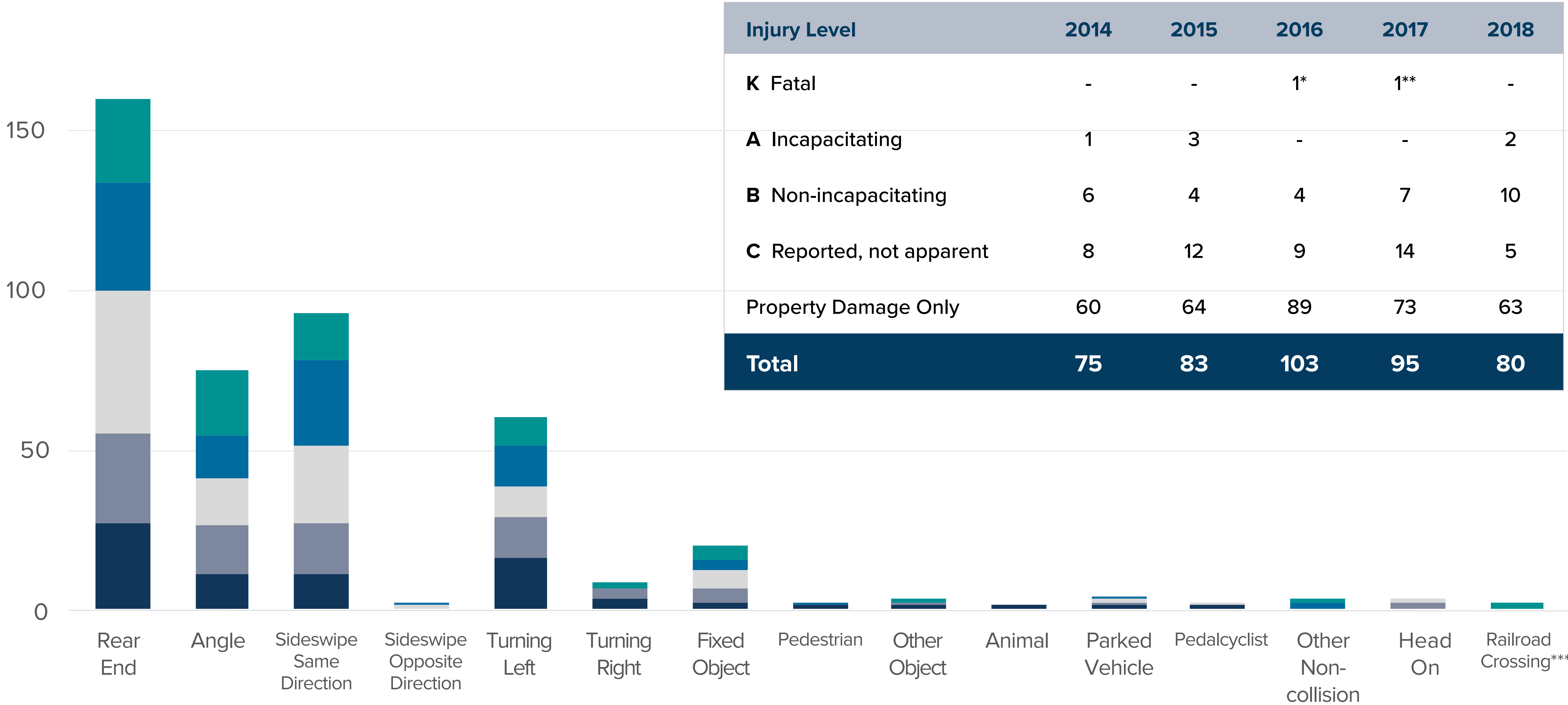
**The purpose of the project is to enhance safety, increase mobility, and improve multimodal connectivity.**

The study team evaluated the following existing conditions and other data to determine the need for improvement:

- Vehicular & Pedestrian Crashes
- Emergency Services
- Rail and Highway Conflict
- Traffic Analysis
- Intermodal Transportation
- Public Transportation
- Non-Motorized Modes

# Crash Study Results

2014–2018

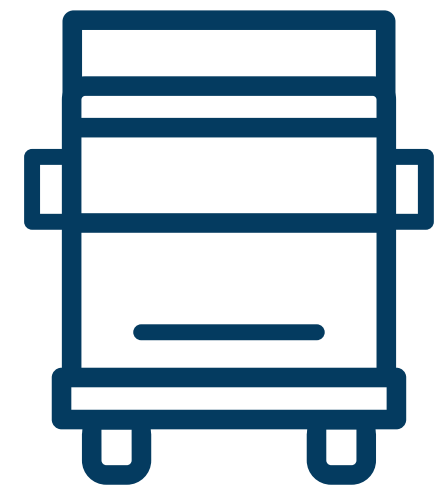


\*Crash occurred on Harlem Ave. between 63<sup>rd</sup> St. and 65<sup>th</sup> St.

\*\*Crash occurred at the intersection of 63<sup>rd</sup> St. and Harlem Ave.

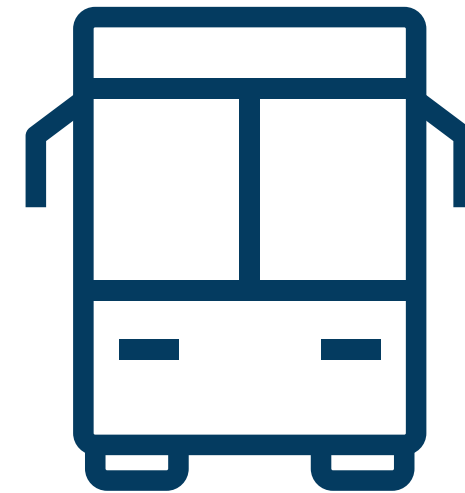
\*\*\*One crash involved a vehicle and train and resulted in 2 injuries, and the other involved a pedestrian and train and resulted in 1 injury.

# Multimodal Connectivity



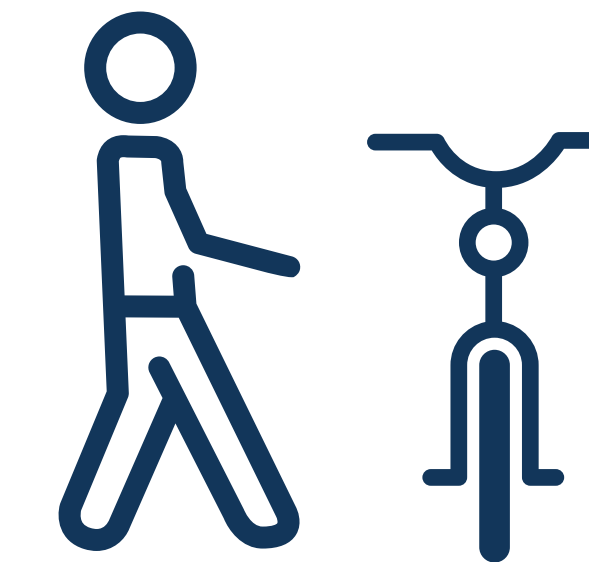
## Intermodal Transportation

The IL 43 corridor and east-west movements are critical to manufacturing and freight along I-55.



## Public Transportation

CTA and PACE operate bus routes that are impacted when trains occupy the crossings.



## Non-Motorized Modes

It is difficult to bike or walk along Harlem Ave. due to lack of bike separation and narrow sidewalks.\*

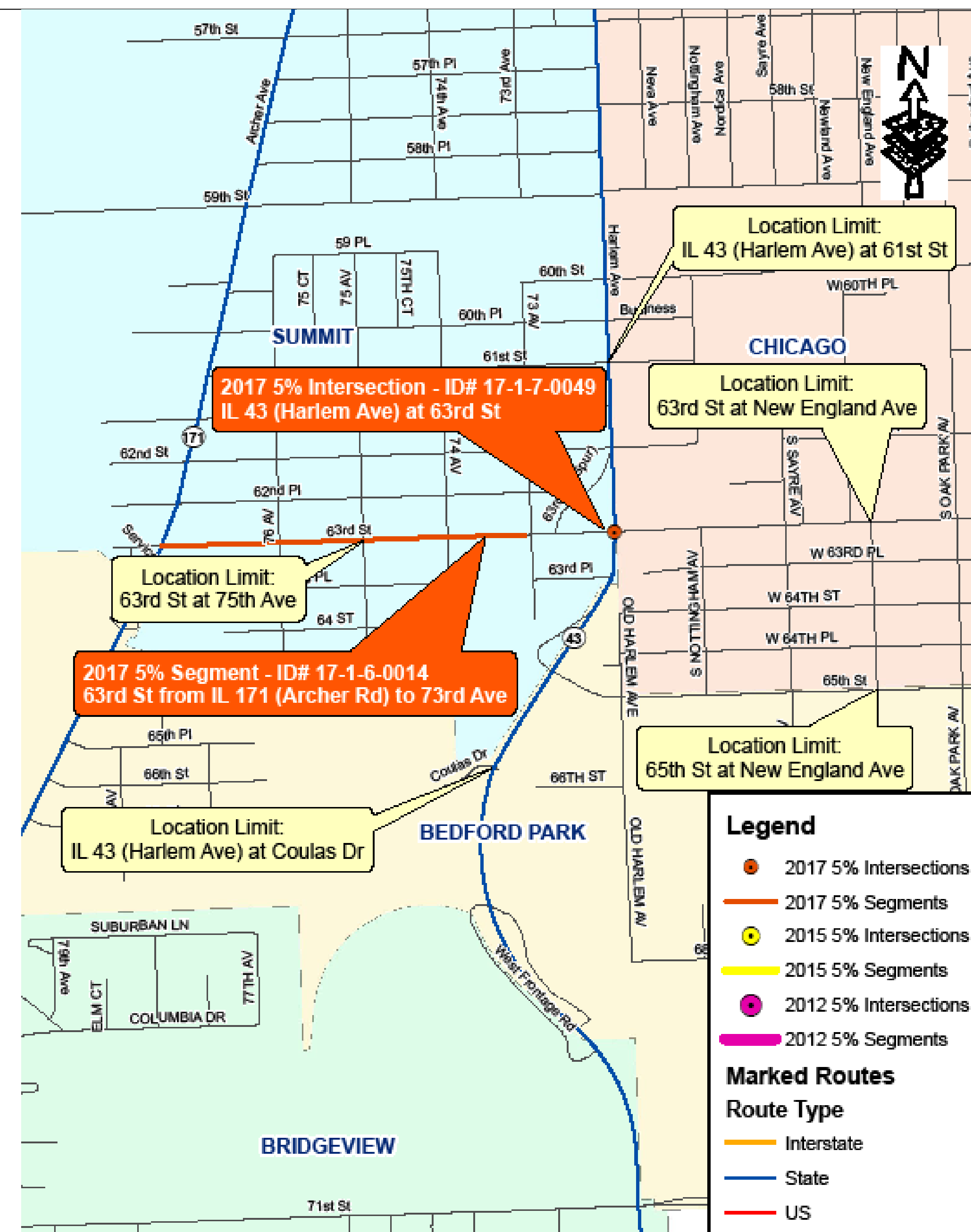
*\*According to a survey conducted by the Village of Summit and the Active Transportation Alliance*



# 5% Locations *2012, 2015, 2017*

**Locations along state highways  
that are identified as 5%  
locations are within the top 5%  
of locations statewide with the  
greatest potential for safety  
improvement, based on crash  
severity and frequency.**

*\*2013, 2014 & 2016 5% reports were not generated*



# Screening Process

## ALTERNATIVES CONSIDERED

~~Group 1~~ Minor Build

~~Group 2~~ Belt Railway Co. Railroad—  
Elevated / Depressed

~~Group 3~~ 63<sup>rd</sup> St. Elevated (Overpass)

~~Group 4~~ 63<sup>rd</sup> St. Depressed (Underpass)

**Group 5** 65<sup>th</sup> St. Elevated (Overpass)

**Group 6** 65<sup>th</sup> St. Depressed (Underpass)

~~Group 7~~ Combinations for 63<sup>rd</sup> St.  
and 65<sup>th</sup> St. Elevated/Depressed

**1**

## Determine

if alternatives meet the Purpose and Need

*Group 1: Minor Build*

*Eliminated*

**2**

## Conduct

stakeholder outreach and analyze  
Belt Railway Co. Railroad impacts

*Group 2: Belt Railway Co. Railroad Elevated/Depressed*

*Eliminated*

**3**

## Evaluate

remaining alternatives against criteria

*Groups 3-6 evaluated*



# Criteria Screening Matrix

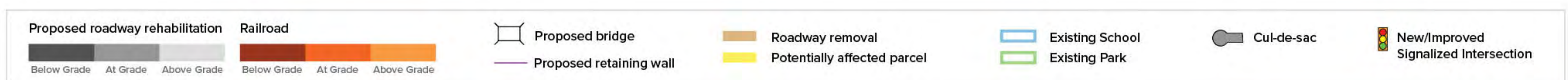
| Magnitude Legend   |  |                              |  |                              |  |  |               |                    |                              |   |                          |                     |  |                    |                       |   |                     |                        |
|--|--|------------------------------|--|------------------------------|--|--|---------------|--------------------|------------------------------|---|--------------------------|---------------------|--|--------------------|-----------------------|---|---------------------|------------------------|
| Large impact or magnitude  |  | Moderate impact or magnitude |  | Small/no impact or magnitude |  | GROUP 3<br>63 <sup>rd</sup> St. Elevated                           |               |                    |                              | GROUP 4<br>63 <sup>rd</sup> St. Depressed |                          |                     | GROUP 5<br>65 <sup>th</sup> St. Elevated |                    |                       | GROUP 6<br>65 <sup>th</sup> St. Depressed |                     |                        |
| <div>CRITERIA</div> <div>All impacts are based on preliminary analysis. Alternatives will be further studied to limit and mitigate impacts.</div> <div>Preliminary Residential Displacements Parcels</div> <div>Includes parcels where building is impacted by improvement or access is impacted by retaining wall.</div> <div>Preliminary Business Displacements Parcels</div> <div>Includes parcels where building is impacted by improvement or access is impacted by retaining wall.</div> <div>Impact to Nottingham Park</div> <div>Section 4(f) Resources</div> <div>Impacts on Community Cohesion</div> <div>Adverse impact to community cohesion such as fragmenting neighborhoods with a physical disruption.</div> <div>Multimodal Ease</div> <div>Does not support multimodal transportation.</div> <div>Community Support</div> <div>Feedback from prior community meetings.</div> <div>Level of Service</div> <div>Transportation level of service for each alternative.</div> <div>Construction Challenges</div> <div>Considers depressed/elevated alternatives, non-standard bridge configuration, and Harlem Avenue realignment.</div> <div>Construction Duration</div> <div>Estimated construction duration.</div> <div>Long-Term Maintenance</div> <div>Estimated yearly maintenance cost.</div> <div>Preliminary Project Cost</div> <div>Estimated construction cost.</div> |  |                              |  |                              |  | 6  | 7             | 8                  | 9                            | 10  | 11                       | 12                  | 13                                       | 14                 | 31                    | 15  | 16                  |                        |
|  |  |                              |  |                              |  | Elevated with Jughandle  |               | Elevated with Ramp | Elevated with Harlem Realign | Elevated Intersection                     | Depressed with Jughandle | Depressed with Ramp | Depressed Intersection                   | Elevated with Ramp | Elevated Intersection | Elevated Roundabout                       | Depressed with Ramp | Depressed Intersection |
|  |  |                              |  |                              |  | Preliminary Residential Displacements<br><i>(Properties/Units)</i> | 24 / 83       | 26 / 85            | 28 / 87                      | 26 / 85                                   | 15 / 73                  | 16 / 87             | 14 / 72                                  | 6 / 6              | 6 / 6                 | 9 / 9                                     | 2 / 2               | 2 / 2                  |
|  |  |                              |  |                              |  | Preliminary Business Displacements<br><i>(Properties/Units)</i>    | 13 / 16       | 25 / 28            | 25 / 28                      | 25 / 28                                   | 12 / 15                  | 25 / 28             | 25 / 28                                  | 14 / 17            | 14 / 17               | 15 / 18                                   | 11 / 11             | 11 / 11                |
|  |  |                              |  |                              |  | Impacts to Nottingham Park<br><i>Section 4 (f) Resource)</i>       | Yes           | Yes                | Yes                          | Yes                                       | Yes                      | Yes                 | Yes                                      | None               | None                  | None                                      | None                | None                   |
|  |  |                              |  |                              |  | Impacts to Community Cohesion                                      | Disruptive    | Disruptive         | Disruptive                   | Disruptive                                | Disruptive               | Disruptive          | Disruptive                               | No Disruption      | No Disruption         | No Disruption                             | No Disruption       | No Disruption          |
|  |  |                              |  |                              |  | Multimodal Ease<br><i>Transit, Bike/Pedestrian</i>                 | Limited       | Limited            | Supported                    | Supported                                 | Limited                  | Limited             | Supported                                | Limited            | Supported             | Limited                                   | Limited             | Supported              |
|  |  |                              |  |                              |  | Community Support  | Not Supported | Not Supported      | Not Supported                | Not Supported                             | Not Supported            | Not Supported       | Not Supported                            | Supported          | Supported             | Supported                                 | Supported           | Supported              |
|  |  |                              |  |                              |  | Level of Service   | Acceptable    | Good               | Poor                         | Poor                                      | Acceptable               | Good                | Poor                                     | Good               | Acceptable            | Good                                      | Good                | Acceptable             |
|  |  |                              |  |                              |  | Construction Challenges  | Minimal       | Moderate           | Moderate                     | Minimal                                   | Moderate                 | Large               | Moderate                                 | Moderate           | Minimal               | Large                                     | Large               | Moderate               |
|  |  |                              |  |                              |  | Construction Duration<br><i>in years</i>                           | 2.2           | 2.6                | 2.3                          | 2.2                                       | 2.8                      | 2.9                 | 2.3                                      | 1.9                | 2.2                   | 2.1                                       | 2.7                 | 2.3                    |
|  |  |                              |  |                              |  | Long-Term Maintenance  | \$3M          | \$4M               | \$3M                         | \$3M                                      | \$5M                     | \$5M                | \$4M                                     | \$4M               | \$3M                  | \$4M                                      | \$5M                | \$4M                   |
|  |  |                              |  |                              |  | Preliminary Project Cost   | \$65M         | \$99M              | \$83M                        | \$83M                                     | \$96M                    | \$120M              | \$108M                                   | \$98M              | \$81M                 | \$105M                                    | \$116M              | \$101M                 |



# Grade Separation Examples







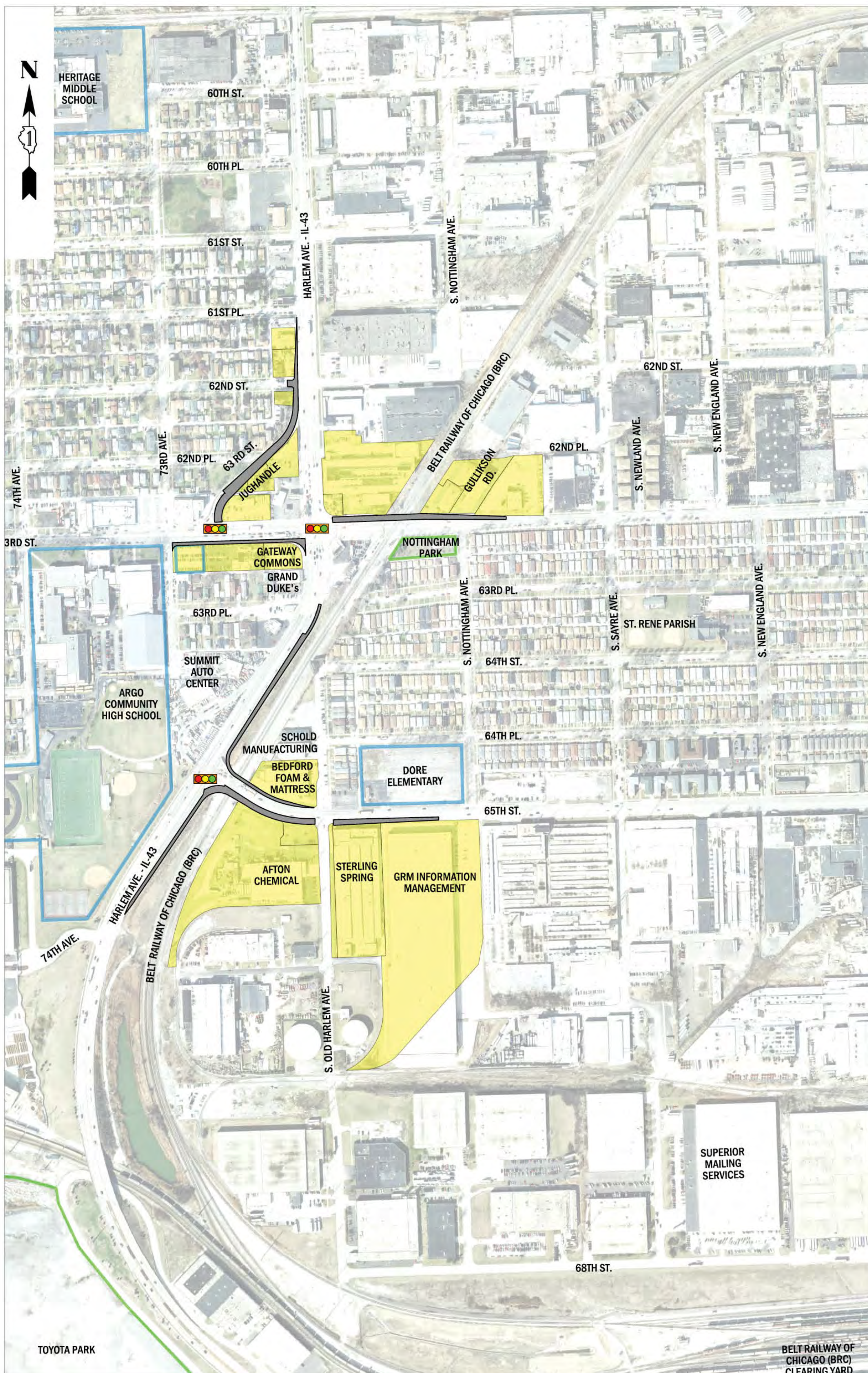
## Cost

\$    \$\$    \$\$\$

## No Build

- Baseline condition
- Leaves the existing conditions as is
- Minor increase in 2040 traffic versus 2016





\$    \$\$    \$\$\$

|               |                        |
|---------------|------------------------|
| <b>Safety</b> | <i>No Improvements</i> |
| <b>LOS</b>    | <i>E or F</i>          |

**Potentially Affected Properties & Access**

|                    |              |
|--------------------|--------------|
| <b>Residential</b> | <i>10-19</i> |
| <b>Businesses</b>  | <i>10-19</i> |

*Potentially no impacts to schools, parks & communities.*

- Keep existing at-grade crossings
- Add some mainline capacity
- Improve existing jughandle at 63<sup>rd</sup> St.
- Keep existing jughandle at 65<sup>th</sup> St.
- Modify traffic and railroad signal interconnectivity and signal timing



# Group 2: Belt Railway Co. Railroad Elevated/Depressed

Eliminated Alternative

Proposed roadway rehabilitation  
Below Grade At Grade Above Grade  
Railroad  
Below Grade At Grade Above Grade

Proposed bridge  
Proposed retaining wall

Roadway removal  
Potentially affected parcel

Existing School  
Existing Park

Cul-de-sac

New/Improved  
Signalized Intersection

## COMPARISON MATRIX

| Safety | Most Improvements | Potentially Affected Properties & Access |       |
|--------|-------------------|--|-------|
| LOS    | D                 | Residential                              | 0-9   |
|        |                   | Businesses                               | 10-19 |

Potential impacts to  
Nottingham Park and  
Argo High School.

Cost \$ \$\$\$ \$\$\$\$

### All Elevated

- New 2-track BRC railroad bridge over 63<sup>rd</sup> St. and 65<sup>th</sup> St.
- Retaining walls along BRC tracks
- Remove jughandles at 63<sup>rd</sup> and 65<sup>th</sup> St.
- Eliminate roadway conflicts with railroad

### Elevated Hybrid

- Partially elevated BRC railroad over partially depressed 63<sup>rd</sup> St. and 65<sup>th</sup> St.
- Depending on roadway depth, expect impacts to Harlem Ave., 63<sup>rd</sup> St. and 65<sup>th</sup> St.
- Retaining walls along BRC tracks
- Remove jughandles at 63<sup>rd</sup> and 65<sup>th</sup> St.
- Eliminate roadway conflicts with railroad

### All Depressed

- Railroad in fully depressed trench with retaining walls
- New roadway bridges over BRC
- Retaining walls along BRC tracks
- Remove jughandles at 63<sup>rd</sup> and 65<sup>th</sup> St.
- Eliminate roadway conflicts with railroad

### Depressed Hybrid

- Railroad in partially depressed trench with retaining walls
- Partially elevated 63<sup>rd</sup> St. and 65<sup>th</sup> St. over BRC tracks
- Retaining walls along BRC tracks
- Remove jughandles at 63<sup>rd</sup> and 65<sup>th</sup> St.
- Eliminate roadway conflicts with railroad



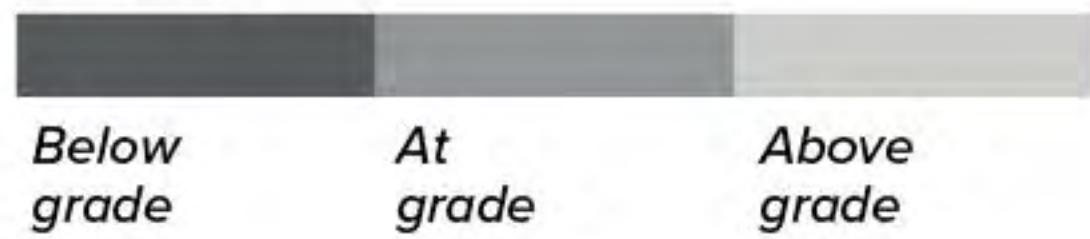


# Group 3: 63<sup>rd</sup> St Elevated (Overpass)

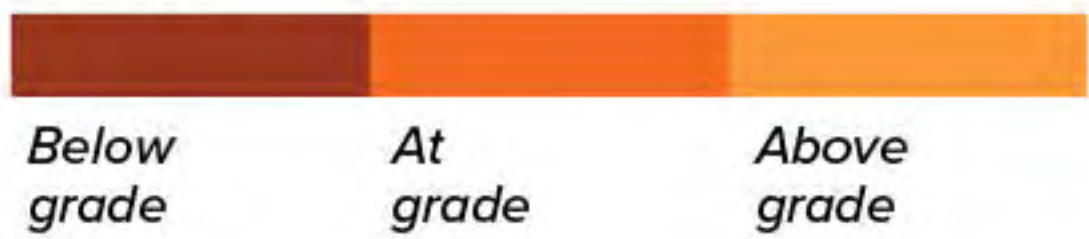
Eliminated Alternative

## PROPOSED IMPROVEMENTS

### Roadway



### Railroad



## PRELIMINARY DISPLACEMENTS

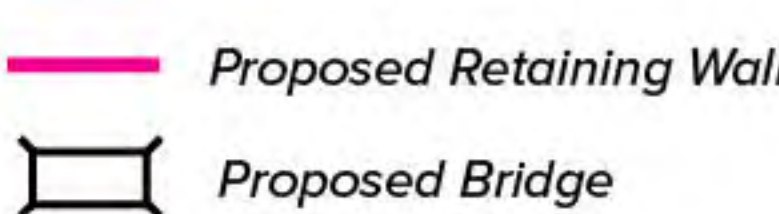
### Residential



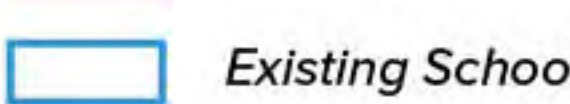
### Commercial



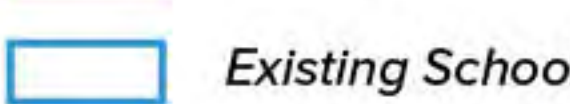
### Roadway Removal



### Existing Park



### Existing School



Cul-de-sac



New/Improved Signalized Intersection

## MATRIX OVERVIEW

### Preliminary Displacements

|                        |       |
|------------------------|-------|
| Residential properties | 24–28 |
| Business properties    | 13–25 |

### Preliminary Costs

|                       |          |
|-----------------------|----------|
| Construction          | \$65–99M |
| Long-term maintenance | \$3–4M   |

## ALTERNATIVE 6

### Elevated with Jughandle

- Elevated 63<sup>rd</sup> St. over BRC and Harlem Ave.
- Reconfigured jughandle to accommodate Harlem Ave./63<sup>rd</sup> St.
- Harlem Ave. / 63<sup>rd</sup> St. intersection grade separated
- New signalized intersection on Harlem Ave. at 63<sup>rd</sup> St jughandle

## ALTERNATIVE 7

### Elevated with Ramp

- Elevated 63<sup>rd</sup> St. over BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St. intersection grade separated
- New 63<sup>rd</sup> St. roadway bridge over at-grade Harlem Ave.
- Elevated signalized intersection with access ramps
- Remove jughandle at Harlem Ave./63<sup>rd</sup> St. and Harlem Ave./65<sup>th</sup> St.

## ALTERNATIVE 8

### Elevated/Harlem Realign

- Elevated 63<sup>rd</sup> St. over BRC
- Realign Harlem Ave. west of existing alignment
- Remove jughandle at Harlem Ave./63<sup>rd</sup> St. and Harlem Ave./65<sup>th</sup> St.

## ALTERNATIVE 9

### Elevated Intersection

- Elevated 63<sup>rd</sup> St. over BRC
- Raised Harlem Ave. / 63<sup>rd</sup> St. signalized intersection
- Remove jughandle at Harlem Ave./63<sup>rd</sup> St. and Harlem Ave./65<sup>th</sup> St.

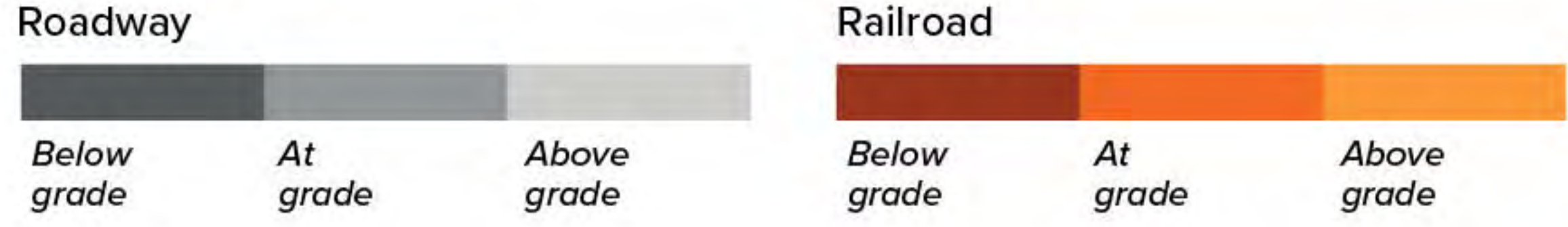




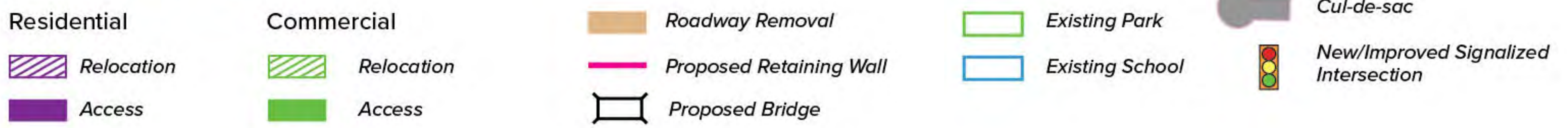
# Group 4: 63<sup>rd</sup> St Depressed (Underpass)

Eliminated Alternative

PROPOSED IMPROVEMENTS



PRELIMINARY DISPLACEMENTS



MATRIX OVERVIEW

| Preliminary Displacements |       |                     |       | Preliminary Costs |           |                       |        |
|---------------------------|-------|---------------------|-------|-------------------|-----------|-----------------------|--------|
| Residential properties    | 14–16 | Business properties | 12–25 | Construction      | \$96–120M | Long-term maintenance | \$4–5M |

ALTERNATIVE 10

## Depressed with Jughandle

- Depressed 63<sup>rd</sup> St. under at-grade BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St intersection grade separated
- Reconfigure jughandle to accommodate Harlem Ave./63<sup>rd</sup> St. intersection
- New signalized intersection on Harlem Ave. at 63<sup>rd</sup> St. jughandle



ALTERNATIVE 11

## Depressed with Ramp

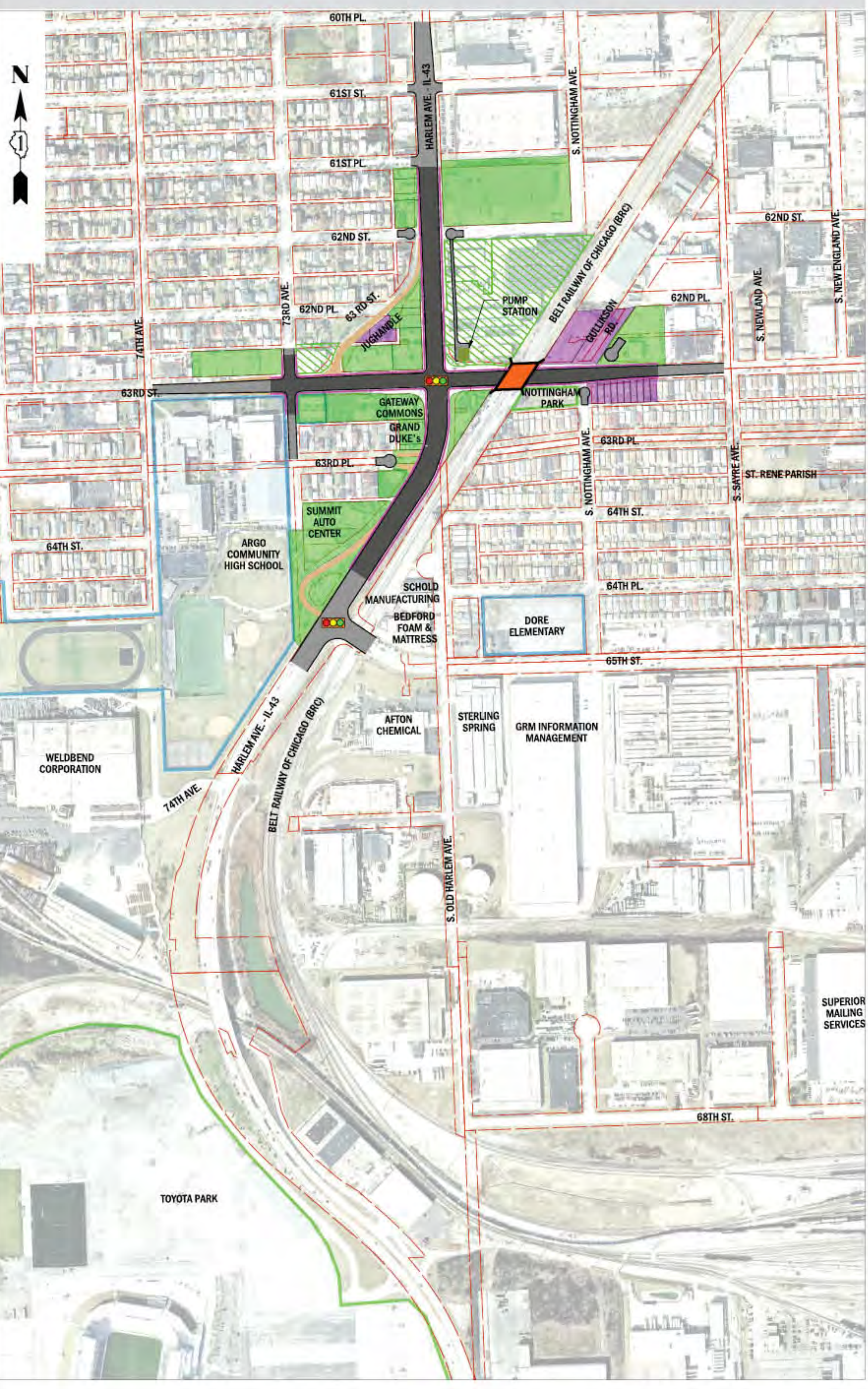
- Depressed 63<sup>rd</sup> St. under at-grade BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St intersection grade separated
- Depressed signalized intersection, on 63<sup>rd</sup> St., with access ramps along Harlem Ave.
- Remove jughandle at Harlem Ave./63<sup>rd</sup> St. and Harlem Ave./65<sup>th</sup> St.



ALTERNATIVE 12

## Depressed Intersection

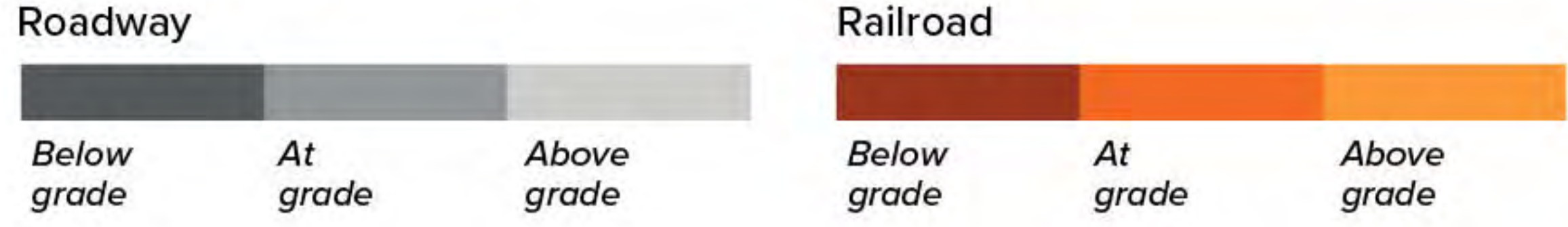
- Depressed 63<sup>rd</sup> St. under at-grade BRC; Harlem Ave. is depressed to intersect 63<sup>rd</sup> St. at same grade
- Harlem Ave./63<sup>rd</sup> St. intersection lowered with retaining walls
- Remove jughandle at Harlem Ave./63<sup>rd</sup> St. and Harlem Ave./65<sup>th</sup> St.



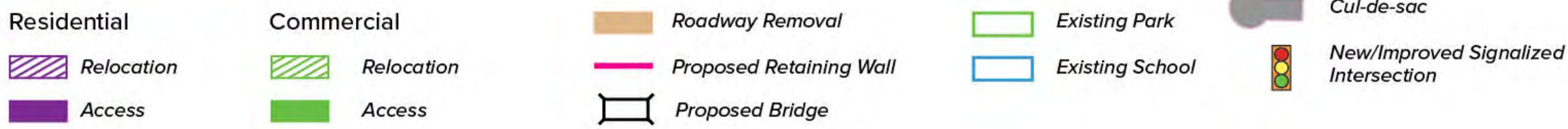


# Group 5: 65<sup>th</sup> St Elevated (Overpass)

PROPOSED IMPROVEMENTS



PRELIMINARY DISPLACEMENTS



MATRIX OVERVIEW

| Preliminary Displacements |     | Preliminary Costs     |       |
|---------------------------|-----|-----------------------|-------|
| Residential properties    | 6–9 | Business properties   | 14–15 |
| Construction              |     | Long-term maintenance |       |
| \$81–105M                 |     | \$3–4M                |       |

ALTERNATIVE 13

## Elevated with Ramp

- Elevated 65<sup>th</sup> St. over BRC and Harlem Ave.
- Elevated signalized intersection, on 65<sup>th</sup> St., with access ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.
- Raised Harlem Ave./63<sup>rd</sup> St. signalized intersection



ALTERNATIVE 14

## Elevated Intersection

- Elevated 65<sup>th</sup> St. over BRC; Harlem Ave. elevated to intersect 65<sup>th</sup> St. at same grade
- New raised signalized intersection at Harlem Ave./ 65<sup>th</sup> St. with retaining walls
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.



ALTERNATIVE 31

## Elevated Roundabout

- Elevated 65<sup>th</sup> St. over BRC and Harlem Ave.
- Elevated Roundabout on 65<sup>th</sup> St., with access ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.
- Raised Harlem Ave./63<sup>rd</sup> St. signalized intersection

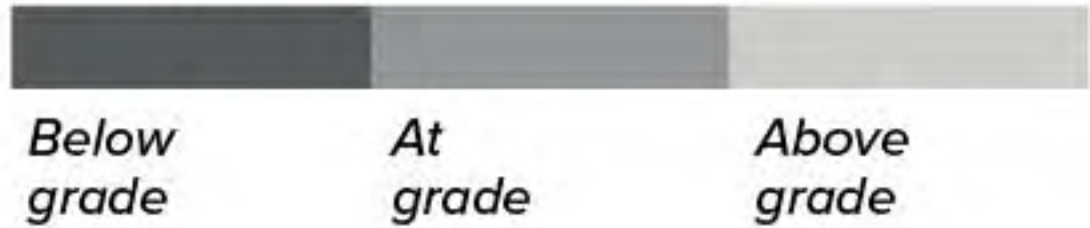




# Group 6: 65<sup>th</sup> St Depressed (Underpass)

PROPOSED IMPROVEMENTS

Roadway



Railroad



PRELIMINARY DISPLACEMENTS

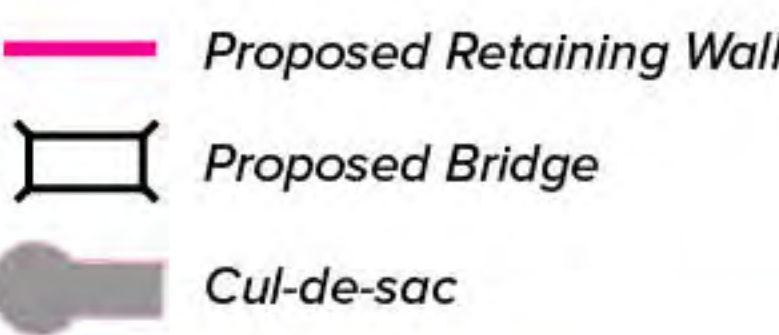
Residential



Commercial



Roadway Removal



Existing Park



MATRIX OVERVIEW

Preliminary Displacements

Residential properties 2 Business properties 11

Preliminary Costs

Construction \$101–116M Long-term maintenance \$4–5M

ALTERNATIVE 15

## Depressed with Ramp

- Depressed 65<sup>th</sup> St. under BRC and Harlem Ave.
- New 2-track railroad bridge for grade separation
- New Harlem Ave. roadway bridge
- Depressed signalized intersection with ramps to/from Harlem Ave.
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.



ALTERNATIVE 16

## Depressed Intersection

- Depressed 65<sup>th</sup> St. under BRC
- New 2-track railroad bridge for grade separation
- New lowered signalized intersection at Harlem Ave./65<sup>th</sup> St with retaining walls
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.



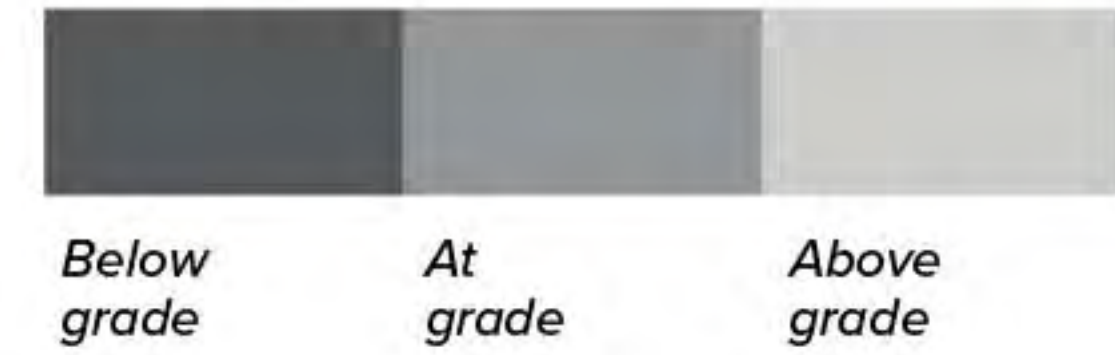


# Group 6: 65<sup>th</sup> St. Depressed (Underpass)

## LEGEND

### PROPOSED IMPROVEMENTS

#### Roadway



#### Railroad



### PRELIMINARY DISPLACEMENTS

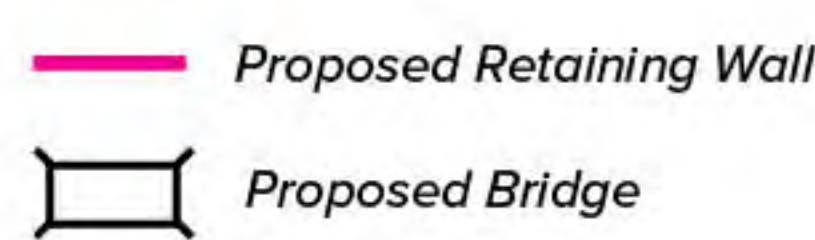
#### Residential



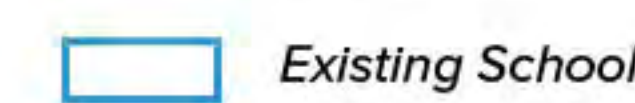
#### Commercial



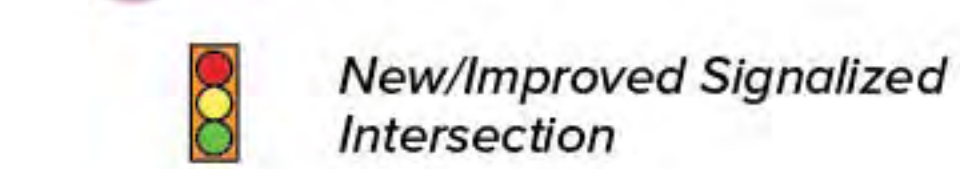
#### Roadway Removal



#### Existing Park



#### Cul-de-sac



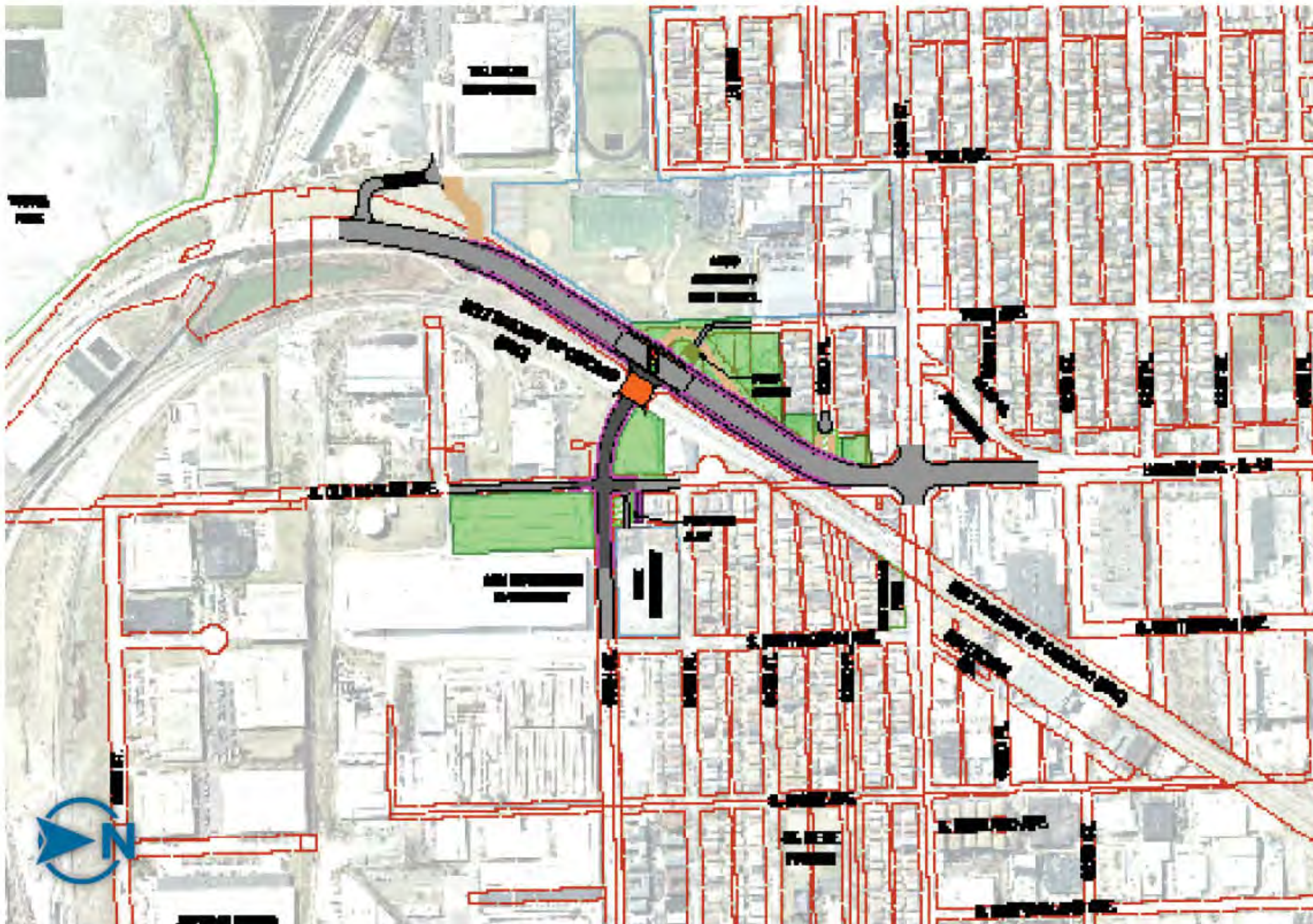
## MATRIX OVERVIEW

### Preliminary Displacements

|                        |    |
|------------------------|----|
| Residential properties | 2  |
| Business properties    | 11 |

### Preliminary Costs

|                       |            |
|-----------------------|------------|
| Construction          | \$101–116M |
| Long-term maintenance | \$4–5M     |



### ALTERNATIVE 15

## Depressed with Ramp

- Depressed 65<sup>th</sup> St. under BRC and Harlem Ave.
- New 2-track railroad bridge for grade separation
- New Harlem Ave. roadway bridge
- Depressed signalized intersection with ramps to/from Harlem Ave.
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.



### ALTERNATIVE 16

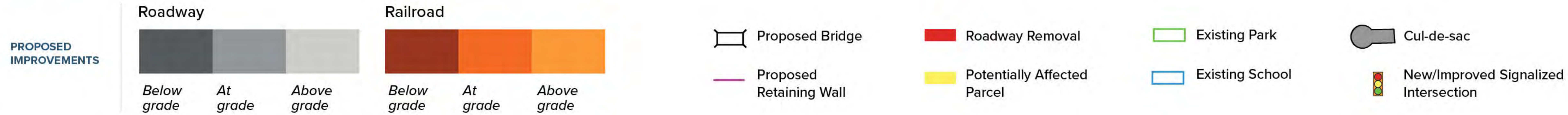
## Depressed Intersection

- Depressed 65<sup>th</sup> St. under BRC
- New 2-track railroad bridge for grade separation
- New lowered signalized intersection at Harlem Ave./65<sup>th</sup> St with retaining walls
- Remove jughandle at Harlem Ave./65<sup>th</sup> St.



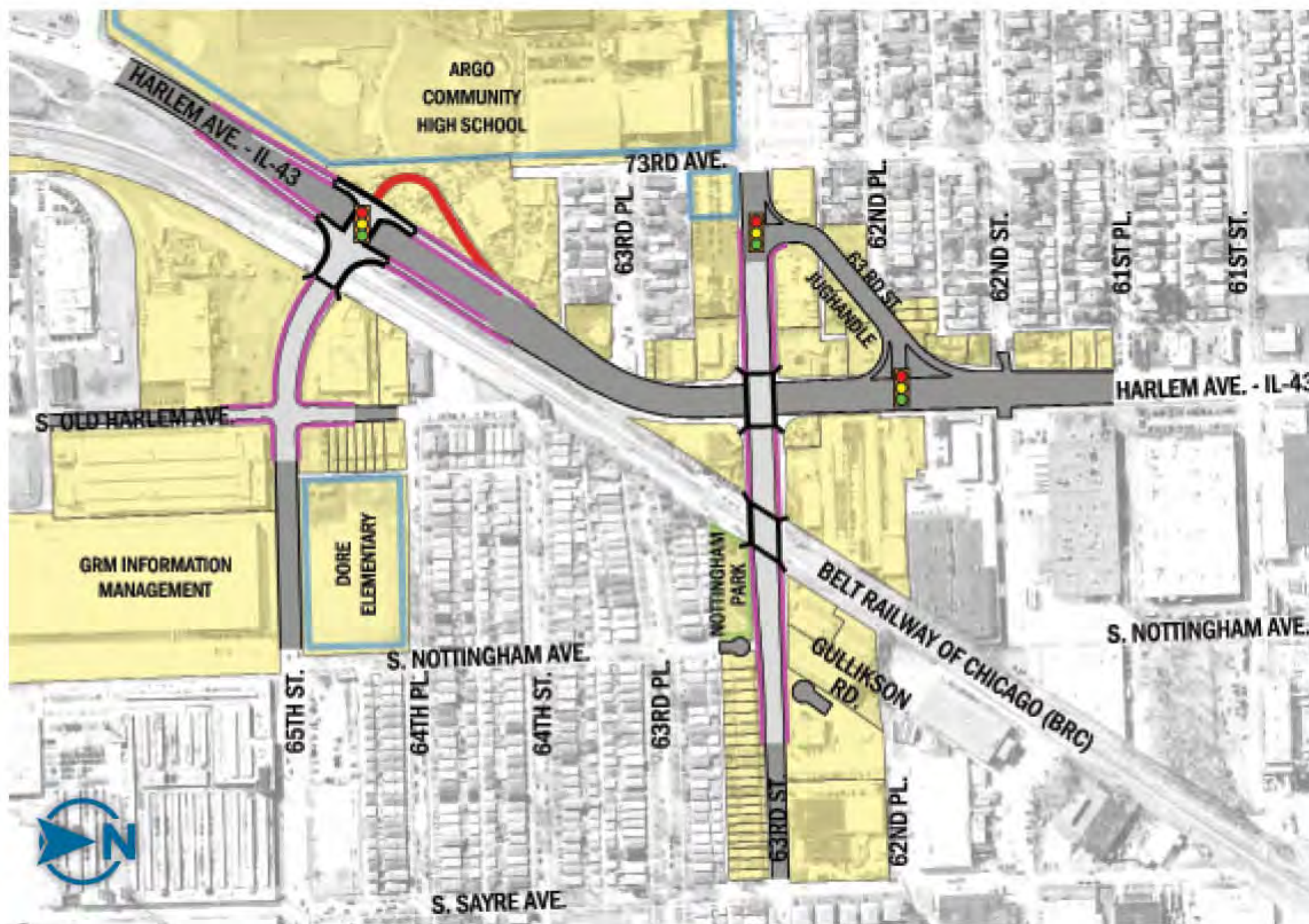
# Group 7: 63<sup>rd</sup> St. and 65<sup>th</sup> St. Elevated/Depressed Combinations

## LEGEND



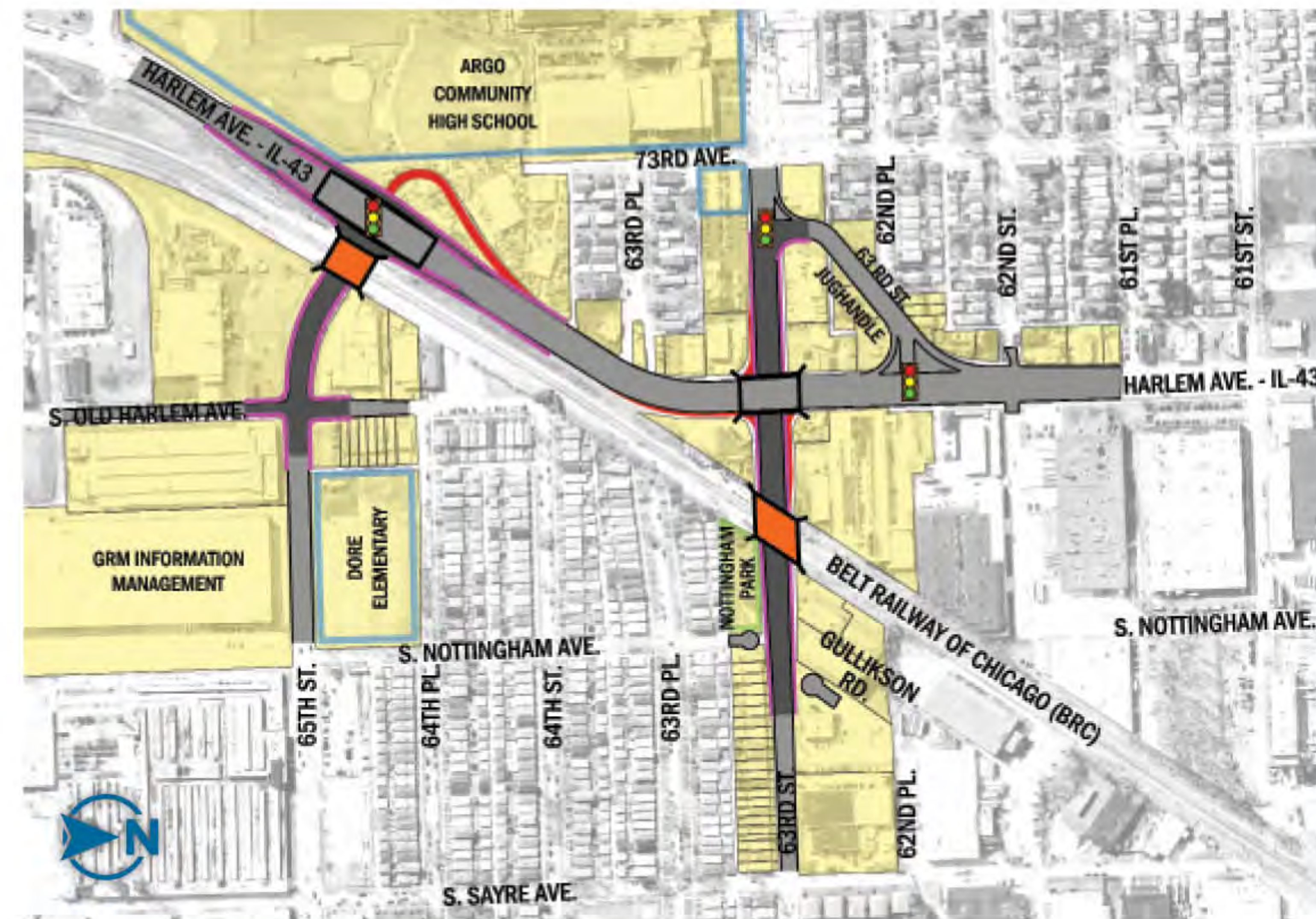
## Cost

\$ \$\$\$



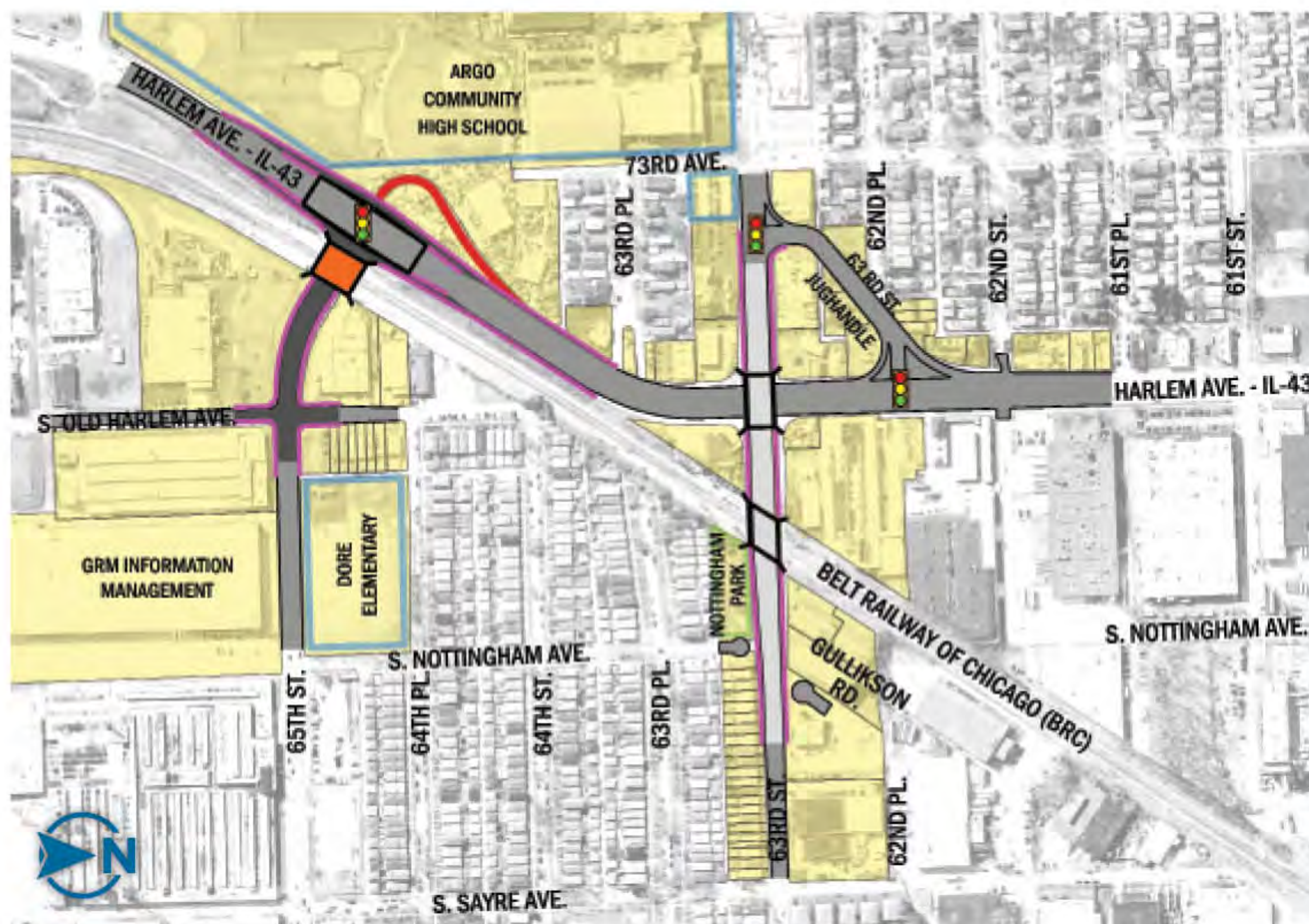
### Elevated 63<sup>rd</sup> St. with Jughandle and Elevated 65<sup>th</sup> St. with Ramps

- Elevated 63<sup>rd</sup> St. over BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St. intersection grade separated
- Reconfigure jughandle to accommodate Harlem Ave./63<sup>rd</sup> St. intersection
- New signalized intersection on Harlem Ave. at 63<sup>rd</sup> St. jughandle
- Elevated 65<sup>th</sup> St. over BRC and Harlem Ave.
- Elevated signalized intersection on 65<sup>th</sup> St. with ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave. & 65<sup>th</sup> St.



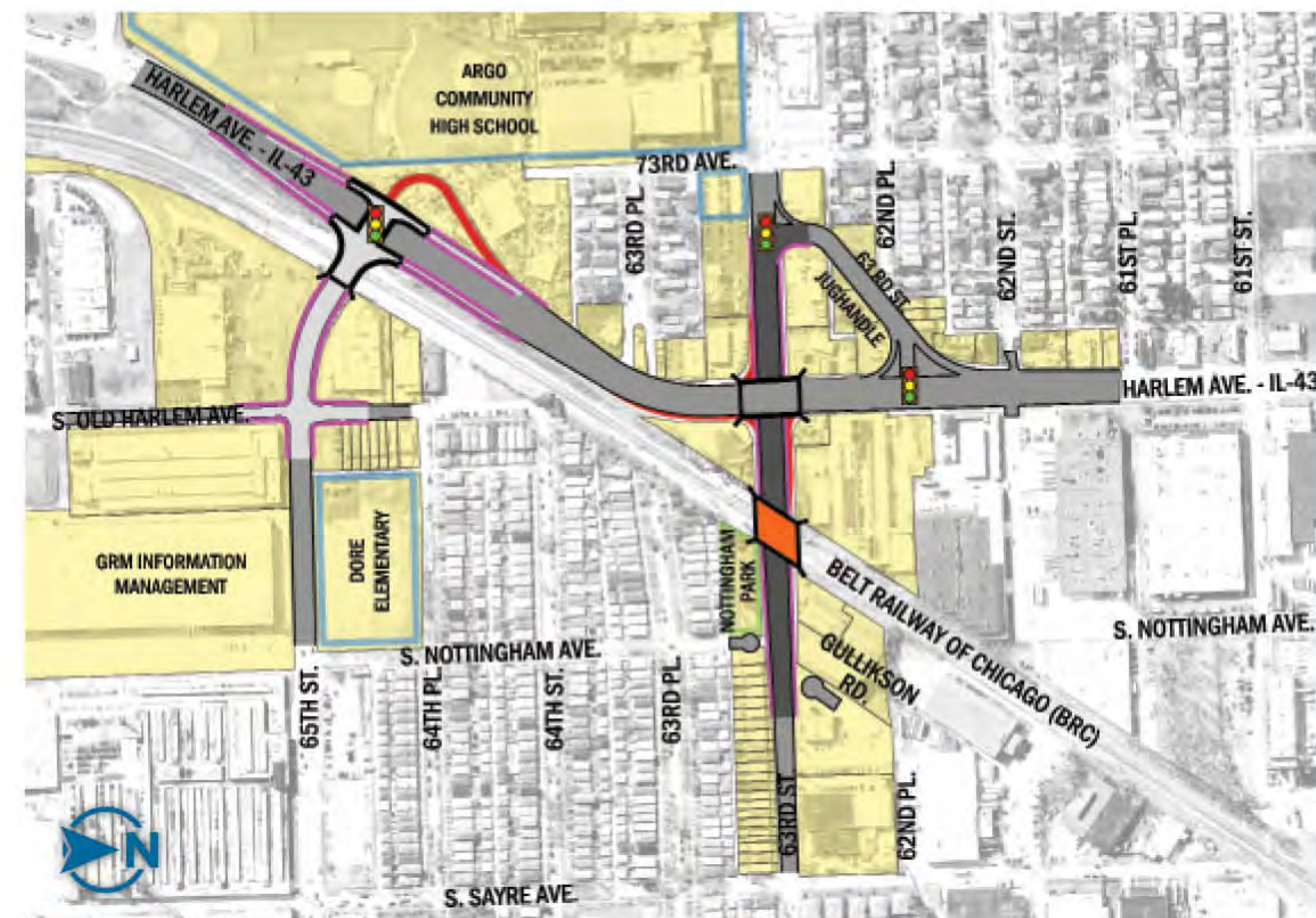
### Depressed 63<sup>rd</sup> St. with Jughandle and Depressed 65<sup>th</sup> St. with Ramps

- Depressed 63<sup>rd</sup> St. under at-grade BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St. intersection grade separated
- Reconfigure jughandle to accommodate Harlem Ave./63<sup>rd</sup> St. intersection
- New signalized intersection on Harlem Ave. at 63<sup>rd</sup> St. jughandle
- Depressed 65<sup>th</sup> St. under BRC and Harlem Ave.
- Depressed signalized intersection on 65<sup>th</sup> St. with ramps to/from Harlem Ave. & 65<sup>th</sup> St.
- New 2-track railroad bridges for grade separations at 63<sup>rd</sup> St. and 65<sup>th</sup> St.
- New Harlem Ave. roadway bridges over 63<sup>rd</sup> St. and 65<sup>th</sup> St.
- New 2-track railroad bridges for grade separations at 63<sup>rd</sup> St. and 65<sup>th</sup> St.
- New Harlem Ave. roadway bridges over 63<sup>rd</sup> St. and 65<sup>th</sup> St.



### Elevated 63<sup>rd</sup> St. with Jughandle and Depressed 65<sup>th</sup> St. with Ramps

- Elevated 63<sup>rd</sup> St. over BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St. intersection grade separated
- Reconfigure jughandle to accommodate Harlem Ave./63<sup>rd</sup> St. intersection
- New signalized intersection on Harlem Ave. at 63<sup>rd</sup> St. jughandle
- Depressed 65<sup>th</sup> St. under BRC and Harlem Ave.
- New 2-track railroad bridge for grade separation at 65<sup>th</sup> St.
- New Harlem Ave. roadway bridge over 65<sup>th</sup> St.
- Depressed signalized intersection on 65<sup>th</sup> St. with ramps to/from Harlem Ave.



### Depressed 63<sup>rd</sup> St. with Jughandle and Elevated 65<sup>th</sup> St. with Ramps

- Depressed 63<sup>rd</sup> St. under at-grade BRC and Harlem Ave.
- Harlem Ave. / 63<sup>rd</sup> St. intersection grade separated
- New 2-track railroad bridge for grade separation at 63<sup>rd</sup> St.
- New Harlem Ave. roadway bridge over 63<sup>rd</sup> St.
- Reconfigure jughandle to accommodate Harlem Ave./63<sup>rd</sup> St. intersection
- New signalized intersection on Harlem Ave. at 63<sup>rd</sup> St. jughandle
- Elevated 65<sup>th</sup> St. over BRC and Harlem Ave.
- Elevated signalized intersection on 65<sup>th</sup> St. with ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave. & 65<sup>th</sup> St.