ILLINOIS 43 STUDY

Harlem Avenue between 63rd and 65th

Community Advisory Group Meeting #3

December 1, 2017

Bedford Park Public Library

Illinois Department of Transportation

CREATE

Meeting Agenda

1. Welcome/Introductions (3 mins)
2. Project Overview and Re-Cap (5 min)
3. Purpose and Need (6 min)
4. Alternatives Evaluation (6 min)
5. Break (10 min)
6. Alternatives Descriptions and Evaluation (80 min)
7. Wrap-Up/Next Steps (10 min)

Illinois Department of Transportation CREATE

Welcome and Introductions

Project Team Introductions

ILLINOIS 43 STUDY

Illinois Department of Transportation

Steve Schilke, P.E.
Project Manager

Anna Kutryn, P.E.
Project Engineer

Michael Baker INTERNATIONAL

Wendy L. Vachet, AICP
Environmental & Public Involvement Lead

Isaac Yun, P.E.
Project Engineer

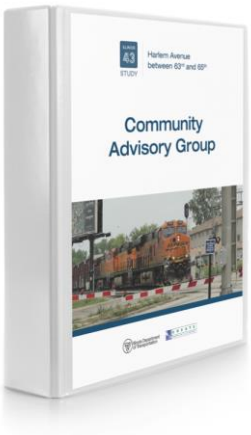
Jim Peyton, P.G.
Environmental Support

SUBCONSULTANTS

Dave Palia, Blue Daring

Veronica Cruz, Blue Daring

CAG Binder



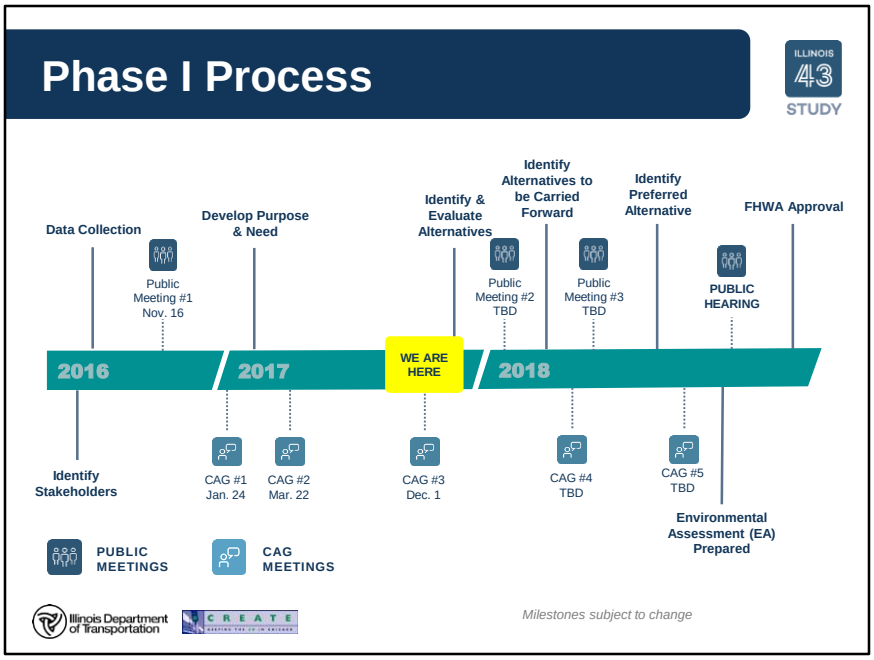
New handouts include:

- Meeting Agenda
- Presentation
- CAG #2 Summary
- Alternatives Workbook
- Alternatives Comment Sheet

Project Overview

Schedule
CAG Meeting #1
CAG Meeting #2

Illinois Department of Transportation CREATE


Phase I Process
ILLINOIS 43 STUDY
Data Collection
Public Meeting #1 Nov. 16
Develop Purpose & Need
Identify & Evaluate Alternatives
Public Meeting #2 TBD
Identify Alternatives to be Carried Forward
Public Meeting #3 TBD
Identify Preferred Alternative
PUBLIC HEARING
FHWA Approval
2016
2017
WE ARE HERE
2018
Identify Stakeholders
CAG #1 Jan. 24
CAG #2 Mar. 22
CAG #3 Dec. 1
CAG #4 TBD
CAG #5 TBD
Environmental Assessment (EA) Prepared
PUBLIC MEETINGS
CAG MEETINGS
Illinois Department of Transportation
CREATE
Milestones subject to change

CAG Meeting #1 – Jan. 24, 2017

ILLINOIS 43 STUDY

PROBLEM STATEMENT

The at-grade crossings of the Belt Railway Company of Chicago (BRC) tracks at 63rd and 65th Streets near IL 43 (Harlem Avenue) have limited the mobility and access to the surrounding communities.

TOP ISSUES IDENTIFIED

- Infrastructure (Pedestrian, ADA)
- Displacement / Relocations
- Traffic Near CPS Schools
- Safety / Emergency Vehicle Blockage
- Construction Timeline / Limited Business Access
- Belt Railway Company of Chicago Safety
- Traffic / Congestion
- Regional Impacts
- Economic / Freight
- Drainage / Flooding
- Turning Lanes

Illinois Department of Transportation CREATE

CAG Meeting #2 – Mar. 22, 2017

ILLINOIS 43 STUDY

Suggested Improvements:

- Extend or add double right turn lane on Harlem Ave. (northbound) to turn onto 65th Street.
- Crosswalk improvements to Harlem Ave and 63rd and 65th Streets.
- Increase speed bumps on Nottingham Ave. between 63rd and 65th Streets.
- Consider adding traffic light on 65th Street near new Dore Elementary.
- Overpass or underpass at 63rd and 65th Streets.
- Add right turn lane on 71st Street to south on Harlem Ave.
- Better in/out coordination with Toyota Park.
- Improve traffic signal timing and visibility for ramp – more signage needed.
- Widen Harlem Ave.
- Resurface Nottingham Ave.

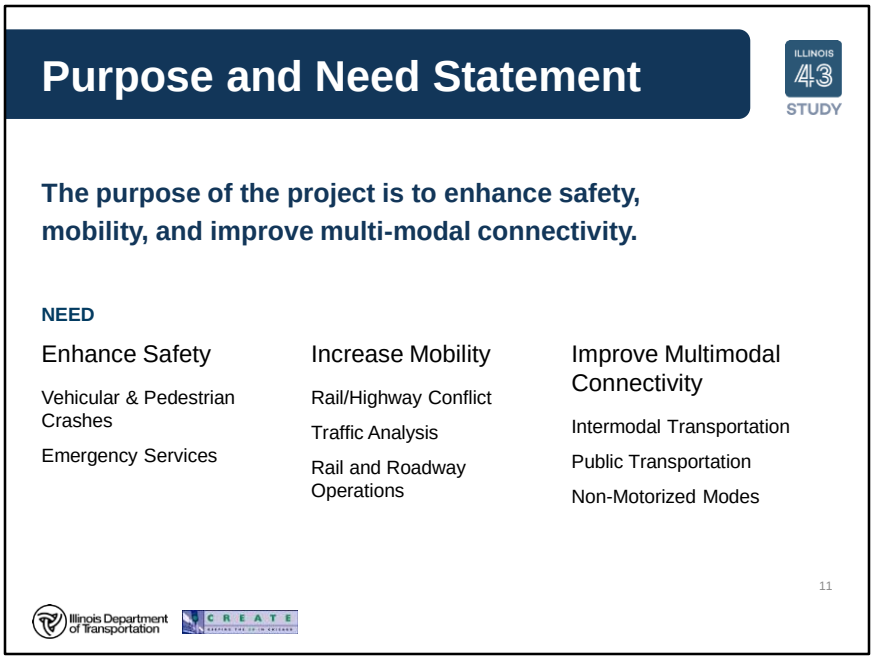
Illinois Department of Transportation

CREATE

Purpose and Need

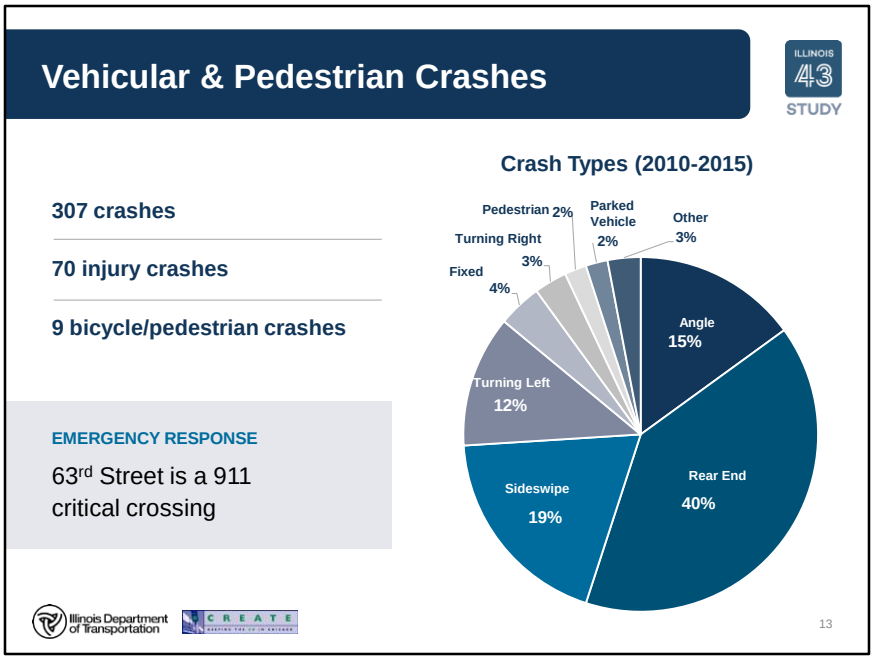
Statement

Technical Elements



This statement is a summary of a 30+page document, which will be available for your review on the project website.

Safety Summary



911 Critical Crossing - When trains are stopped or anticipated to obstruct the crossing, the train crew must notify the BRC immediately. City Ordinance #9-28-030 defines a reporting process that is to be followed for obstructions at 911 critical crossings. When moving or stopped trains obstruct the crossing for more than five minutes, the Chicago Transportation Coordination Office (CTCO) must immediately notify the 911 emergency telephone system, and alert them when the crossing is clear.

How is mobility and connectivity measured?

Level of Service (LOS)

ILLINOIS 43 STUDY

Level of Service is the average delay per vehicle resulting from traffic control at each intersection

Letter grades (A thru F) represent quality of service from a motorist's perspective.

LOS A : free flow conditions (little or no delay)

LOS D (or better) : considered acceptable

LOS E : unstable flow conditions (intolerable delays and traffic levels exceed roadway capacity)

LOS F : forced flow conditions (congested and queues fail to clear)

Delay expected by motorists varies by intersection type:

Signalized (stop light)

Unsignalized (including roundabouts)

Illinois Department of Transportation CREATE

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

15

LOS Criteria *by Intersection Type*

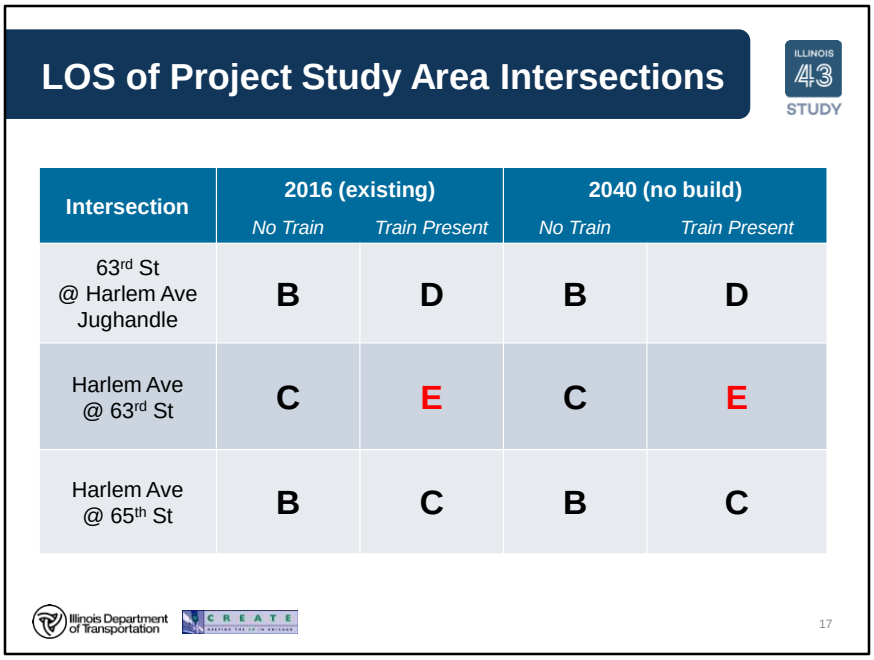
ILLINOIS 43 STUDY

Average Delay Per Vehicle *(seconds)*

Letter Grade	Signalized	Unsignalized
A	≤10	≤10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50

Illinois Department of Transportation CREATE

16



The level of service results obtained from our simulations are shown in this table. The values represent the overall intersection delay. Both the no-train and the with train scenarios use exactly the same variables, except for the BRC train blockage.

Signal Cycles

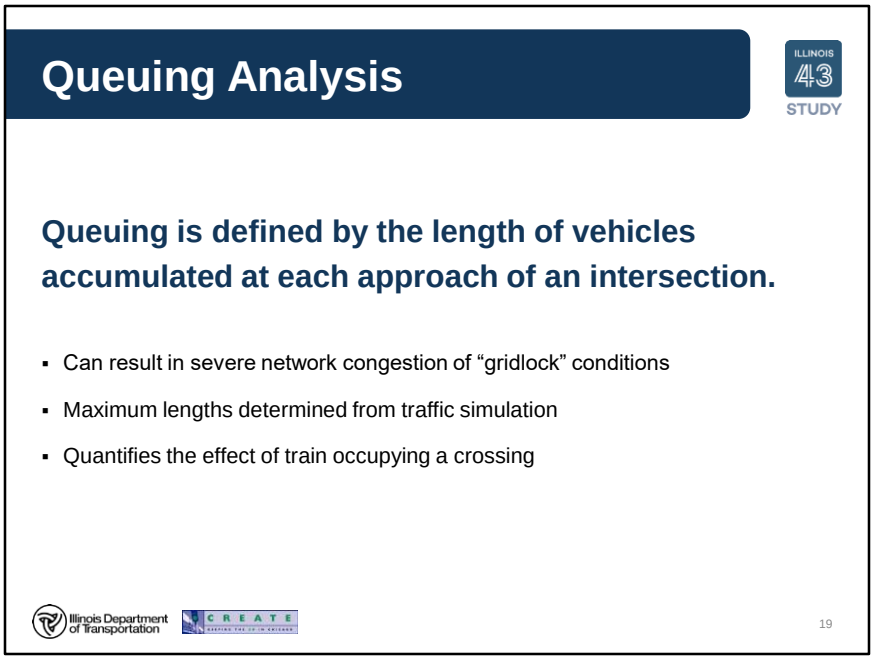
ILLINOIS 43 STUDY

Number of signal cycles to pass through Harlem Ave.

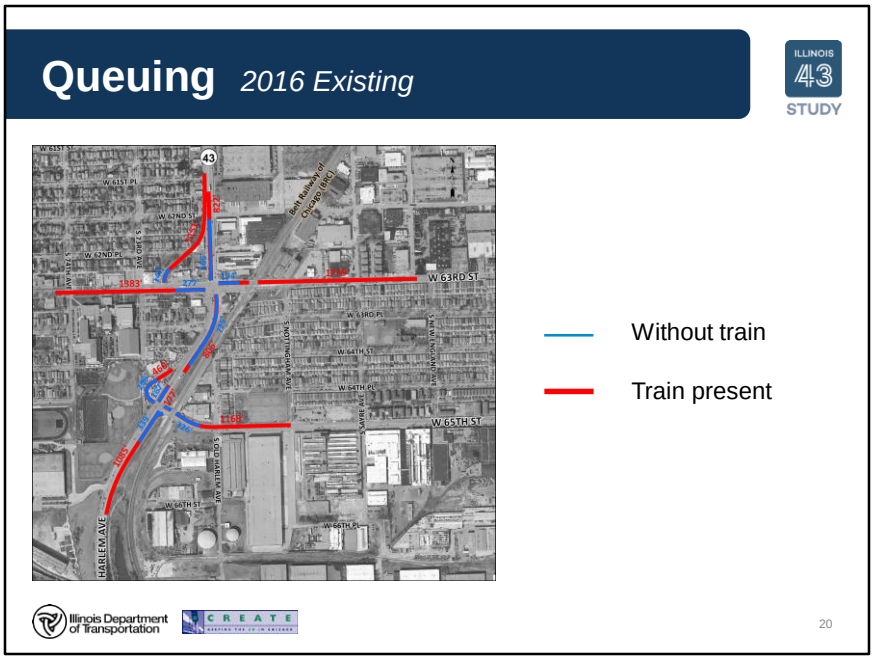
Street	Direction of Travel	2016 (existing)		2040 (no build)	
		No Train	*Train Present*	*No Train*	*Train Present*
W. 63rd St.	Eastbound	1 cycle	2-3 cycles	1 cycle	2-3 cycles
	Westbound	1 cycle	1-2 cycles	1 cycle	1-2 cycles
W 65th St.	Eastbound	1 cycle	1-2 cycles	1 cycle	2-3 cycles
	Westbound	1 cycle	2-3 cycles	1 cycle	2-3 cycles

Illinois Department of Transportation CREATE

18



Maximum queue lengths were also determined from simulation. While level of service identifies the impacts at a refined scale, queue lengths were utilized as a measure to evaluate alternatives at the corridor level. This is a useful parameter for representing the worst condition, but is not necessarily typical of what an average driver would experience.



The blue lines represent the maximum queue lengths without a train, and the red lines represent the train blocking scenarios. It's estimated that it will take a minimum of 4 traffic signal cycles after the train clears both 63rd and 65th Streets before the queuing is cleared (e.g. congestion cleared). Queues on both 63rd Street and 65th Street back up for several blocks, negatively impacting the traffic on blocked side streets. With no improvements, queue lengths would increase even more due to the projected traffic growth on 63rd Street and 65th Street.

Alternatives Evaluation

Criteria

Process

Evaluation Criteria

ILLINOIS 43 STUDY

The project team developed the following criteria to measure each alternative and determine if it meets the Purpose and Need and goals of the CAG.

CONSIDERATIONS

Safety of all modes

LOS (Mobility/Connectivity)

Construction Cost

POTENTIALLY AFFECTED PROPERTIES & ACCESS

Residential

Businesses

Schools

Parks & Community

Illinois Department of Transportation

CREATE

Evaluation Process

ILLINOIS 43 STUDY

Identifiy and Evaluate Alternatives

Develop and Evaluate a Range of Alternatives

17 Alternatives

CAG #3

Identify Alternatives to be Carried Forward

Advance Viable Alternatives into Detailed Alternatives and Evaluate

Approximately 8 Alternatives, 4 to Carry Forward

PM #2 CAG #4

Identify Preferred Alternative

CAG #5 PM #3

All alternatives must meet the evaluation criteria

Illinois Department of Transportation

CREATE


Questions / Break
Illinois Department of Transportation
CREATE
24

Exercise

Alternatives Descriptions
Alternatives Evaluation

Groups and Alternatives

No-Build (Baseline)

Group 1 : **Minor Build**

Group 2 : **BRC Elevated/Depressed**

Group 3 : **63rd St. Elevated**

Group 4 : **63rd St. Depressed**

Group 5 : **65th St. Elevated**

Group 6 : **65th St. Depressed**

Group 7 : To be determined

Elevating the BRC RR at one crossing and depressing it at the other is **not** a feasible alternative.

Exercise: Evaluate Alternatives

ILLINOIS 43 STUDY

Using your Alternatives Workbook and Comment Sheet, evaluate and comment on each alternative using the criteria provided.

Determine if you would like to see the alternative carried forward and state why it should be kept or dismissed from further evaluation.

Illinois Department of Transportation

CREATE

Baseline : No Build

Harlem Ave. and 63rd St.

Baseline : No Build

ILLINOIS 43 STUDY

DETAILS

- Baseline condition
- Leaves the existing conditions as is
- Minor increase in 2040 traffic versus 2016
- 63rd St. @ Jughandle LOS D
- IL-43 @ 63rd St. LOS E
- IL-43 @ 65th St. LOS C

Illinois Department of Transportation | CREATE

Group 1 : Minor Build

ILLINOIS 43 STUDY

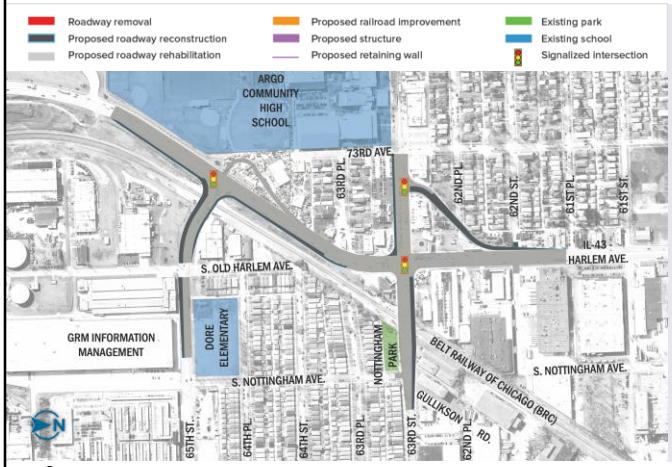
Harlem Ave. and 63rd St.

Illinois Department of Transportation

CREATE

Group 1 : Minor Build

ILLINOIS 43 STUDY



DETAILS

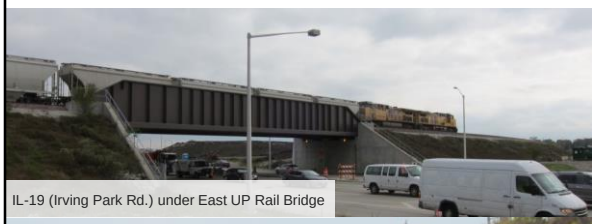
- Keep existing at-grade crossings
- Add some mainline capacity
- Improve existing jughandle at 63rd St.
- Keep existing jughandle at 65th St.
- Modify traffic and railroad signal interconnectivity and signal timing

Illinois Department of Transportation | CREATE

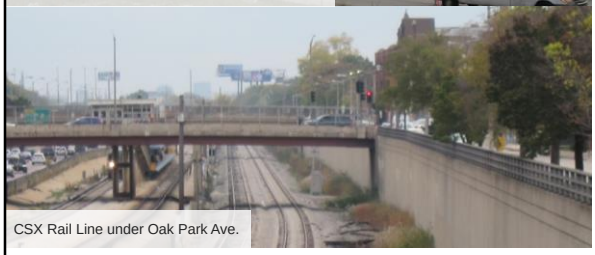
31

Group 2: BRC Elevated/Depressed

ILLINOIS 43 STUDY



IL-19 (Irving Park Rd.) under East UP Rail Bridge



CSX Rail Line under Oak Park Ave.

Completely elevate BRC tracks at 63rd and 65th Streets

Completely depress BRC tracks at 63rd and/or 65th Streets

Partially elevate BRC tracks at partially depressed 63rd and 65th Streets

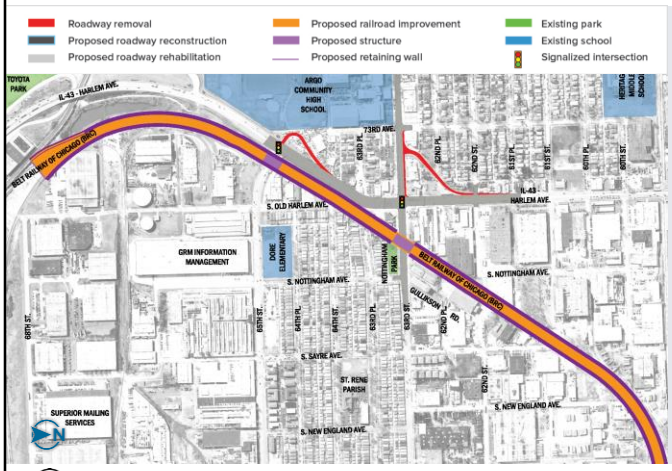
Partially depress BRC tracks at partially elevated 63rd and 65th Streets

Illinois Department of Transportation

CREATE

Group 2 : All Elevated

ILLINOIS 43 STUDY



DETAILS

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

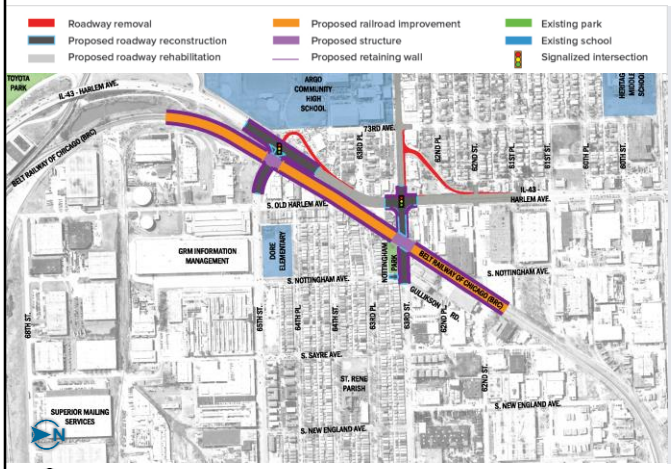
Illinois Department of Transportation

CREATE

33

Group 2 : Elevated Hybrid

ILLINOIS 43 STUDY



DETAILS

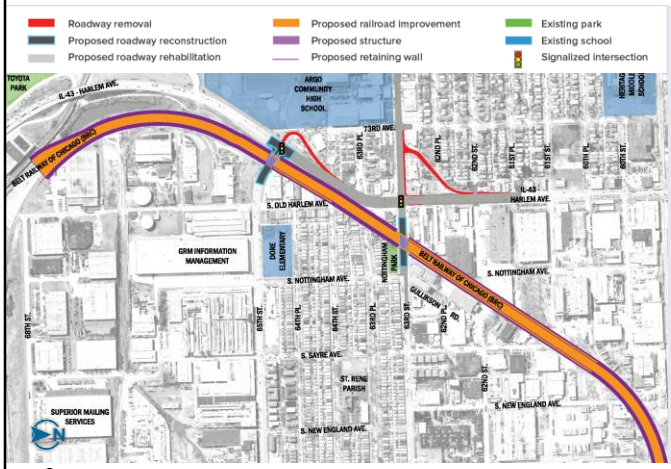
- Partially elevated BRC railroad over partially depressed 63rd St. and 65th St.
- Depending on roadway depth, expect impacts to Harlem Ave., 63rd St. and 65th St.
- Retaining walls along BRC tracks
- Remove jughandles at 63rd and 65th St.
- Eliminate roadway conflicts with railroad

Illinois Department of Transportation

CREATE

Group 2 : All Depressed

ILLINOIS 43 STUDY



DETAILS

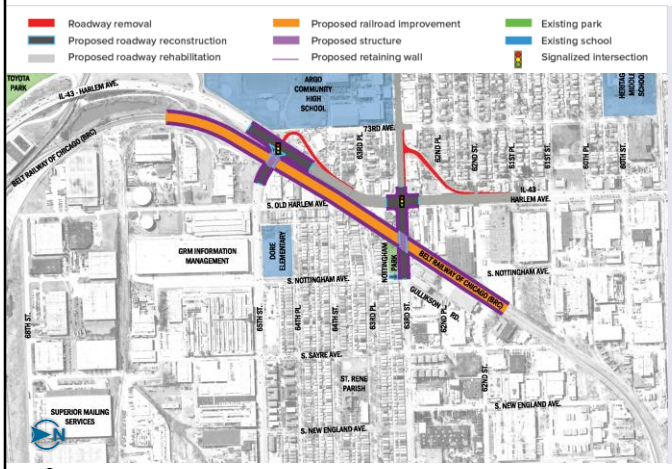
- Railroad in fully depressed trench with retaining walls
- New roadway bridges over BRC
- Retaining walls along BRC tracks
- Remove jughandles at 63rd and 65th St.
- Eliminate roadway conflicts with railroad

Illinois Department of Transportation

CREATE

Group 2 : Depressed Hybrid

ILLINOIS 43 STUDY



DETAILS

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

Illinois Department of Transportation

CREATE

Group 3 : 63rd St. Elevated

Harlem Ave. over CSX Rail Line and Toyota Park Frontage Rd.

Elevate 63rd St. over BRC and Harlem Ave. with two-way jughandle

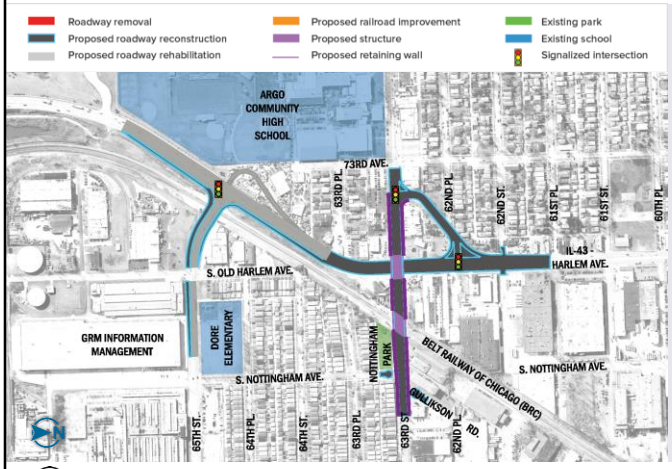
Elevate 63rd St. over BRC and Harlem Ave. with ramps to/from Harlem Ave.

Elevate 63rd St. over BRC and realign Harlem Ave./63rd St. intersection

Elevate 63rd St. over BRC and raise Harlem Ave./63rd St. intersection

Group 3 : Elevated with Jughandle

ILLINOIS 43 STUDY



DETAILS

- Elevated 63rd St. over BRC and Harlem Ave.
- Harlem Ave./63rd St. intersection grade separated
- Reconfigured jughandle to accommodate Harlem Ave./63rd St.
- New signalized intersection on Harlem Ave. at 63rd St. jughandle
- LOS A, B, or C

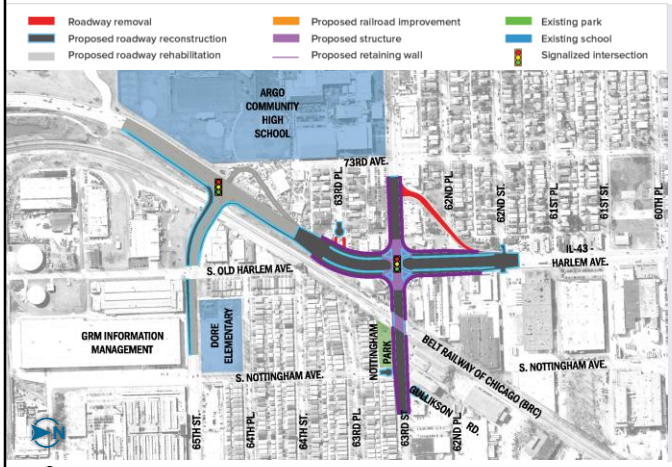
Illinois Department of Transportation

CREATE

38

Group 3 : Elevated with Ramps

ILLINOIS 43 STUDY



DETAILS

- Elevated 63rd St. over BRC and Harlem Ave.
- Harlem Ave./63rd St. intersection grade separated
- New 63rd St. roadway bridge over at-grade Harlem Ave.
- Elevated signalized intersection with access ramps
- LOS A, B, or C

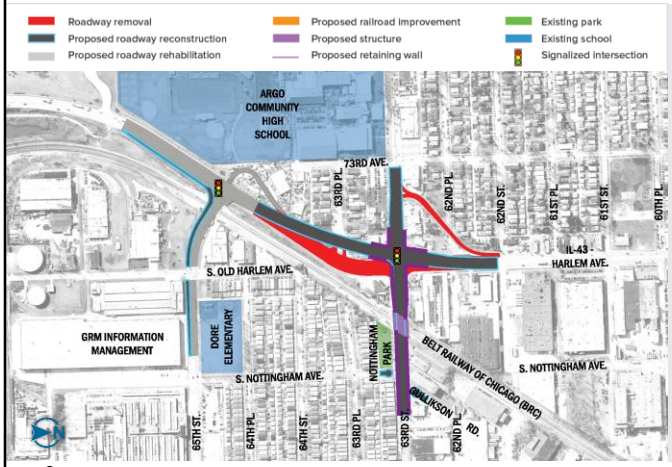
Illinois Department of Transportation

CREATE

39

Group 3 : Elevated / Harlem Realign

ILLINOIS 43 STUDY



DETAILS

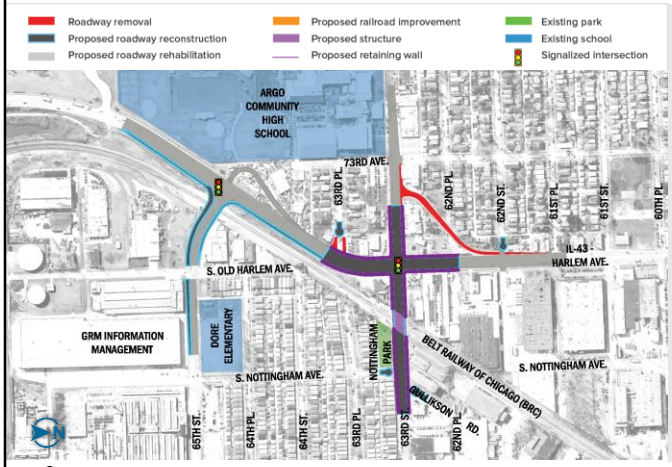
- Elevated 63rd St. over BRC
- Realign Harlem Ave. west of existing alignment
- Remove jughandle at Harlem Ave./63rd St.
- LOS E or F

Illinois Department of Transportation

CREATE

Group 3 : Elevated Intersection

ILLINOIS 43 STUDY



DETAILS

- Elevated 63rd St. over BRC
- Raised Harlem Ave./63rd St. signalized intersection
- Remove jughandle at Harlem Ave./63rd St.
- LOS E or F

Illinois Department of Transportation

CREATE

41

Group 4 : 63rd St. Depressed

Archer under B&O Railroad

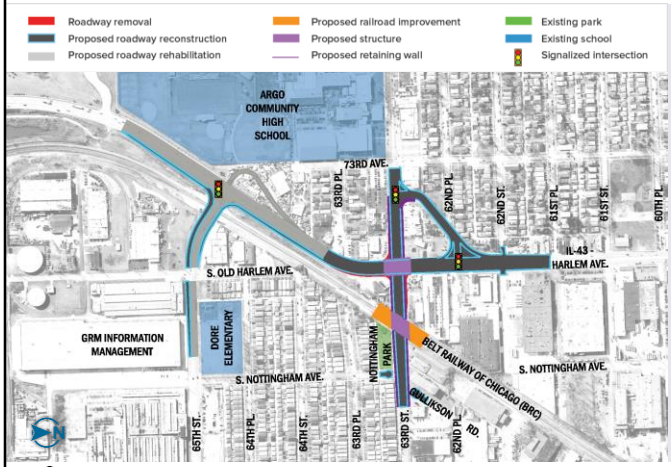
Depress 63rd St. under BRC and Harlem Ave. with two-way jughandle

Depress 63rd St. under BRC and Harlem Ave. with ramps to/from Harlem Ave.

Depress 63rd St. under BRC and depress Harlem Ave./63rd St. intersection

Group 4 : Depressed with Jughandle

ILLINOIS 43 STUDY



DETAILS

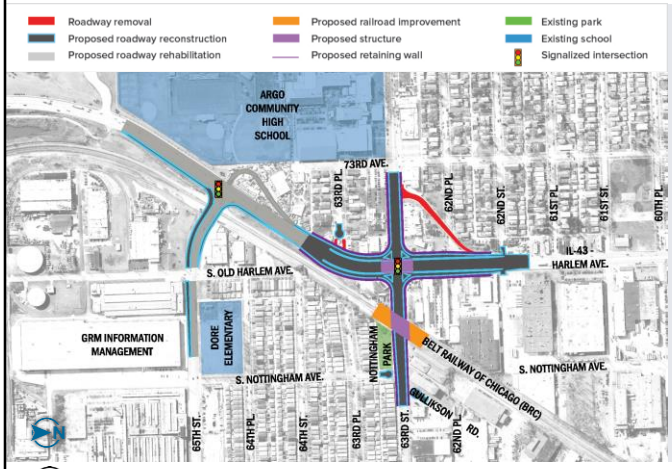
- Depressed 63rd St. under at-grade BRC and Harlem Ave.
- Harlem Ave./63rd St. intersection grade separated
- Reconfigure jughandle to accommodate Harlem Ave./63rd St. intersection
- New signalized jughandle intersection on Harlem Ave./63rd St.
- LOS A, B, or C

Illinois Department of Transportation

CREATE

Group 4 : Depressed with Ramps

ILLINOIS 43 STUDY



DETAILS

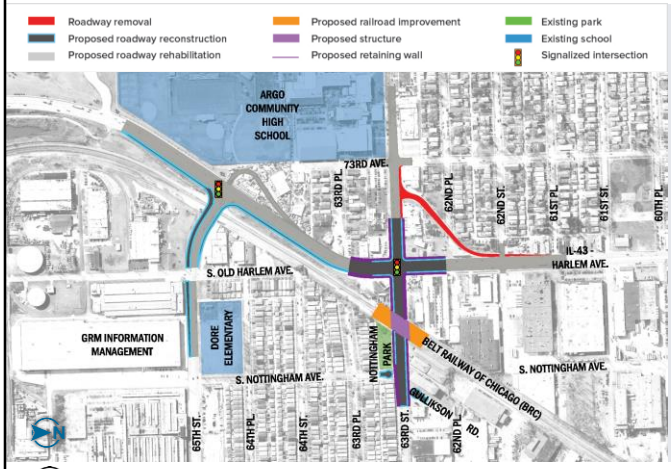
- Depressed 63rd St. under at-grade BRC and Harlem Ave.
- Harlem Ave./63rd St. intersection grade separated
- Depressed signalized intersection, on 63rd St., with access ramps along Harlem Ave.
- Remove jughandle at Harlem Ave./63rd St.
- LOS A, B, or C

Illinois Department of Transportation

CREATE

Group 4 : Depressed Intersection

ILLINOIS 43 STUDY



DETAILS

- Depressed 63rd St. under at-grade BRC; Harlem Ave. is depressed to intersect 63rd St. at same grade
- Harlem Ave./63rd St. intersection lowered with retaining walls
- Remove jughandle at Harlem Ave./63rd St.
- LOS E or F

Illinois Department of Transportation

CREATE

45

Group 5 : 65th St. Elevated

Mannheim Rd. over CP Rail Yard

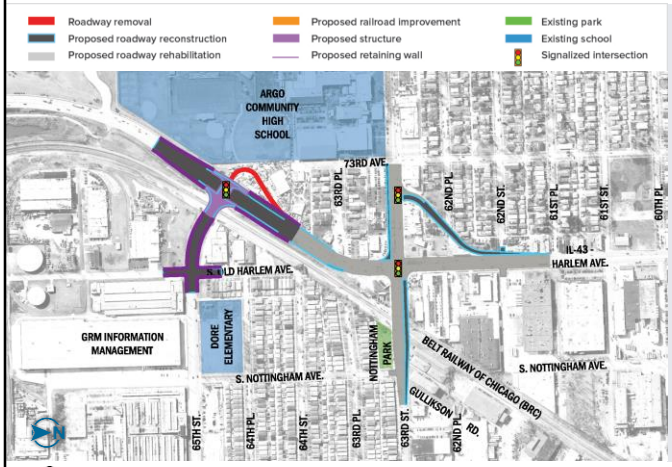
Elevate 65th St. over BRC and Harlem Ave. with urban interchange & ramps

Elevate 65th St. over BRC and raise Harlem Ave./65th St. intersection

Elevate 65th St. over BRC and Harlem Ave. with elevated roundabout

Group 5 : Elevated with Ramps

ILLINOIS 43 STUDY



DETAILS

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

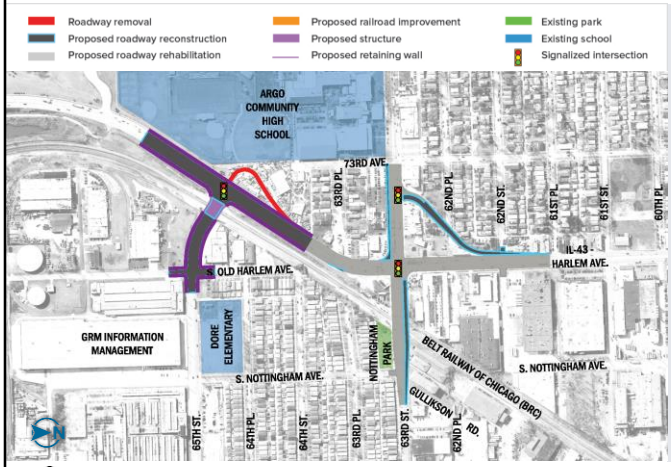
Illinois Department of Transportation

CREATE

47

Group 5 : Elevated Intersection

ILLINOIS 43 STUDY



DETAILS

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

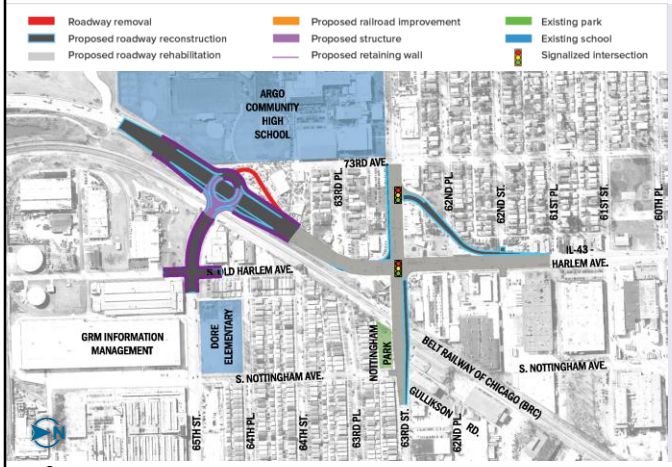
Illinois Department of Transportation

CREATE

48

Group 5 : Elevated Roundabout

ILLINOIS 43 STUDY



DETAILS

- Elevated 65th St. over BRC and Harlem Ave.
- Elevated Roundabout, on 65th St., with access ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave./65th St.

Illinois Department of Transportation | CREATE

Group 6 : 65th St. Depressed

ILLINOIS 43 STUDY

Canal at Cermak Rd.

Depress 65th St. under BRC and Harlem Ave. with ramps to/from Harlem Ave.

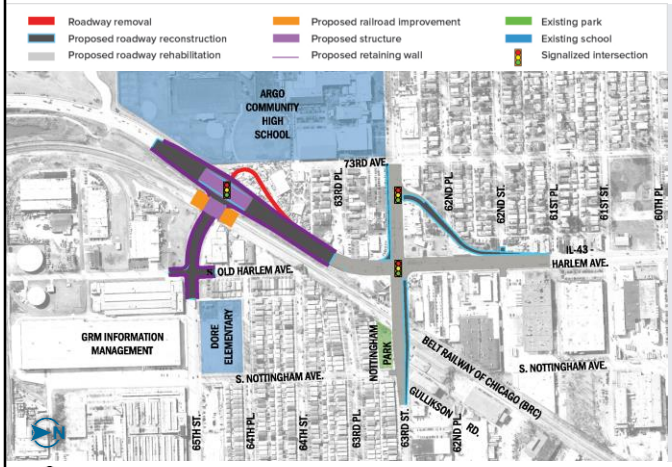
Depress 65th St. under BRC and depress Harlem Ave./65th St. intersection

Illinois Department of Transportation

CREATE

Group 6 : Depressed with Ramps

ILLINOIS 43 STUDY



DETAILS

- Depressed 65th 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./65th St.

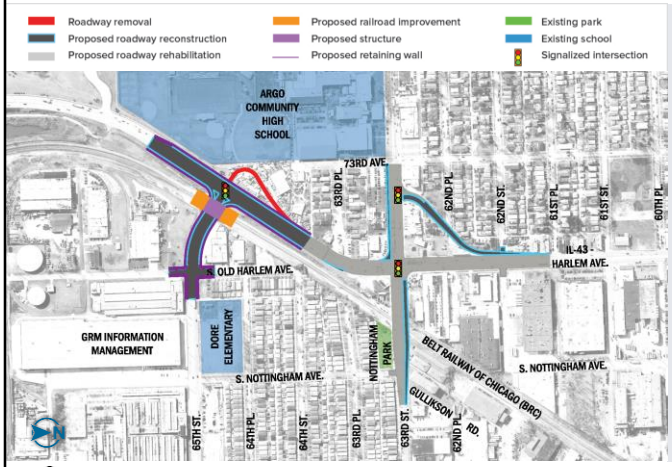
Illinois Department of Transportation

CREATE

51

Group 6 : Depressed Intersection

ILLINOIS 43 STUDY



DETAILS

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

Illinois Department of Transportation

CREATE

52

Group 7 : Combined Alternatives

ILLINOIS 43 STUDY

At the next CAG meeting, we'll present combined alternatives from Groups 3 – 6 and further evaluate which alternatives to carry forward.

Illinois Department of Transportation CREATE


Questions
Illinois Department of Transportation
CREATE
54

Next Steps

Public Meeting #2

Public Meeting #2

ILLINOIS 43 STUDY

1. Present Problem Statement
2. Present Purpose and Need
3. Share full range of alternatives
4. Obtain input

Illinois Department of Transportation

CREATE

Thank You!

www.il43study.org

Illinois Department of Transportation

CREATE