



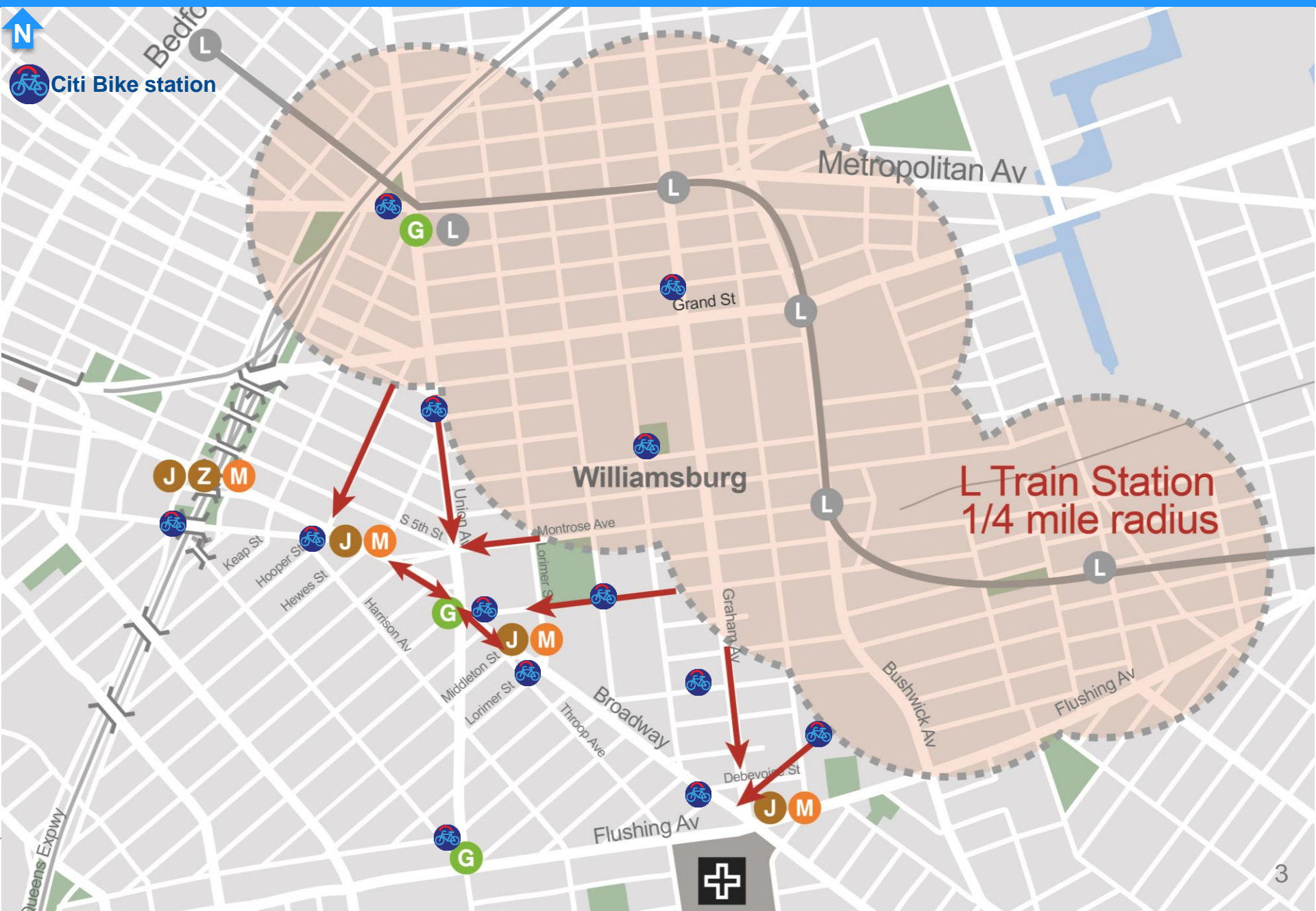
BROADWAY L-TRAIN MITIGATION

Presentation to Brooklyn CB 1


June 12, 2018

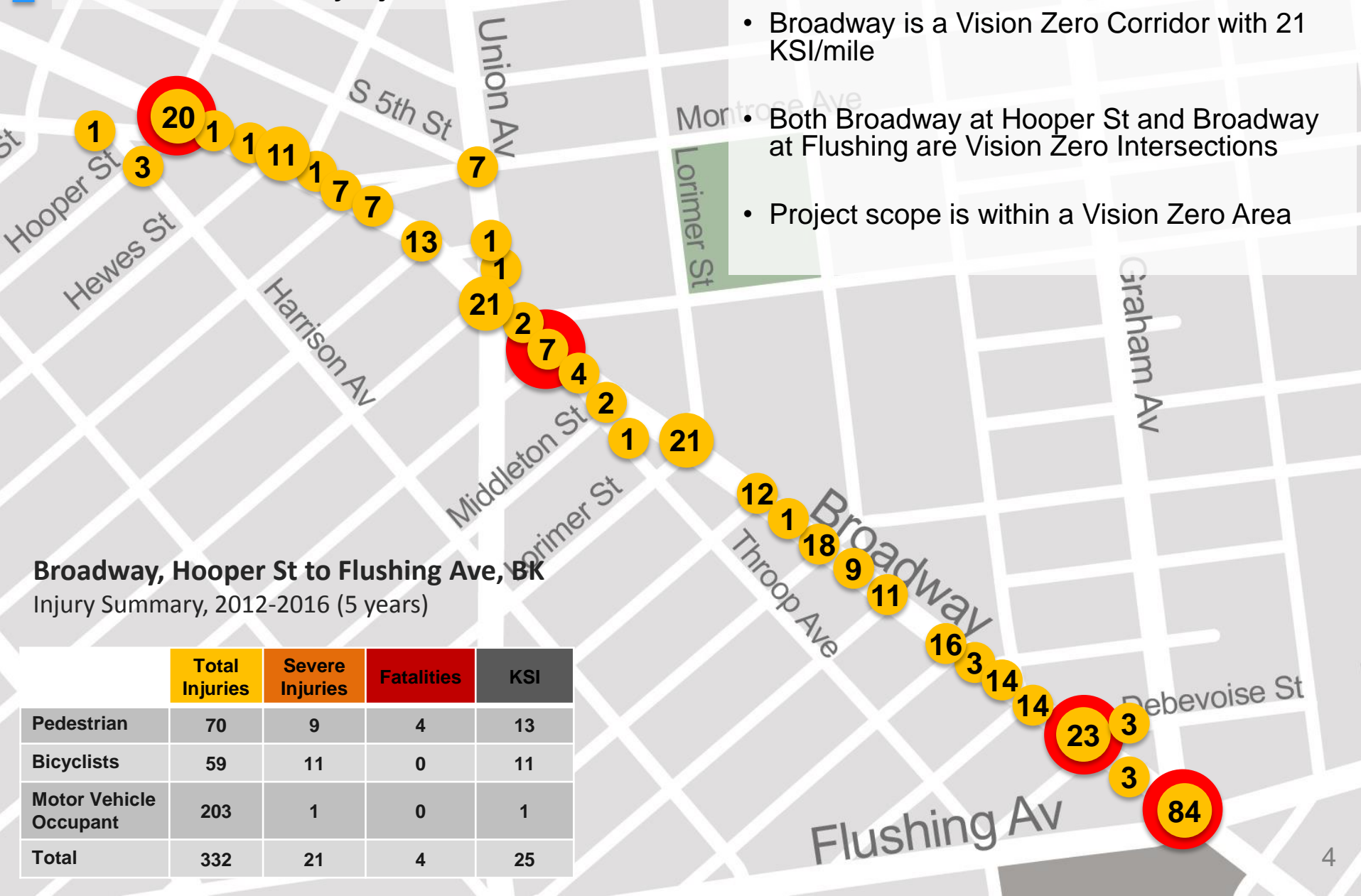
Project Background

PROJECT BACKGROUND



PROJECT AREA AND SAFETY DATA

 **KSI: Killed or Severely Injured**



Broadway, Hooper St to Flushing Ave, BK
Injury Summary, 2012-2016 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	70	9	4	13
Bicyclists	59	11	0	11
Motor Vehicle Occupant	203	1	0	1
Total	332	21	4	25

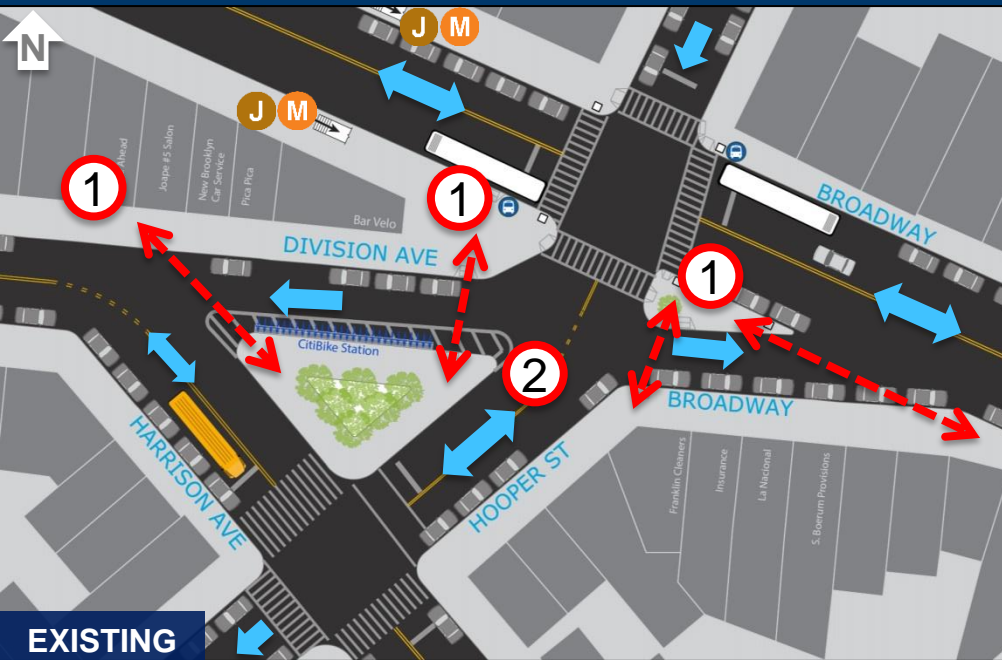
Project Issues and Solutions

PROJECT LOCATIONS

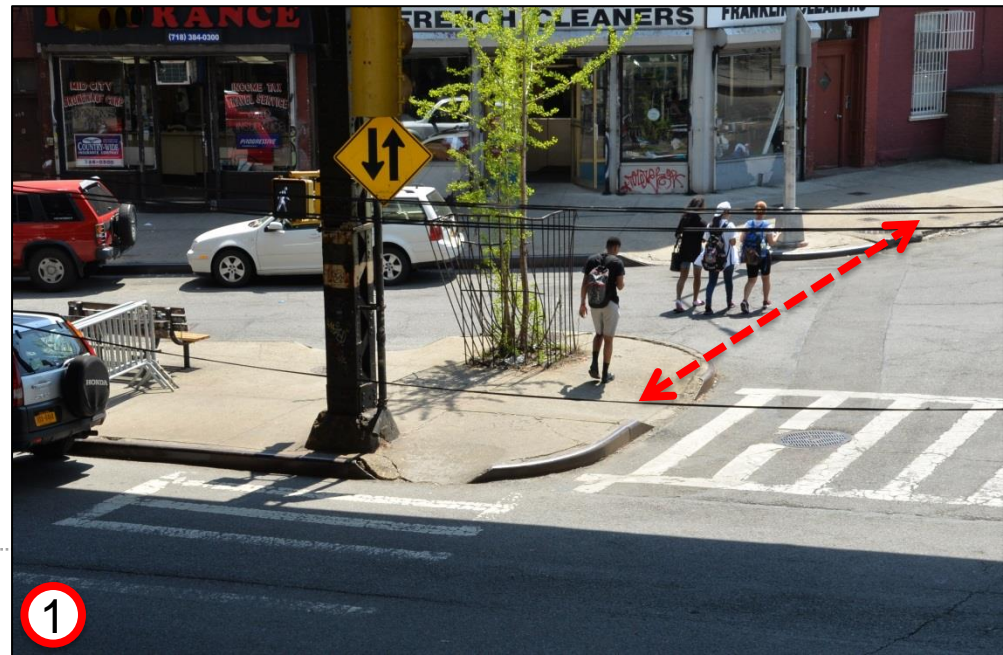


Improve access to stations

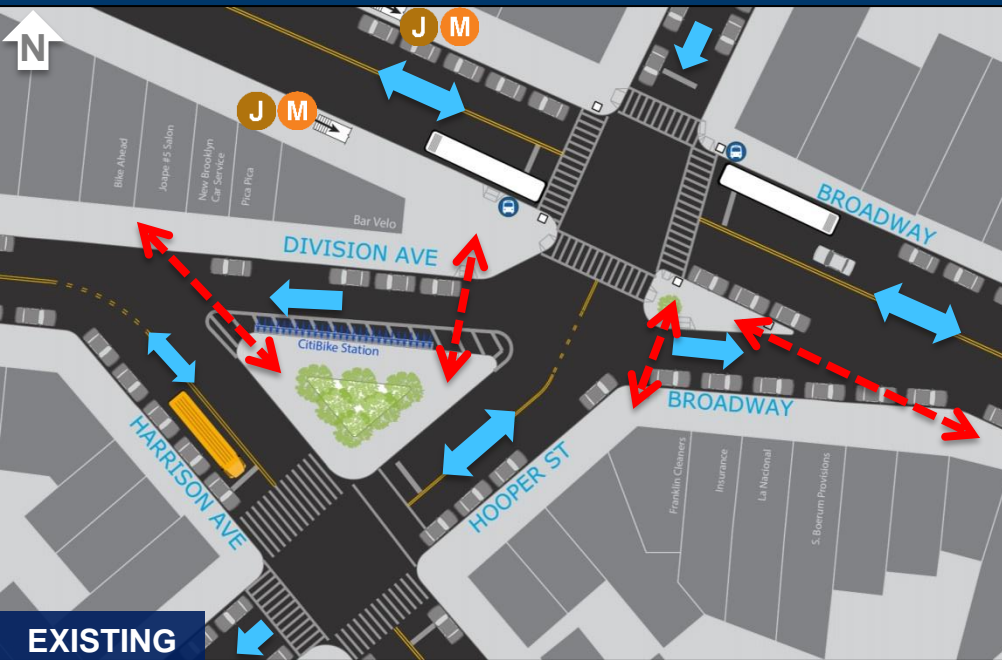
HOOPER ST – EXISTING ISSUES



- 1 Multiple missing crosswalks
- 2 Inconsistent street network on Hooper St



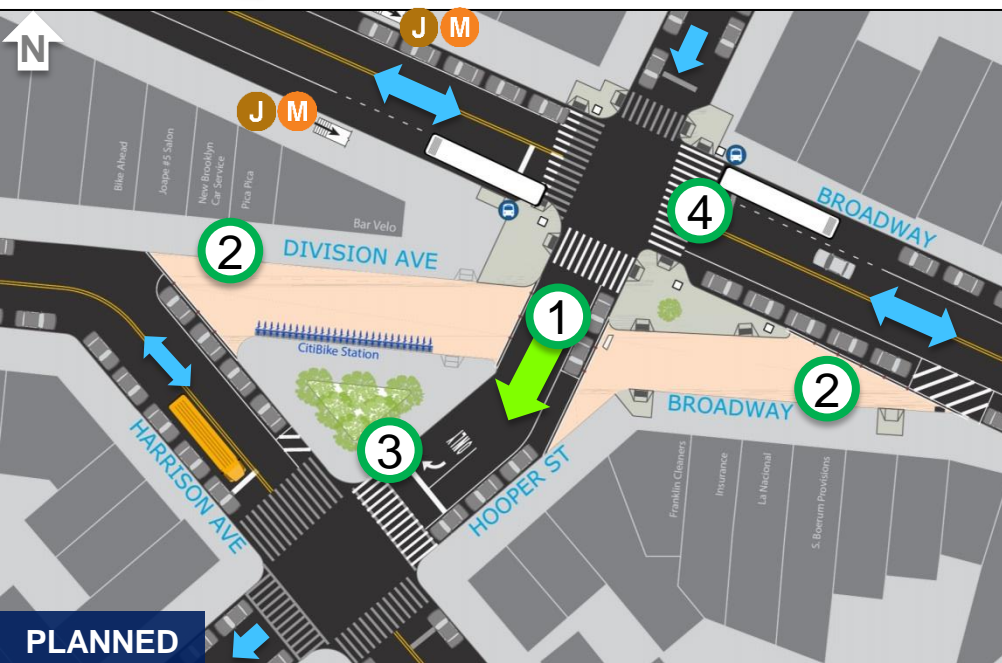
HOOVER ST – PROJECT PLAN



Street Conversions

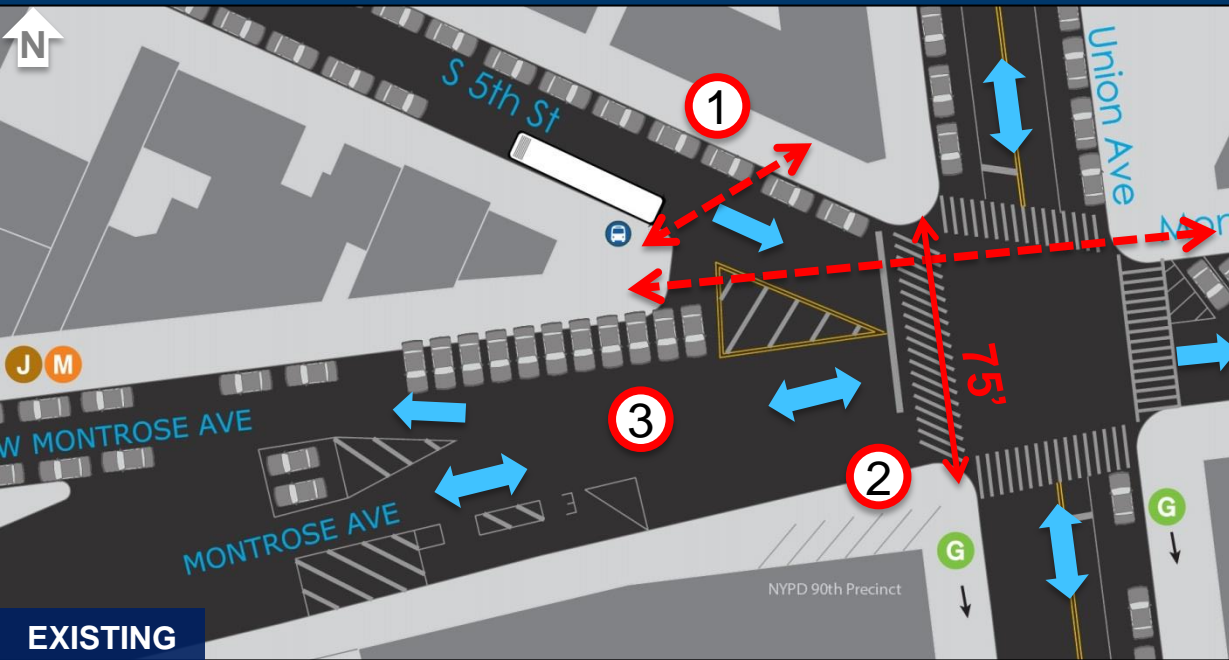


Slip Closure in Paint



- 1 Convert one block of Hooper St to one-way southbound
- 2 Close slips on Division Ave and Broadway in paint
- 3 Add a right turn lane on Hooper St at Harrison Ave
- 4 Build out and extend concrete triangle and adjacent corners

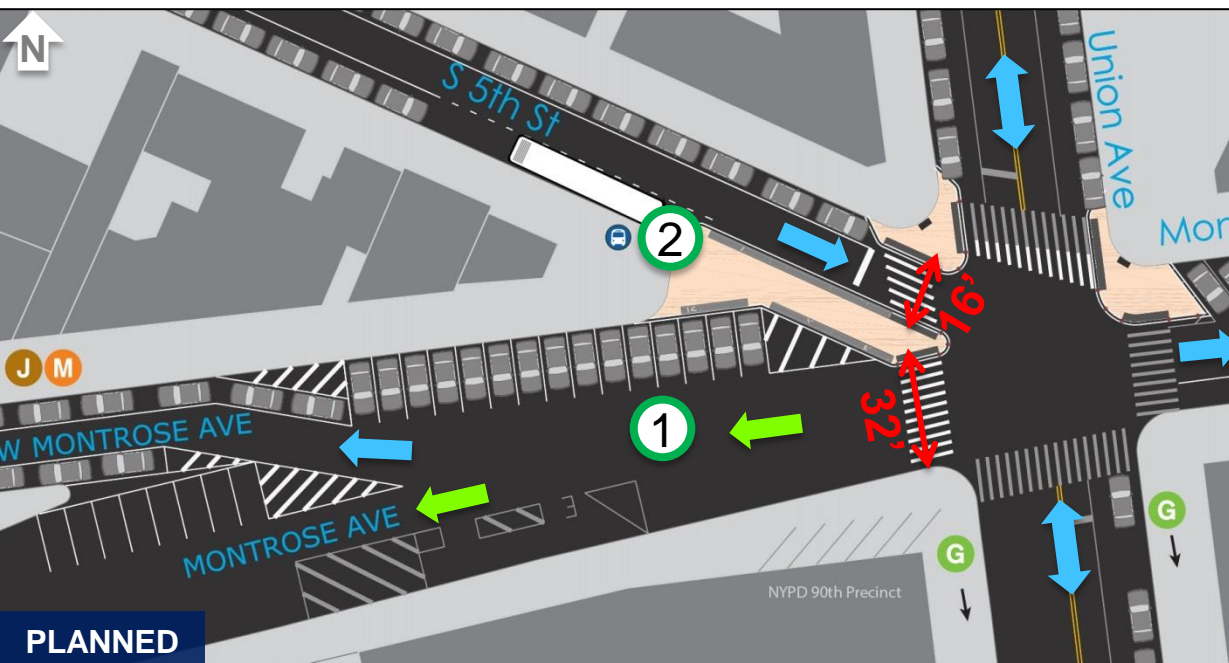
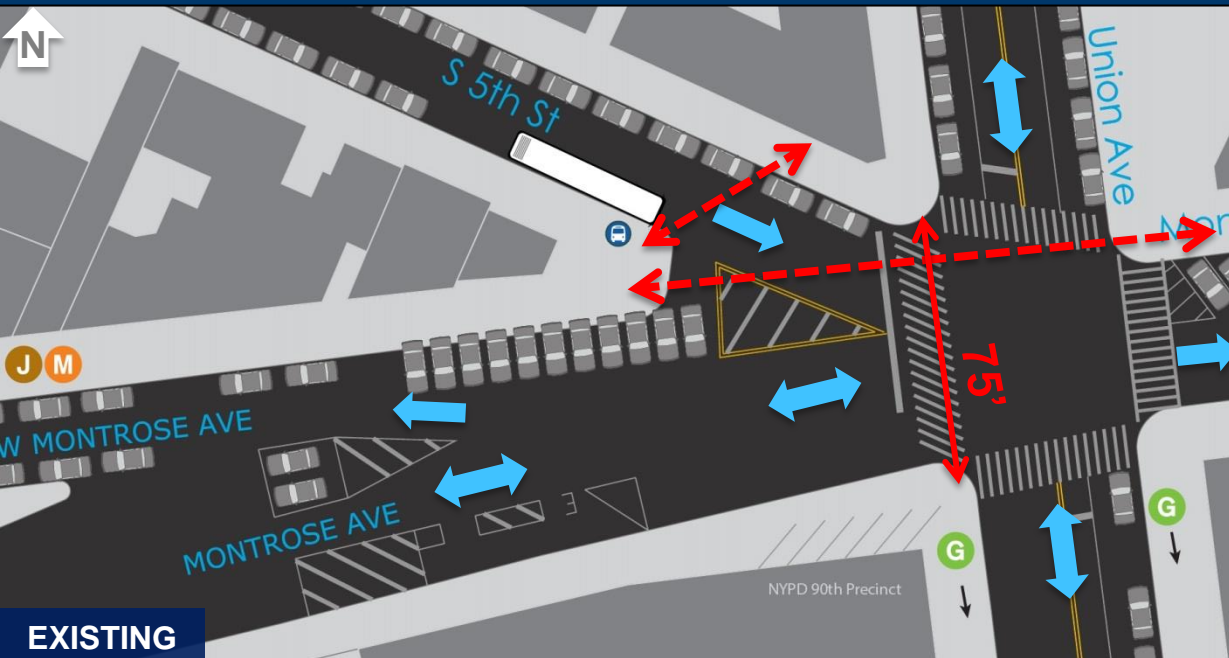
MONTROSE AVE – EXISTING ISSUES



- ① Missing crossing on S 5th St
- ② Long crossings along Union Ave
- ③ Redundancies in vehicular network create conflict for all roadway users



MONTROSE AVE – PROJECT PLAN



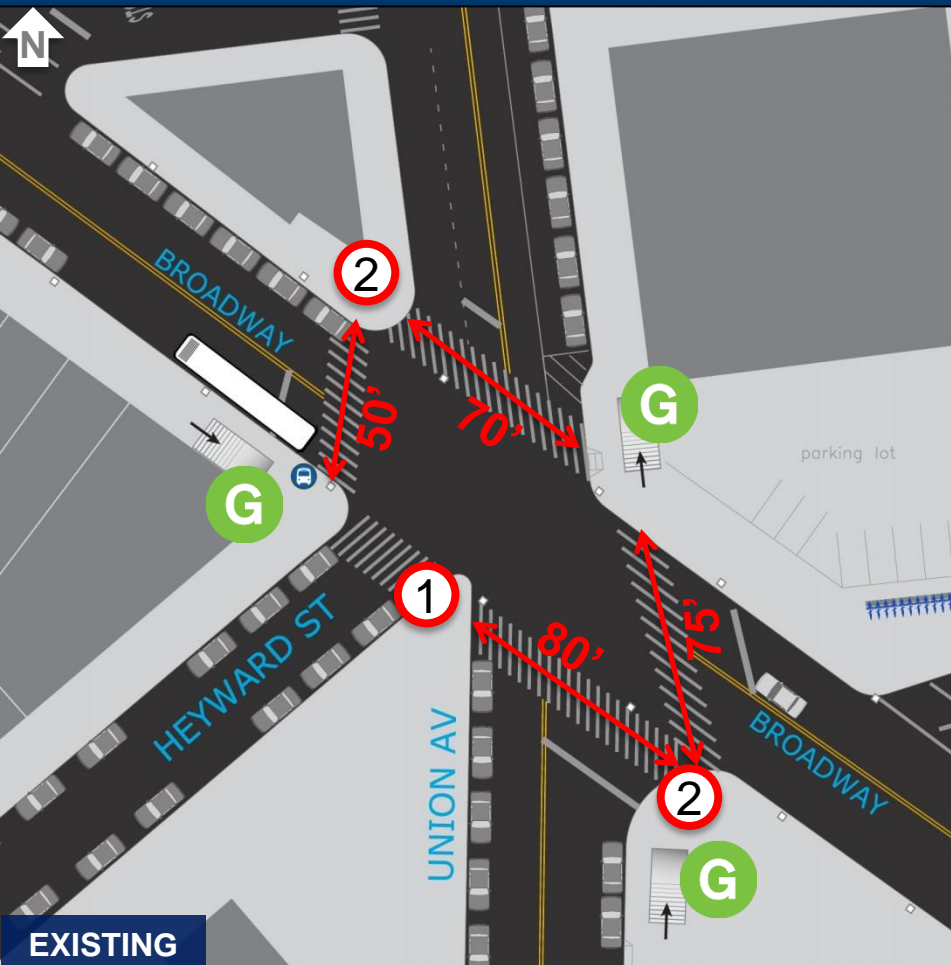
Street Conversions



Painted Sidewalk Extensions

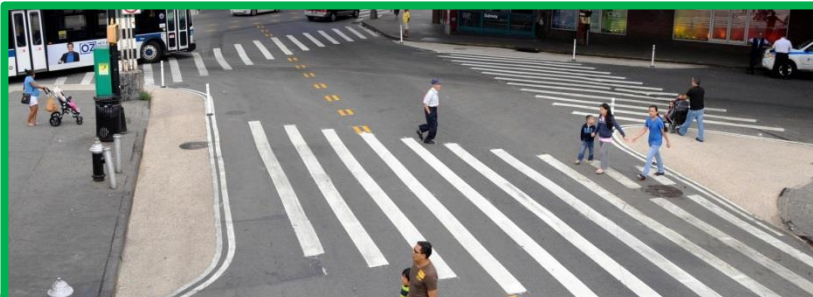
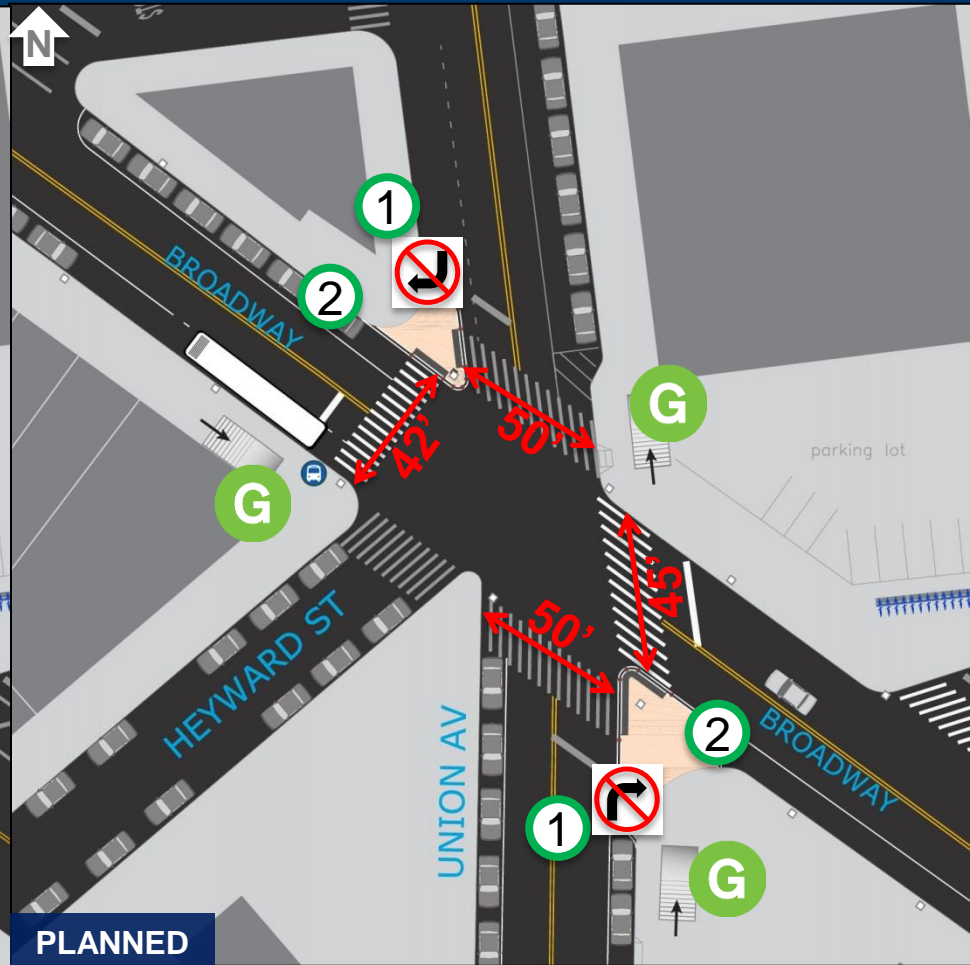
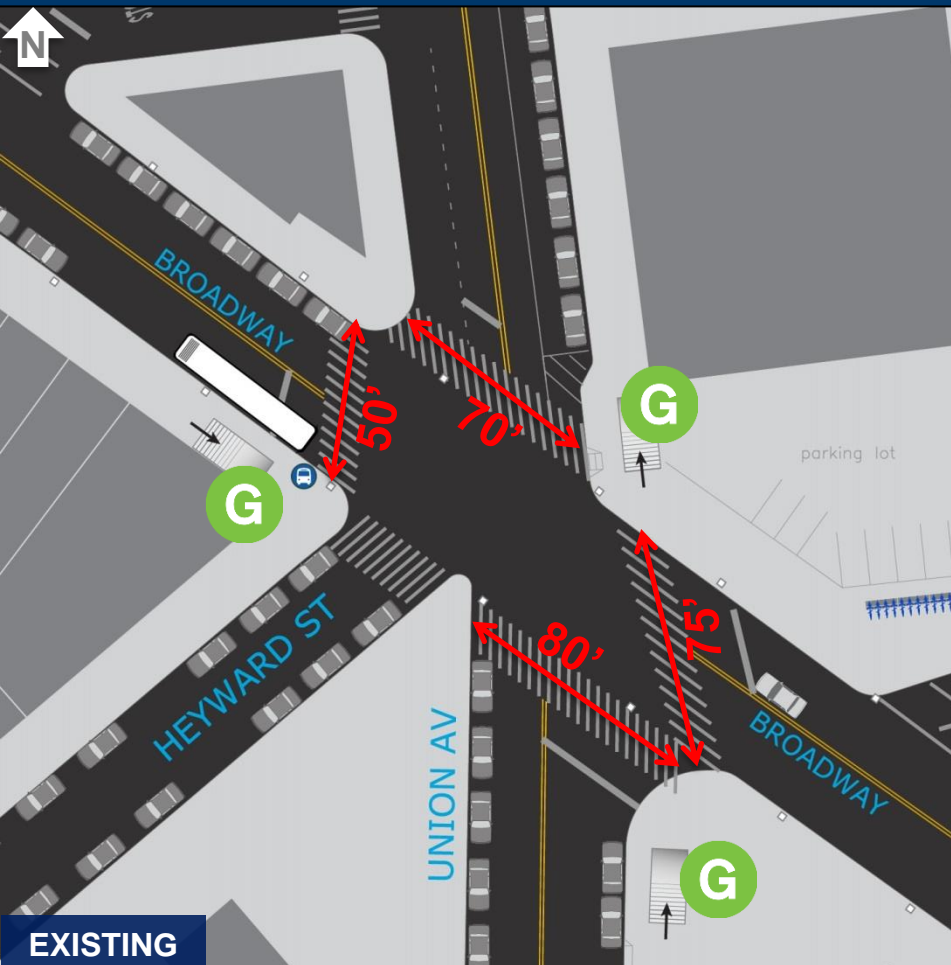
- 1 Convert one block of Montrose Ave to one-way westbound
- 2 Extend sidewalks in paint along S 5th St

UNION AVE – EXISTING ISSUES



- 1 Long pedestrian crossing distances
- 2 Acute right turns from Union onto Broadway are not geometrically possible for heavy vehicles

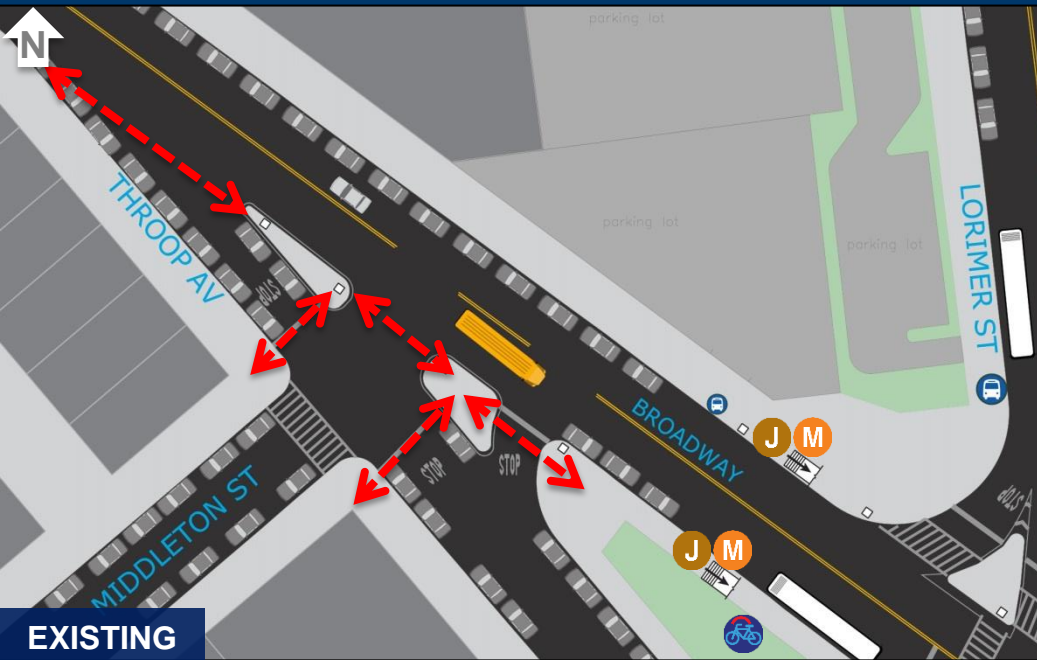
UNION AVE – PROJECT PLAN



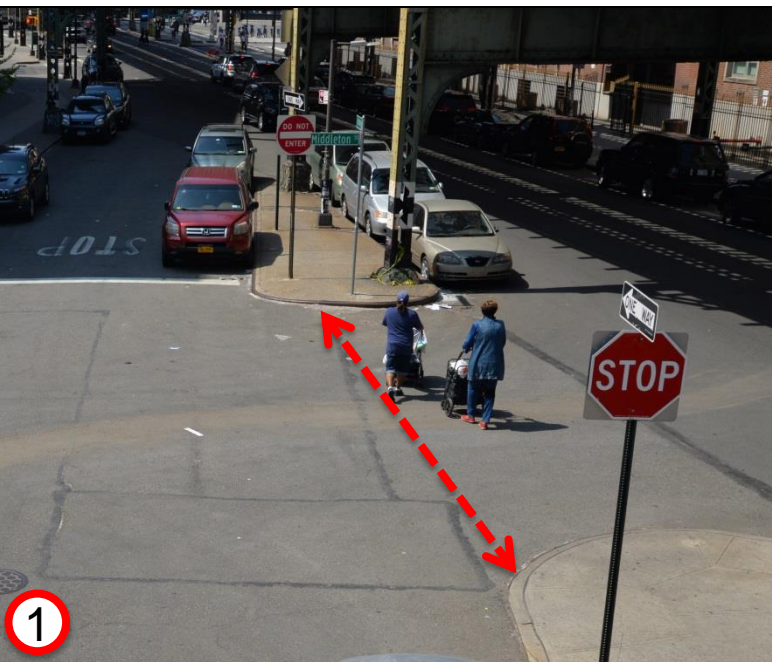
EXAMPLE OF PAINTED CURB EXTENSIONS

- ① Restrict the right turns onto Broadway from Union Ave
- ② Extend sidewalks in paint

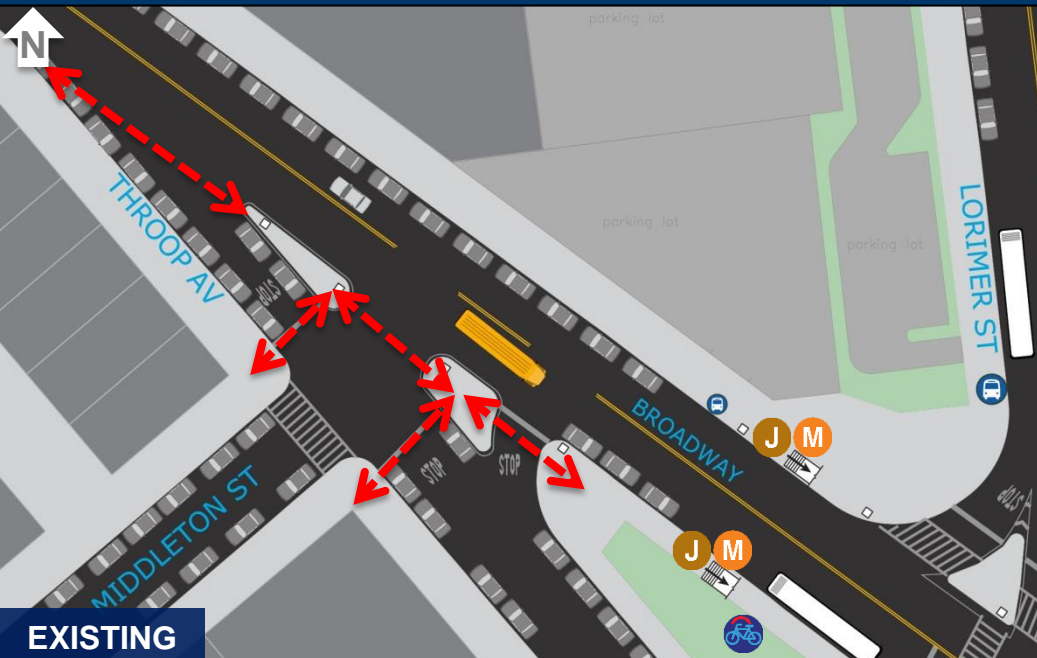
THROOP AVE – EXISTING ISSUES



- 1 Missing crosswalks and ADA compliant access along Broadway and across Throop Ave
- 2 Unclear vehicular and pedestrian movements



THROOP AVE – PROJECT PLAN



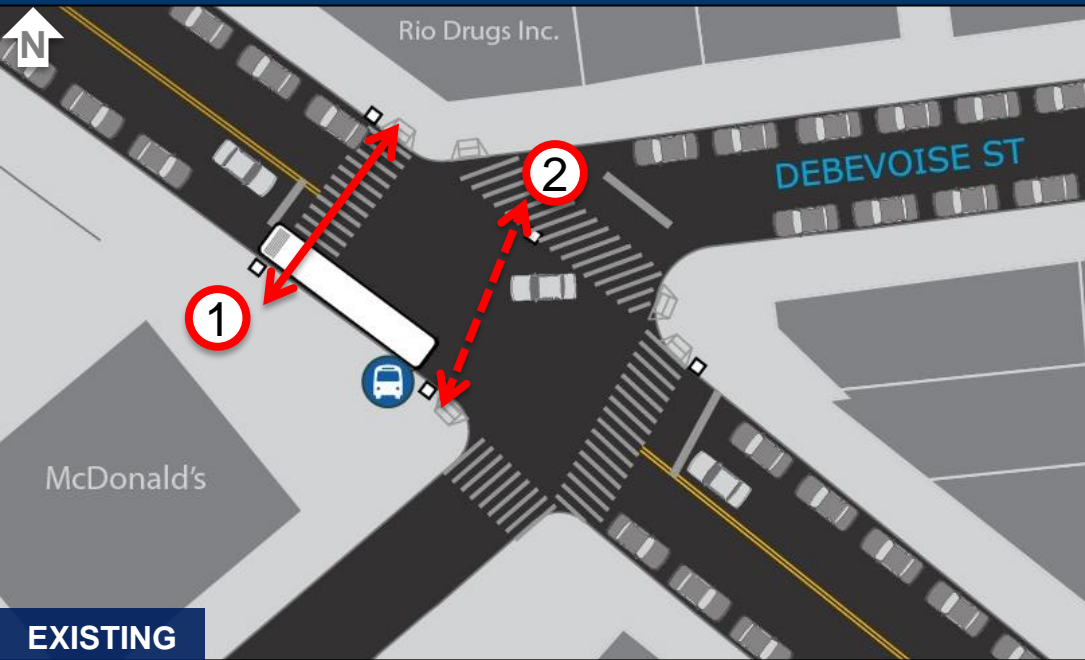
Slip Closure in Paint



Painted Sidewalk Extensions

- 1 Close the slip from Middleton St to Broadway in paint
- 2 Install a painted sidewalk extension on Throop Ave at Broadway
- 3 Add crosswalks along the southern side of Broadway

DEBEVOISE ST – EXISTING ISSUES

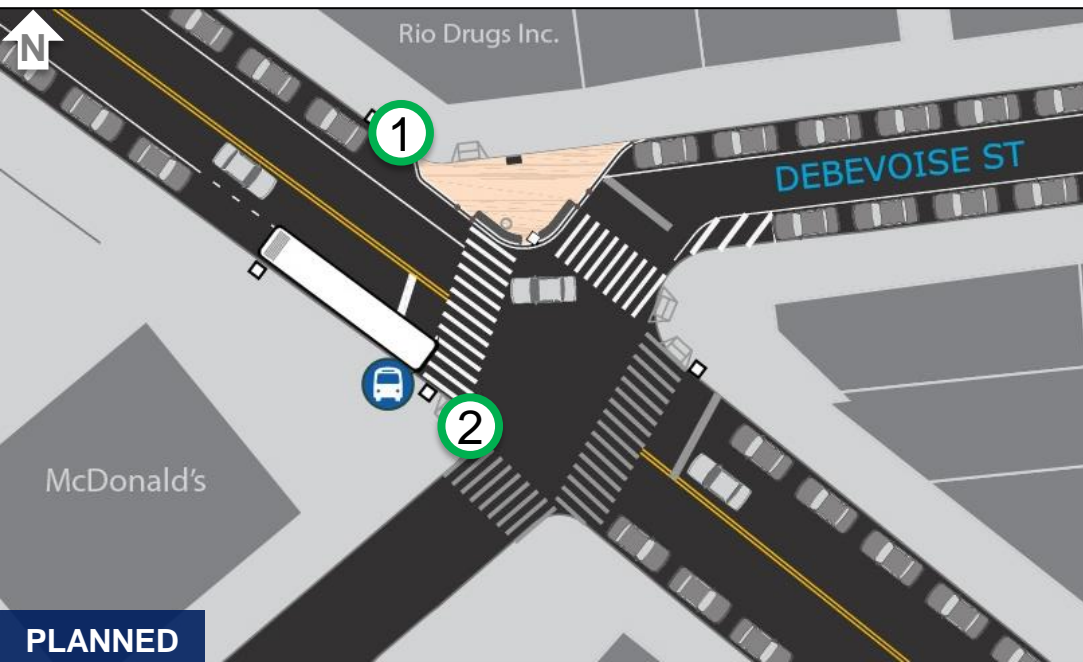
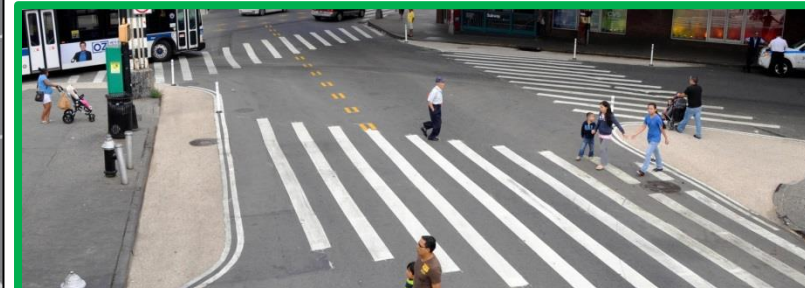
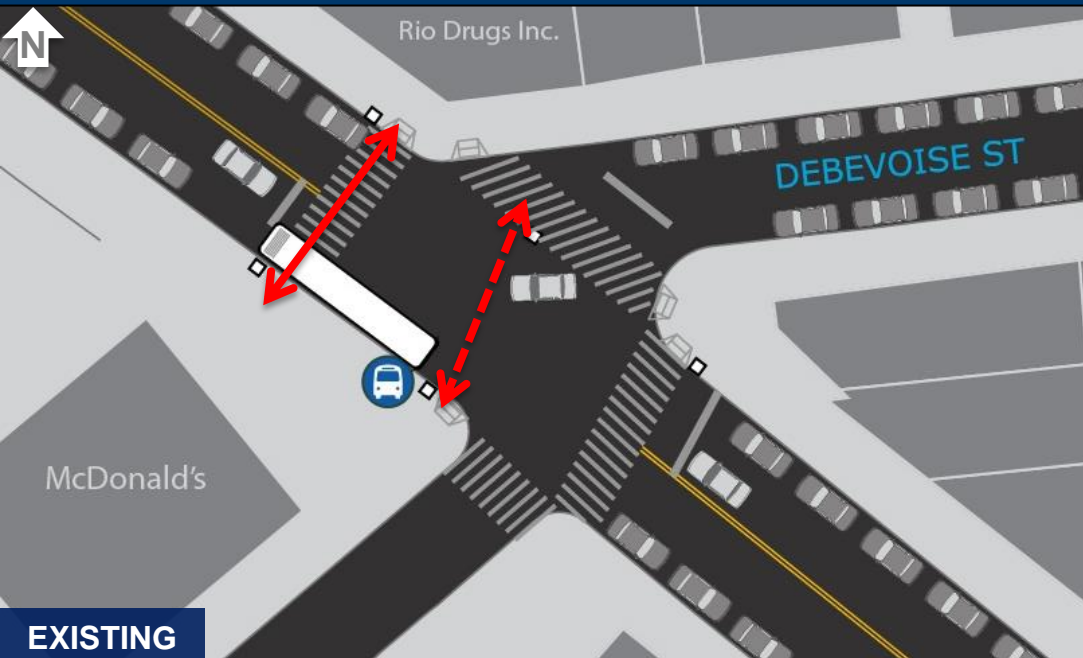


1 Crosswalk behind the bus stop making pedestrians less visible to vehicles

2 Crosswalk does not match pedestrian desire line or the existing ramp

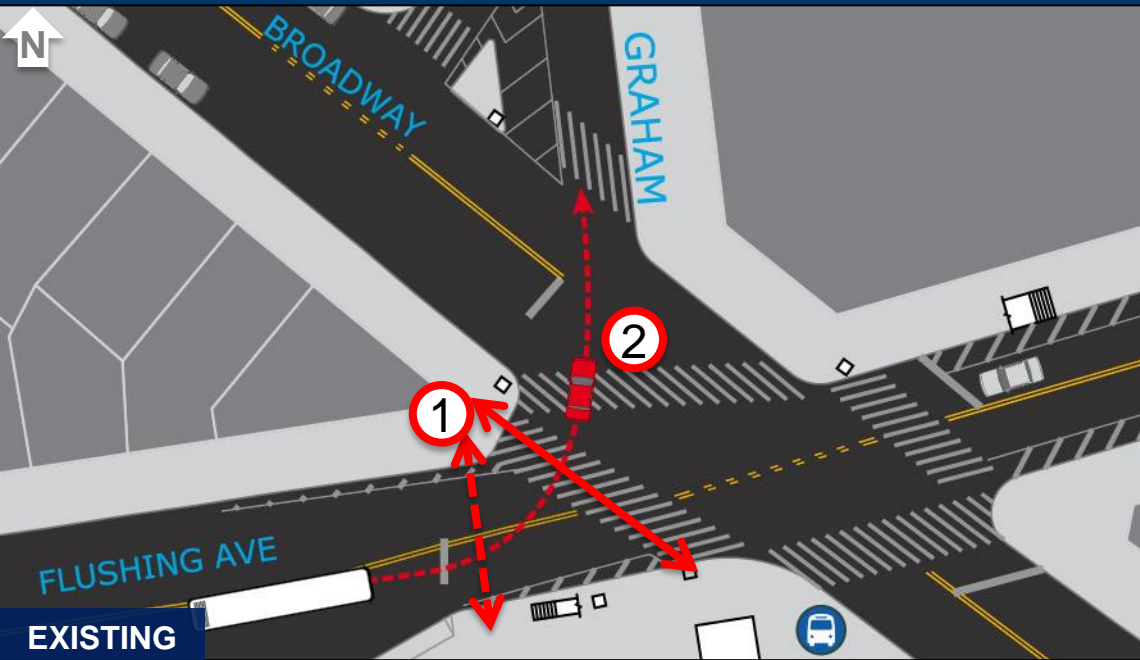


DEBEVOISE ST – PROJECT PLAN

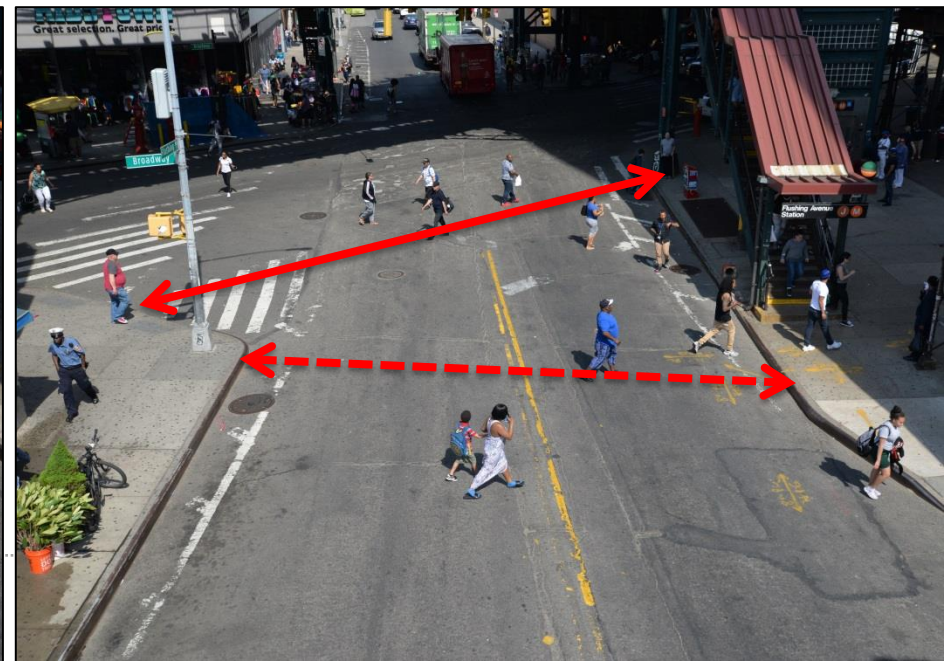
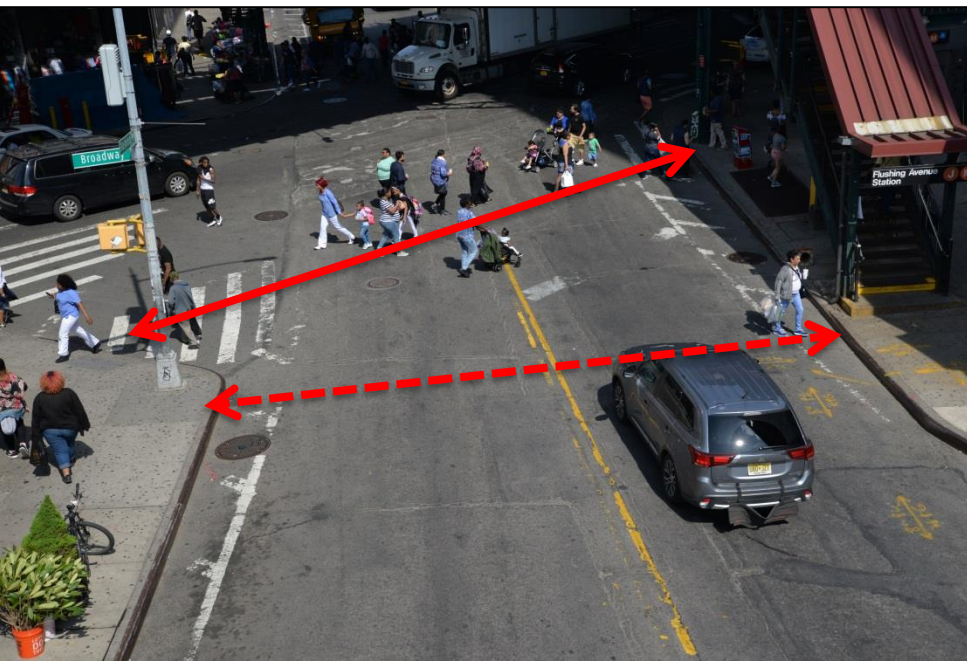


- 1 Add painted curb extension on the northern side of Debevoise St
- 2 Realign crosswalk to be in front of the bus stop

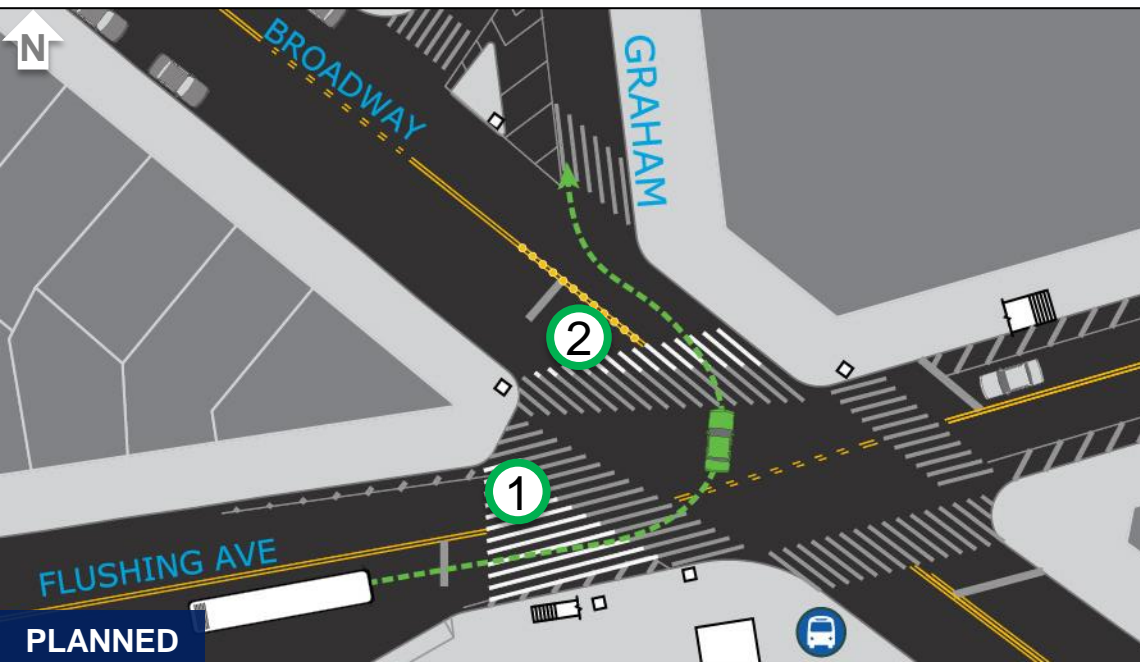
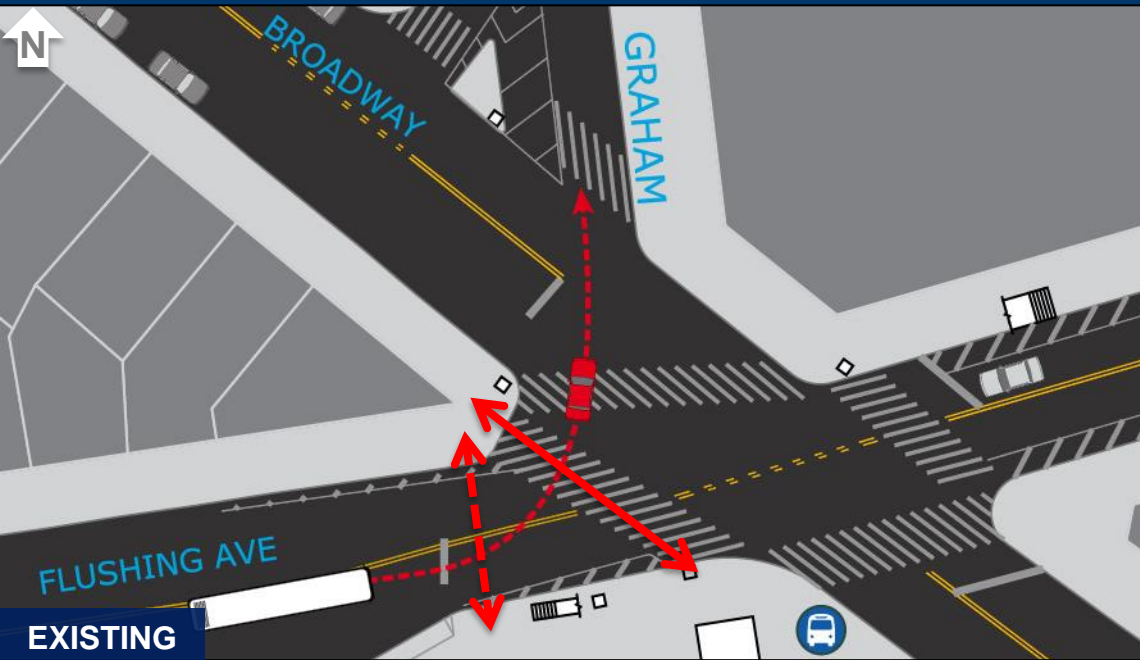
FLUSHING AVE – EXISTING ISSUES



- 1 Crosswalk does not lead to the station stairs
- 2 Left turns from Flushing Ave westbound onto Broadway and Graham Ave northbound create an unsafe condition



FLUSHING AVE – PROJECT PLAN



HARDENED CENTERLINE

- 1 Flare the crosswalk on Flushing Ave and Broadway
- 2 Install hardened centerline to calm turns from Flushing onto Broadway

THANK YOU!

Questions?



NYC DOT



NYC DOT



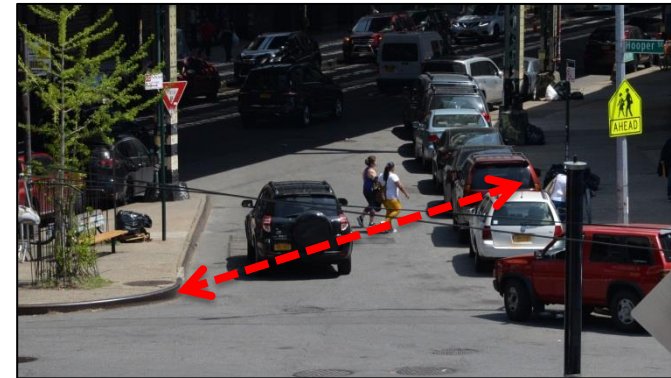
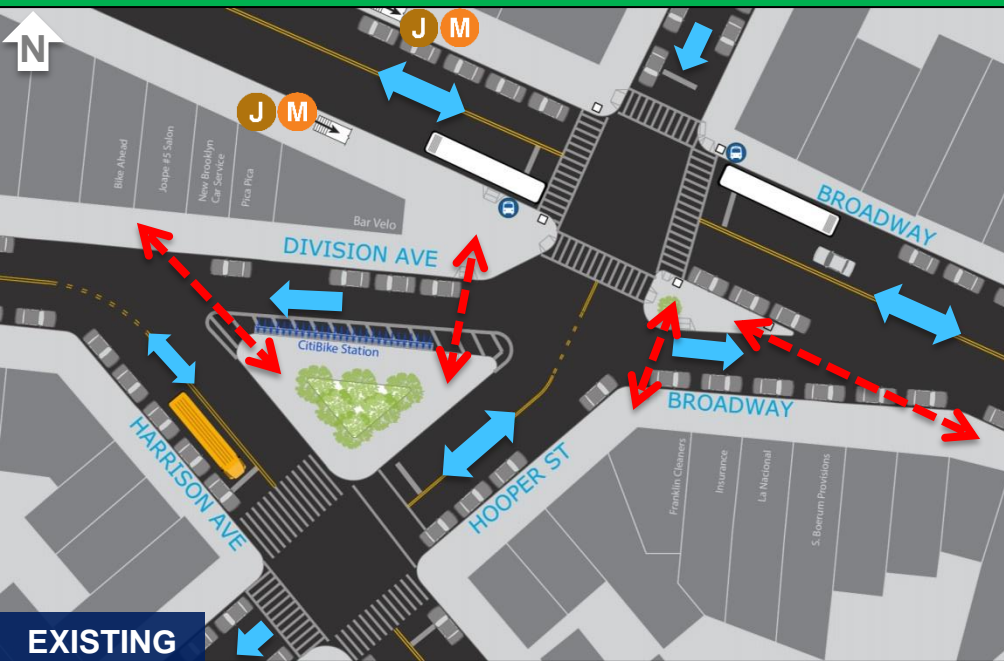
nyc_dot



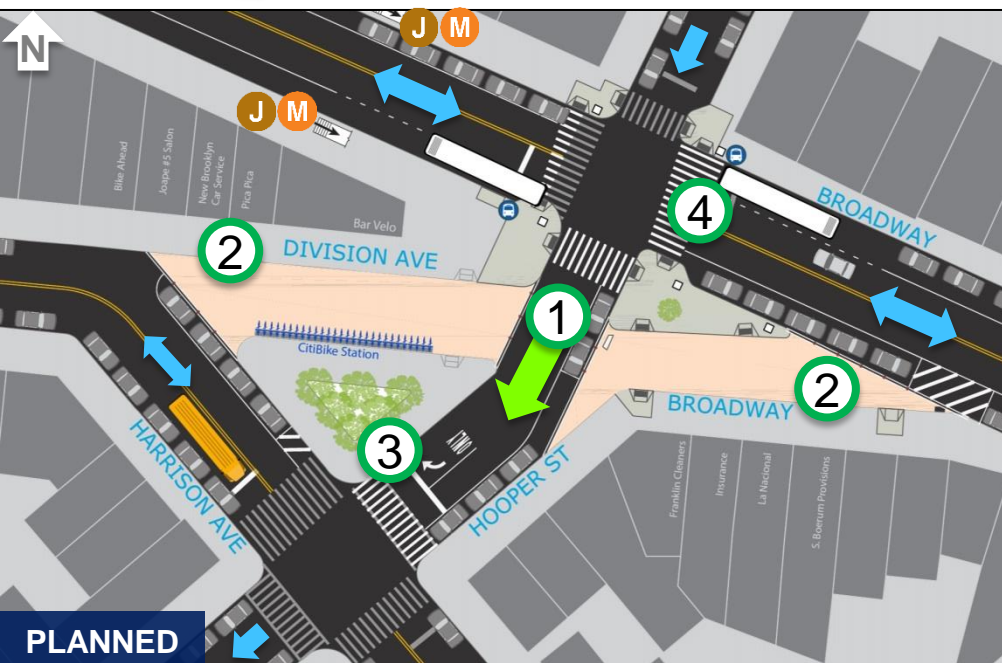
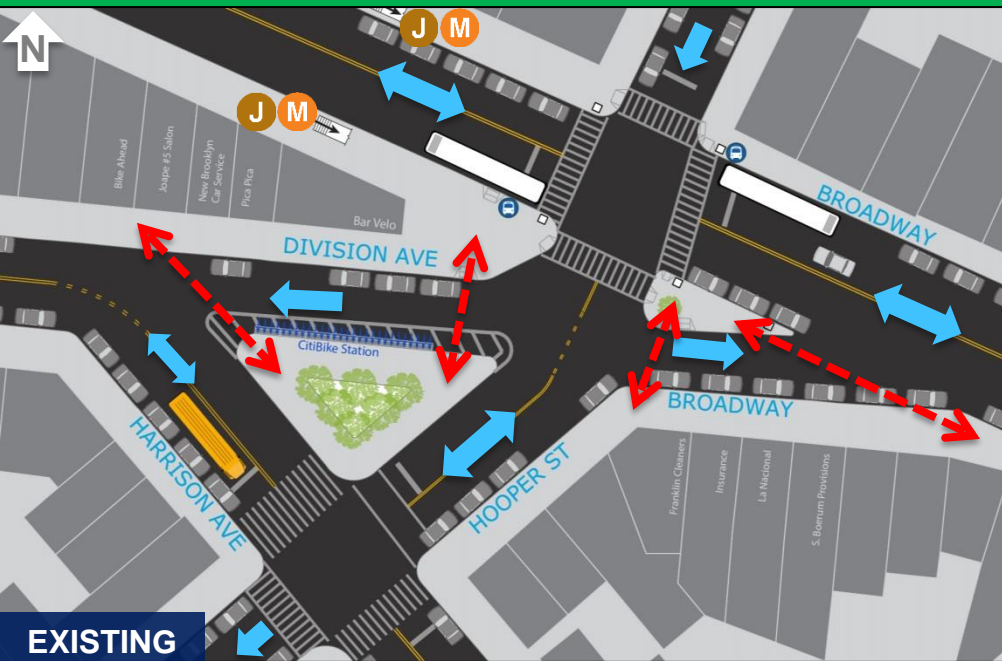
NYC DOT

Appendix

HOOPER ST - EXISTING



HOOVER ST – PROJECT PLAN



Street Conversions



Slip Closure in Paint

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- 2 Close slips on Division Ave and Broadway in paint
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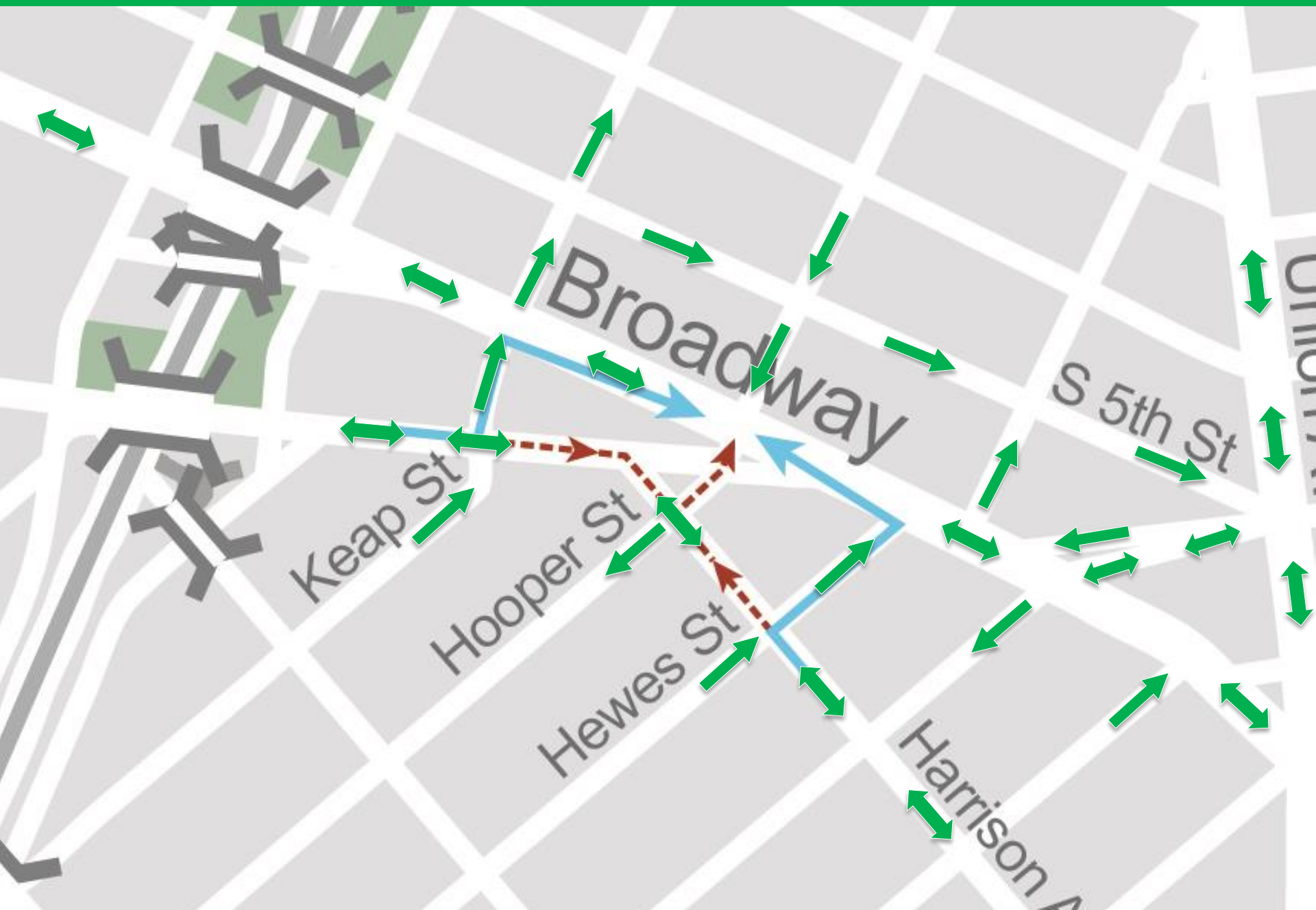
EXAMPLES OF CARS FAILING TO YIELD



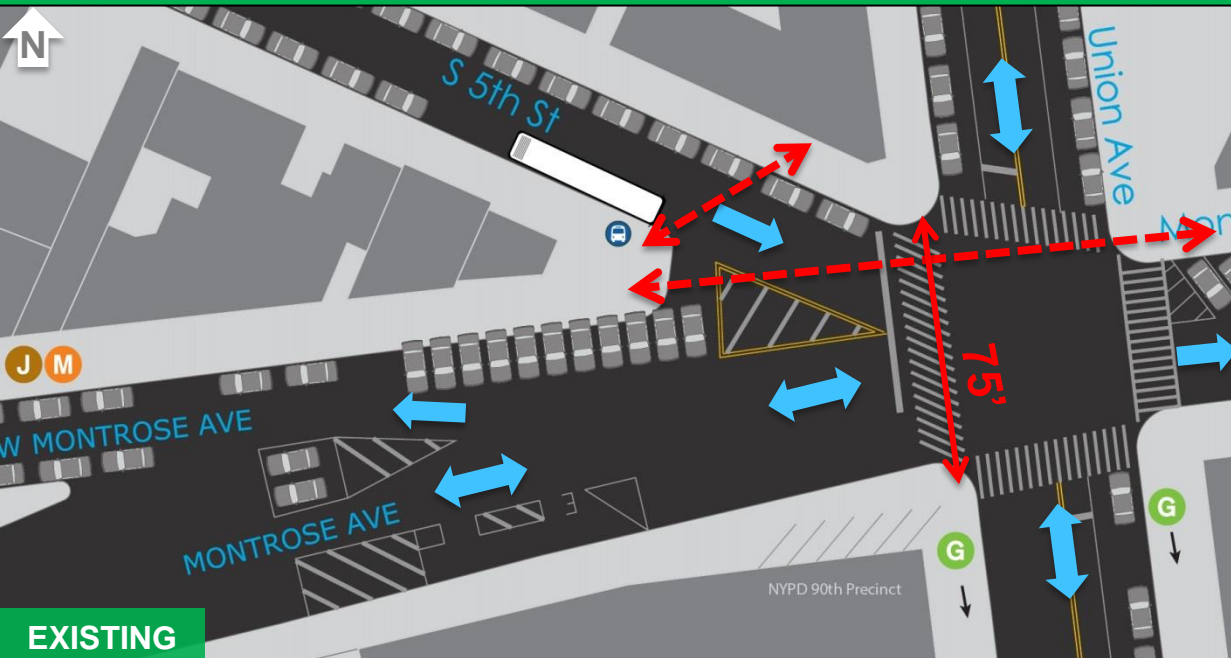
Examples of cars failing to yield to pedestrians on the Division Ave slip



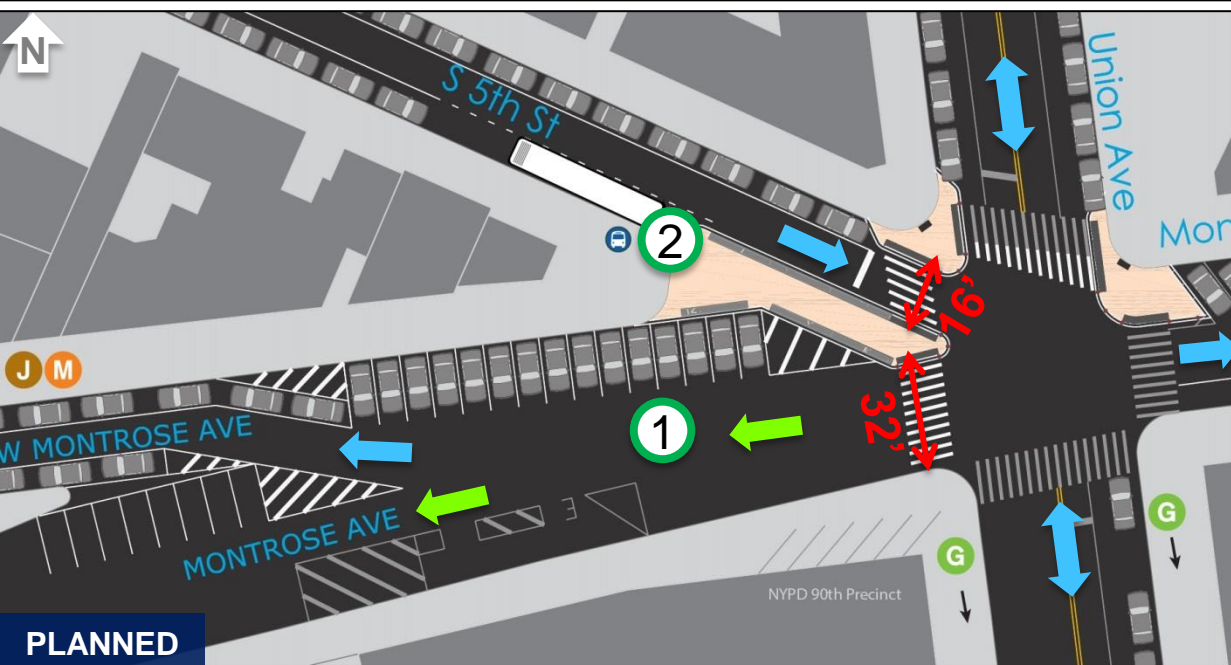
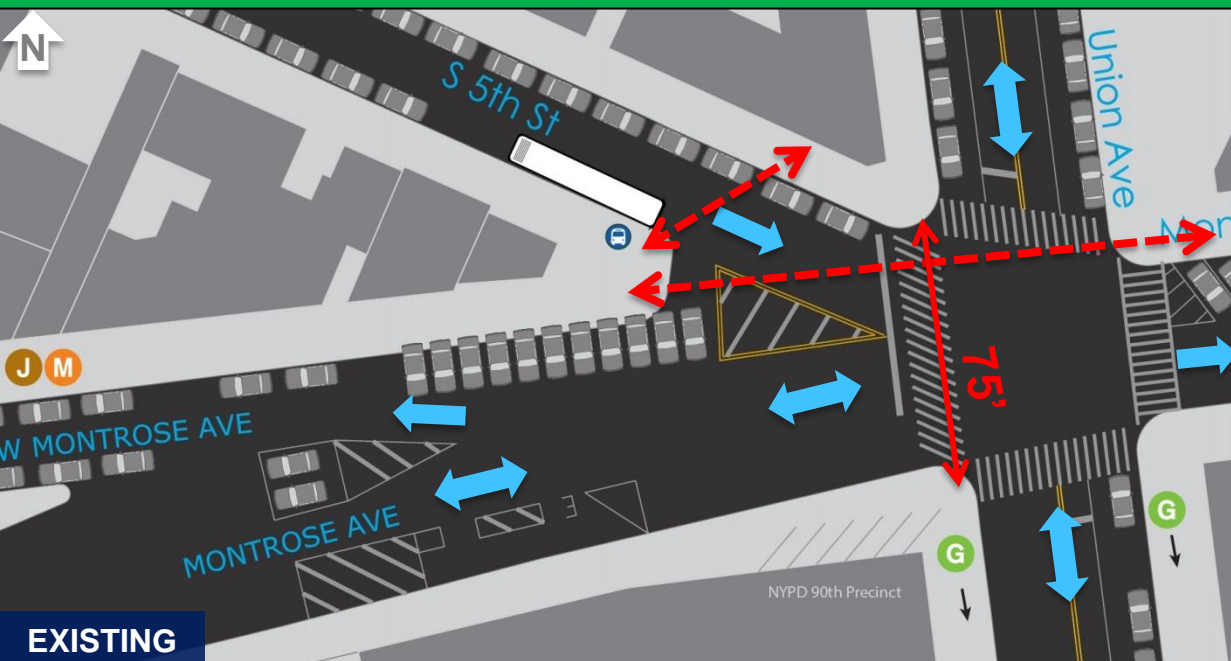
DIVERSION DIAGRAM – HOOPER ST



MONTROSE AVE - EXISTING



MONTROSE AVE – PROJECT PLAN



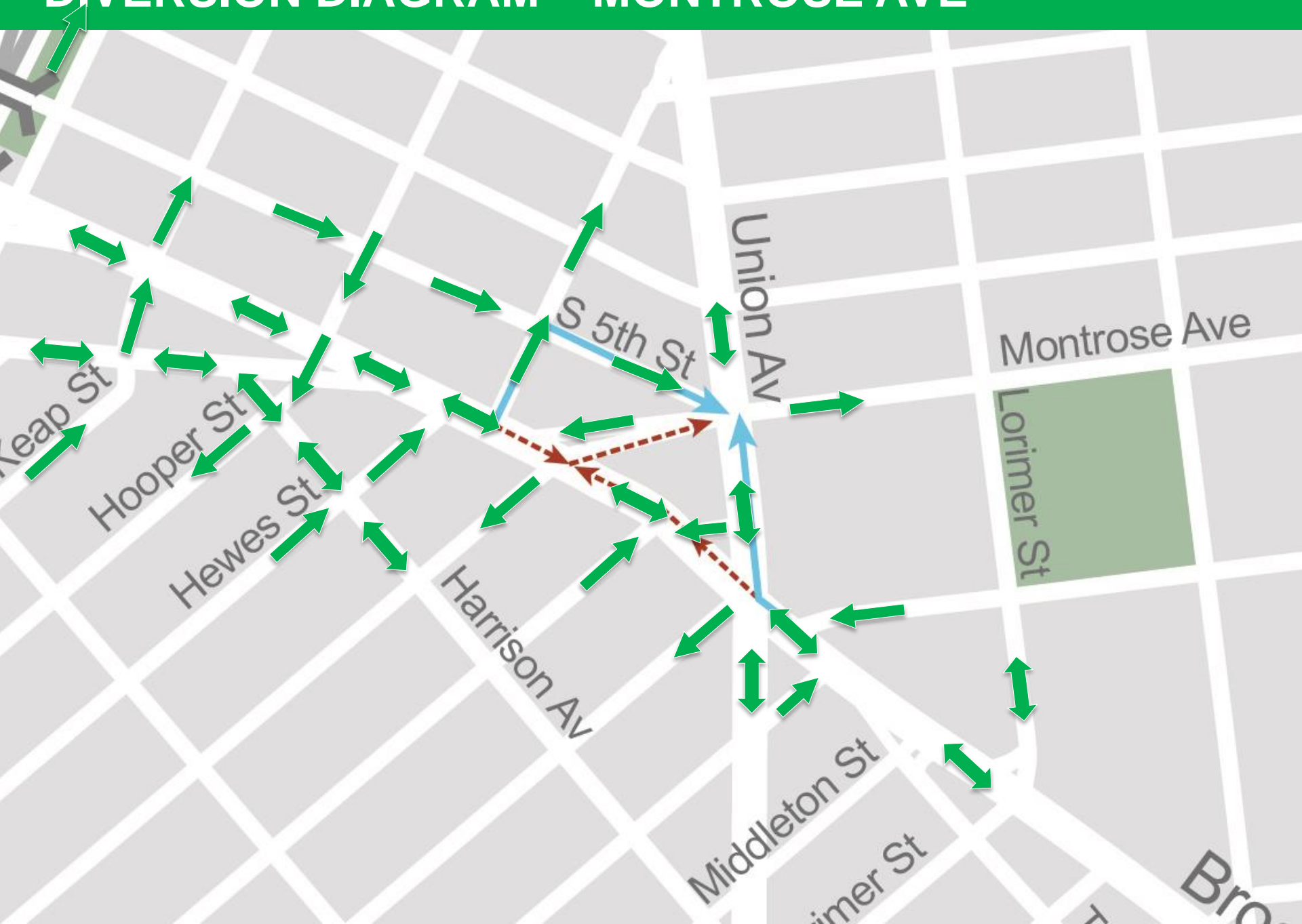
Street Conversions



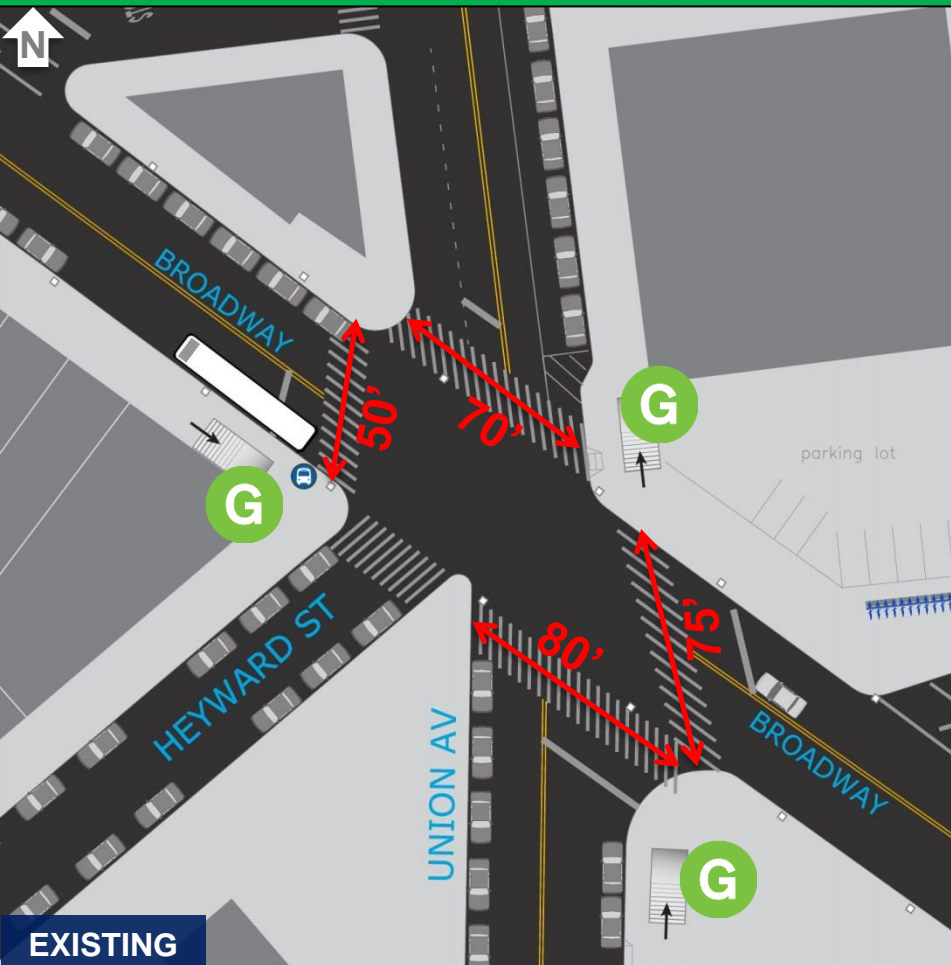
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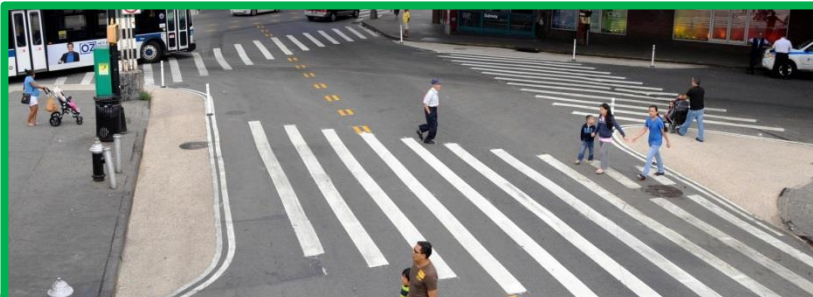
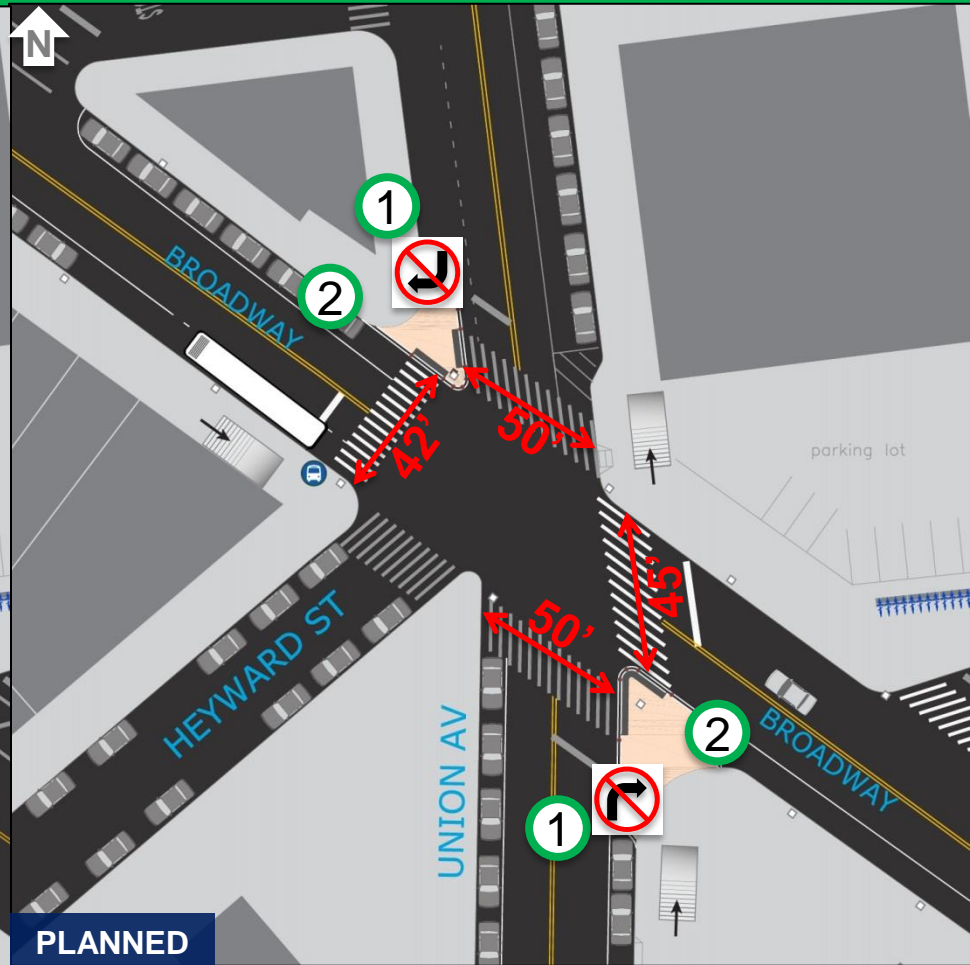
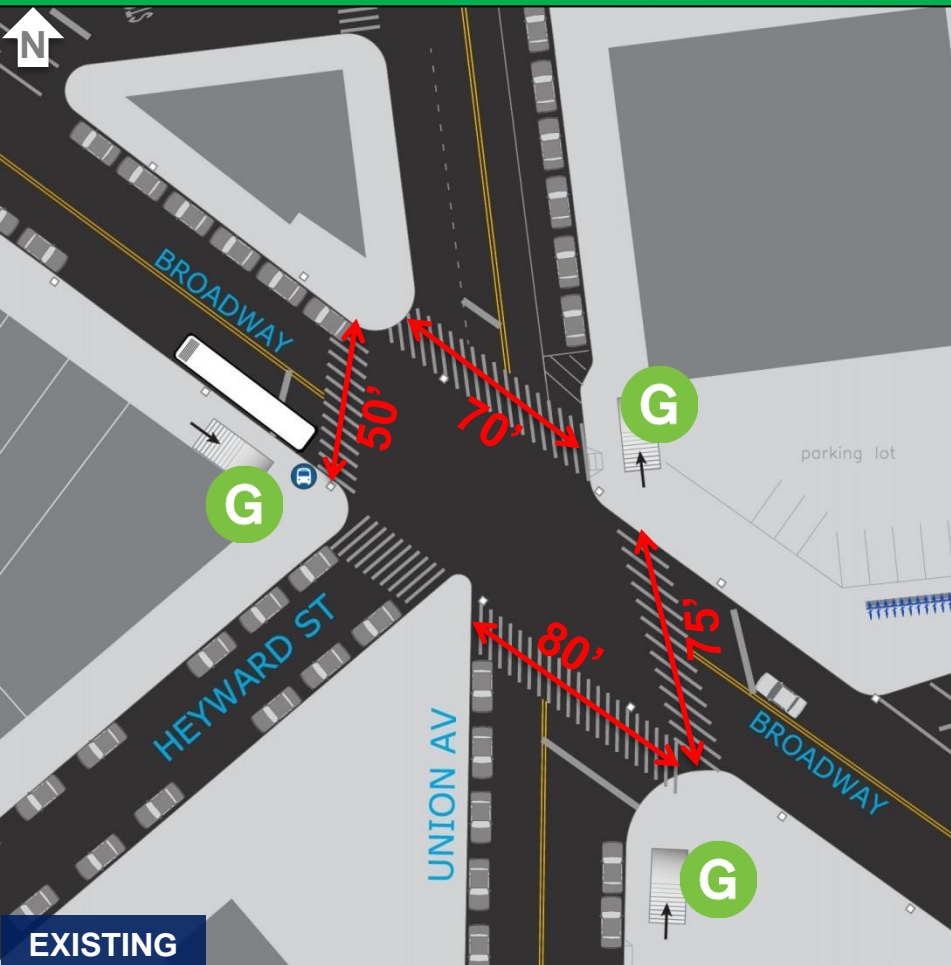
DIVERSION DIAGRAM – MONTROSE AVE



UNION AVE - EXISTING



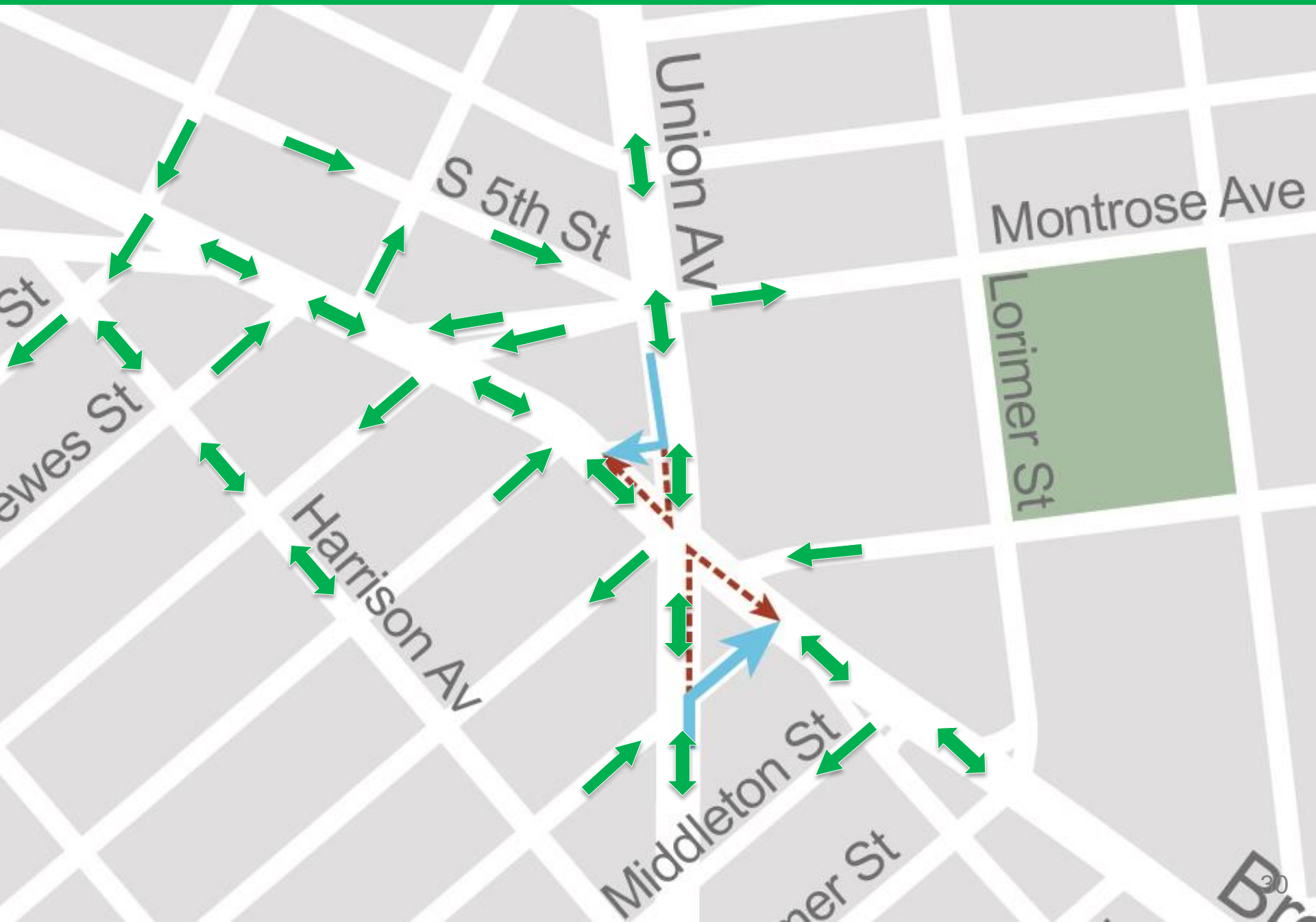
UNION AVE – PROJECT PLAN



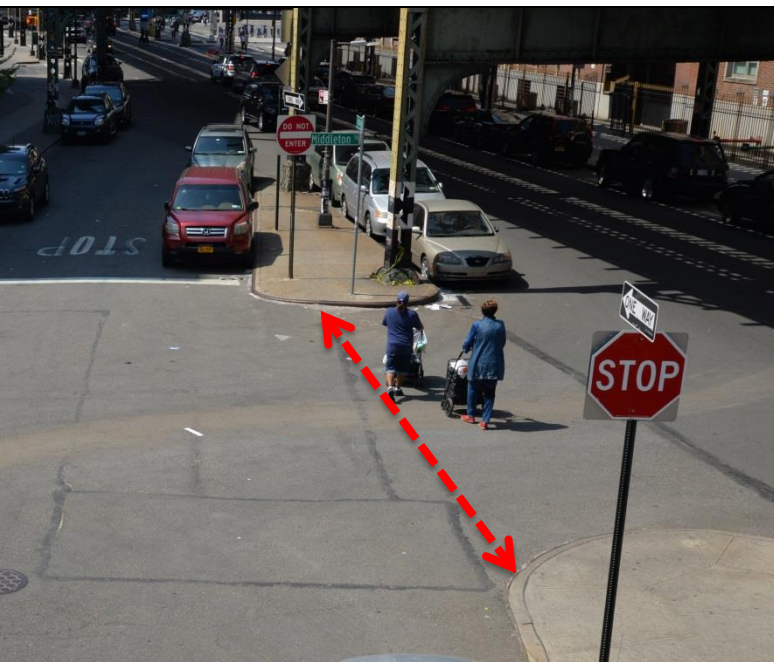
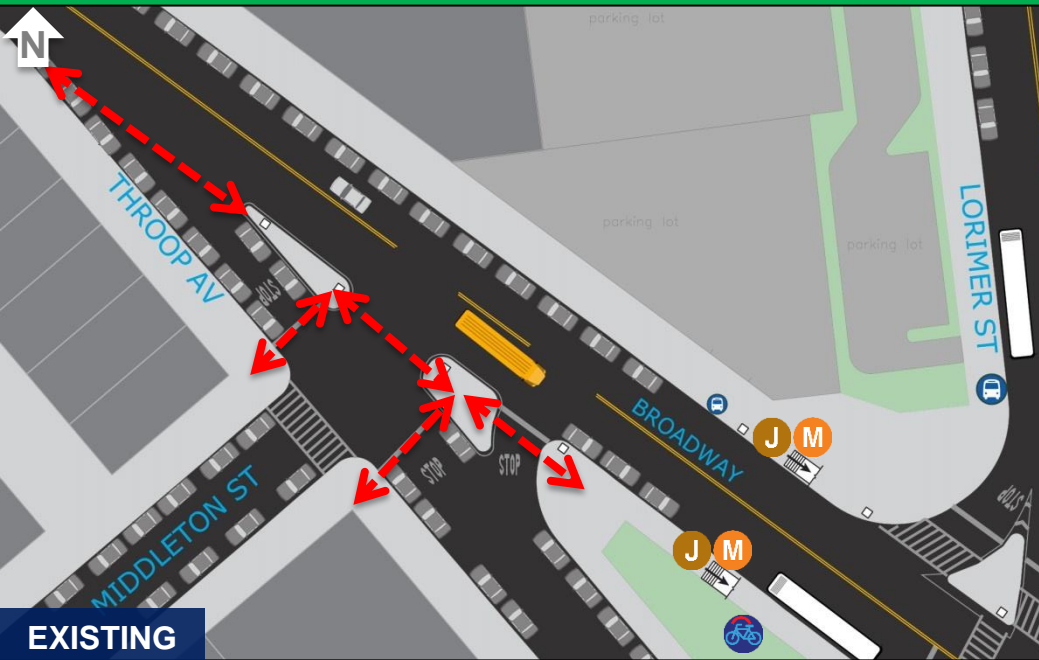
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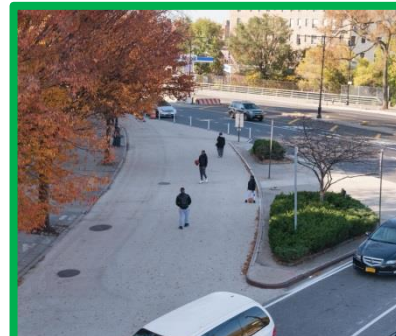
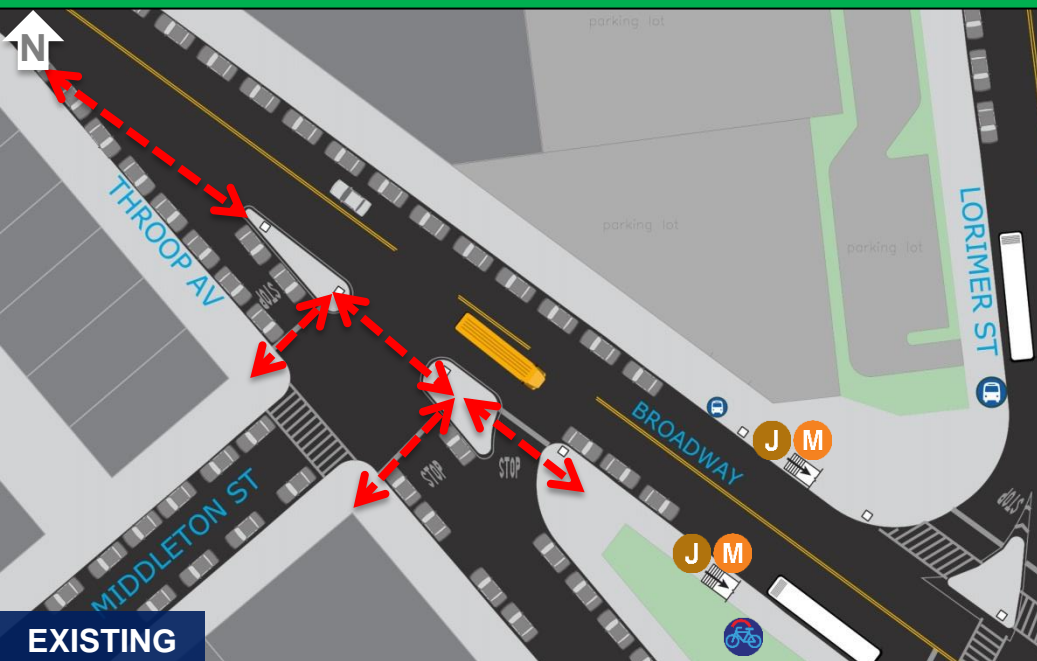
DIVERSION DIAGRAM – UNION AV



THROOP AVE - EXISTING



THROOP AVE – PROJECT PLAN



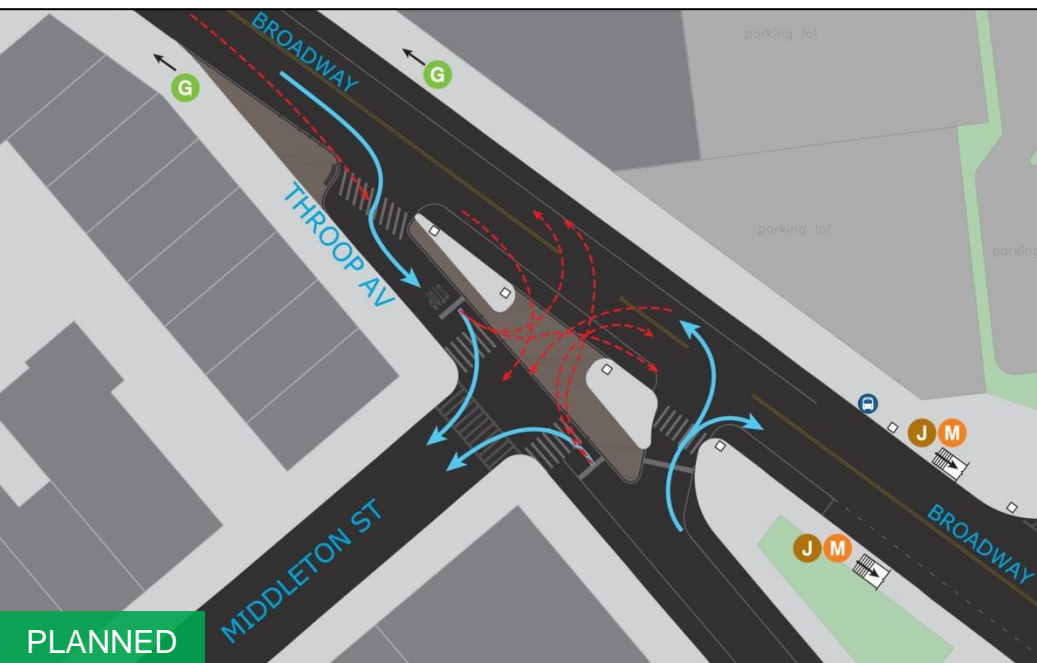
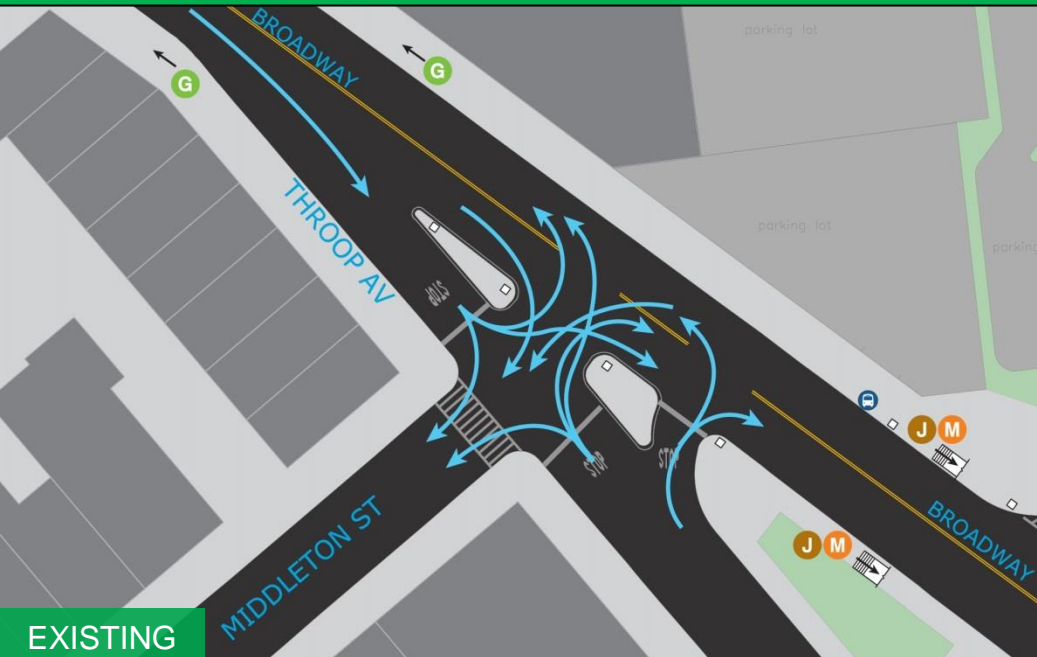
Slip Closure in Paint



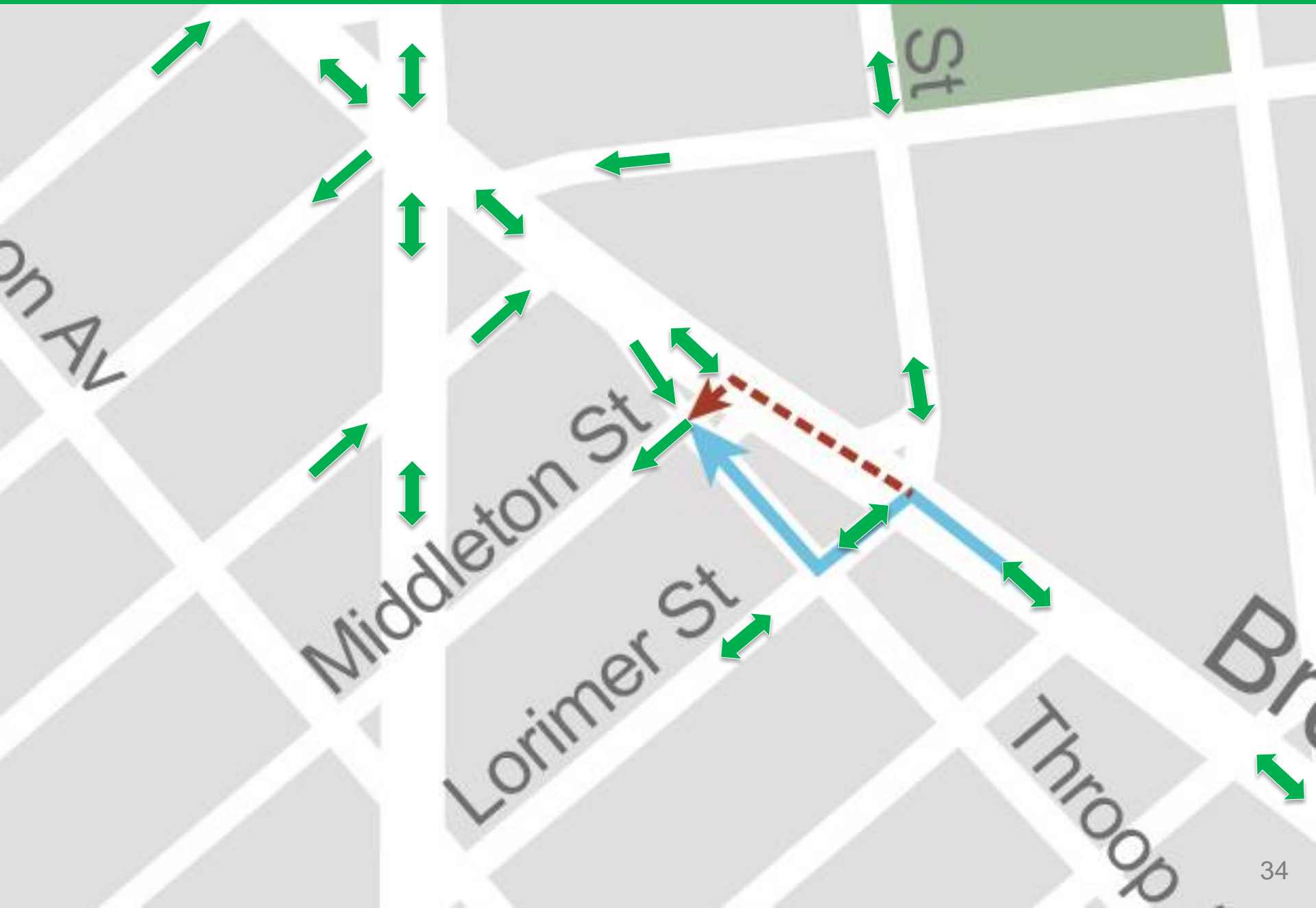
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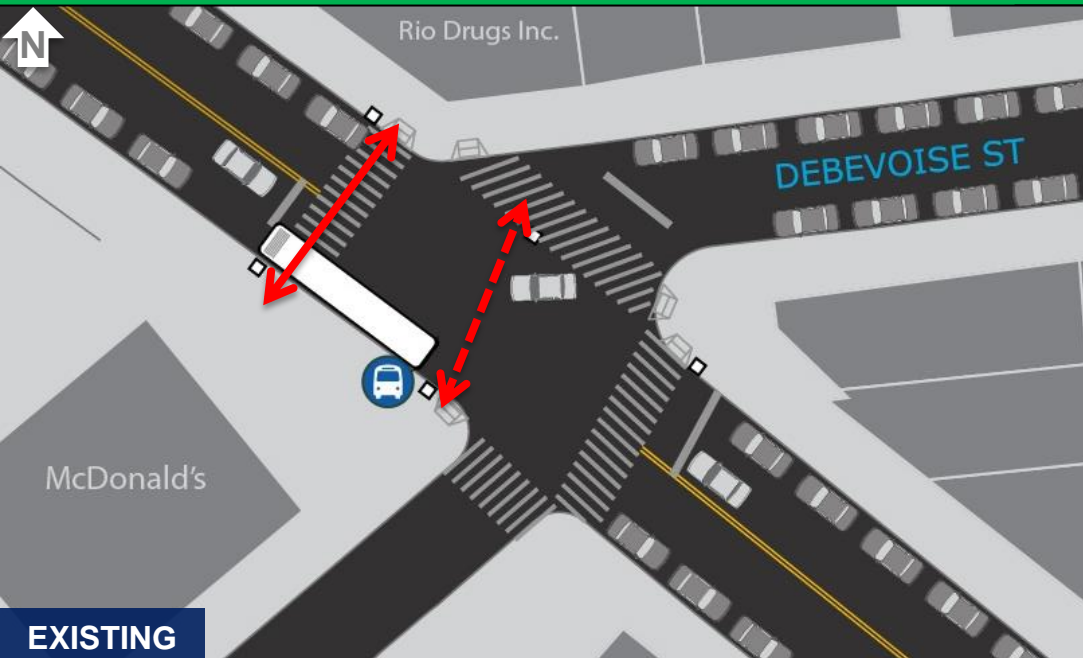
THROOP AVE – VEHICULAR MOVEMENTS



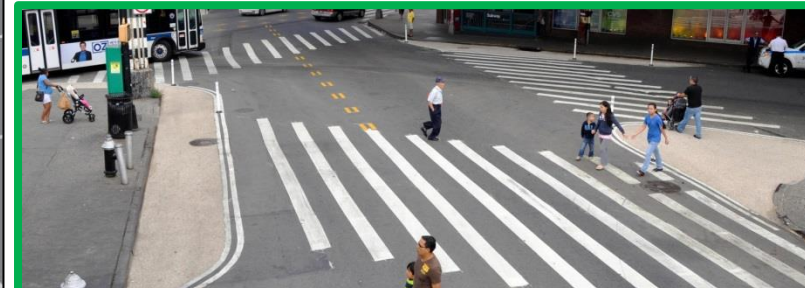
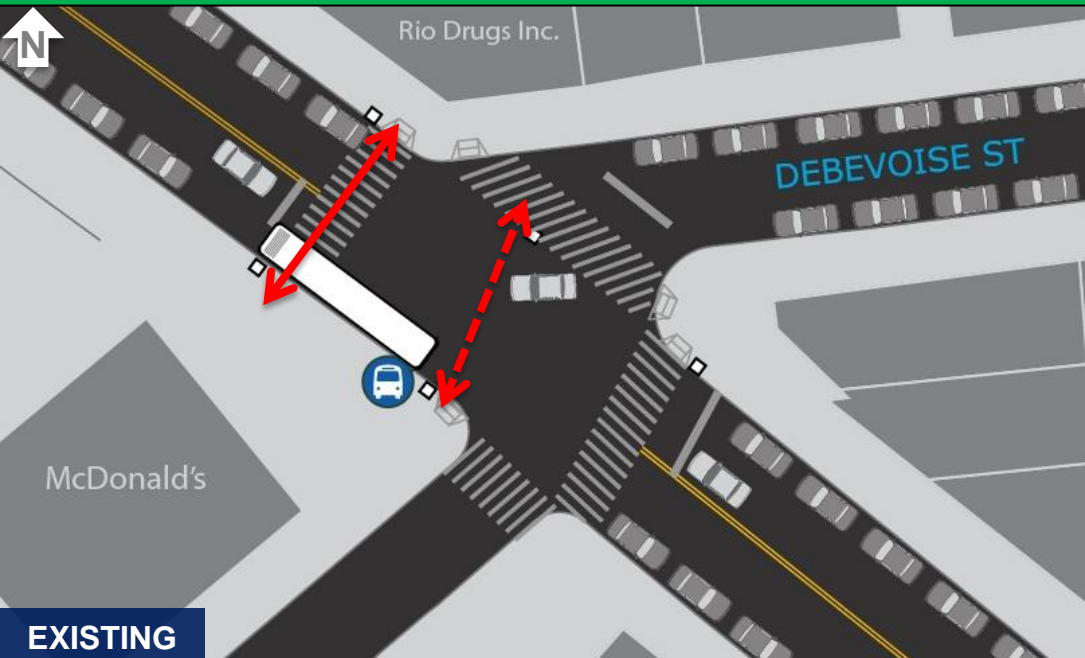
DIVERSION DIAGRAM – THROOP AVE



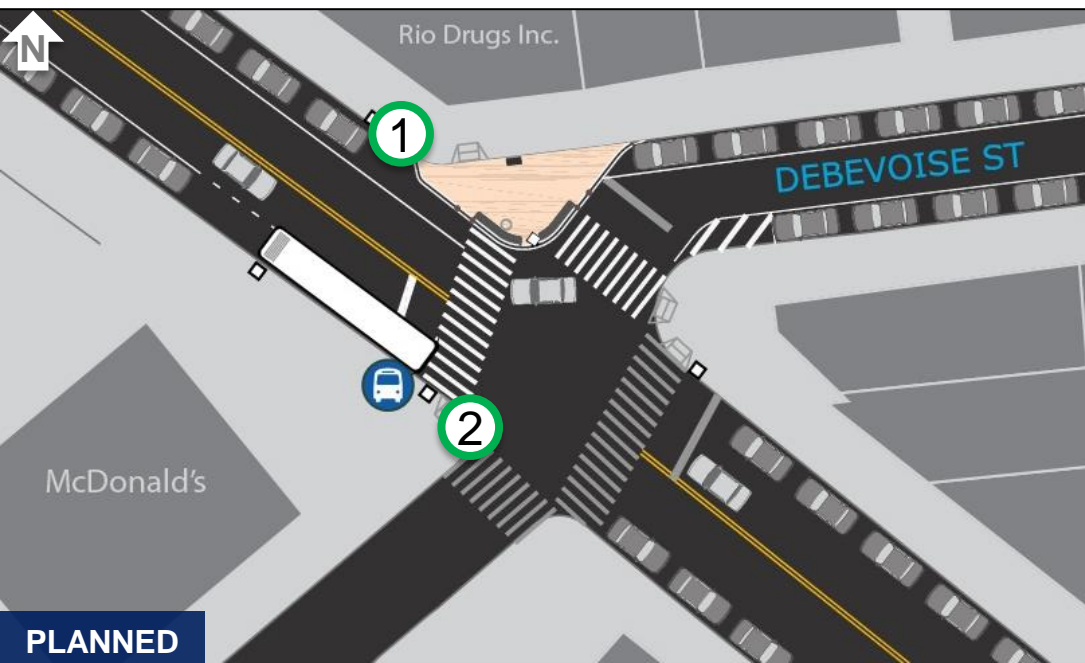
DEBEVOISE ST - EXISTING



DEBEVOISE ST – PROJECT PLAN

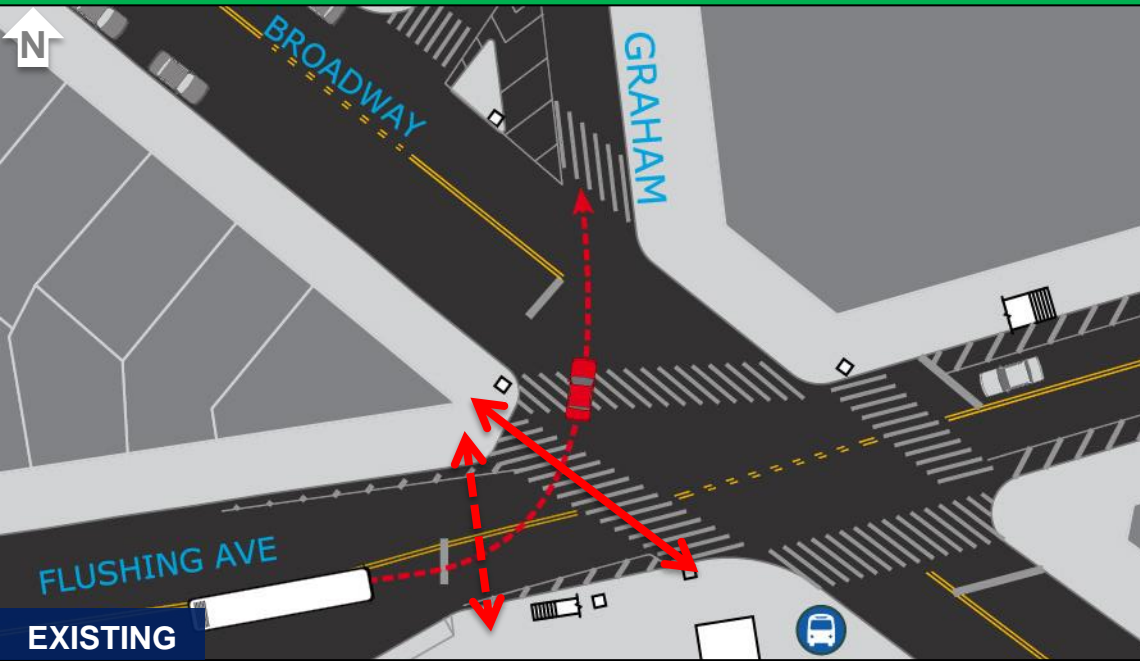


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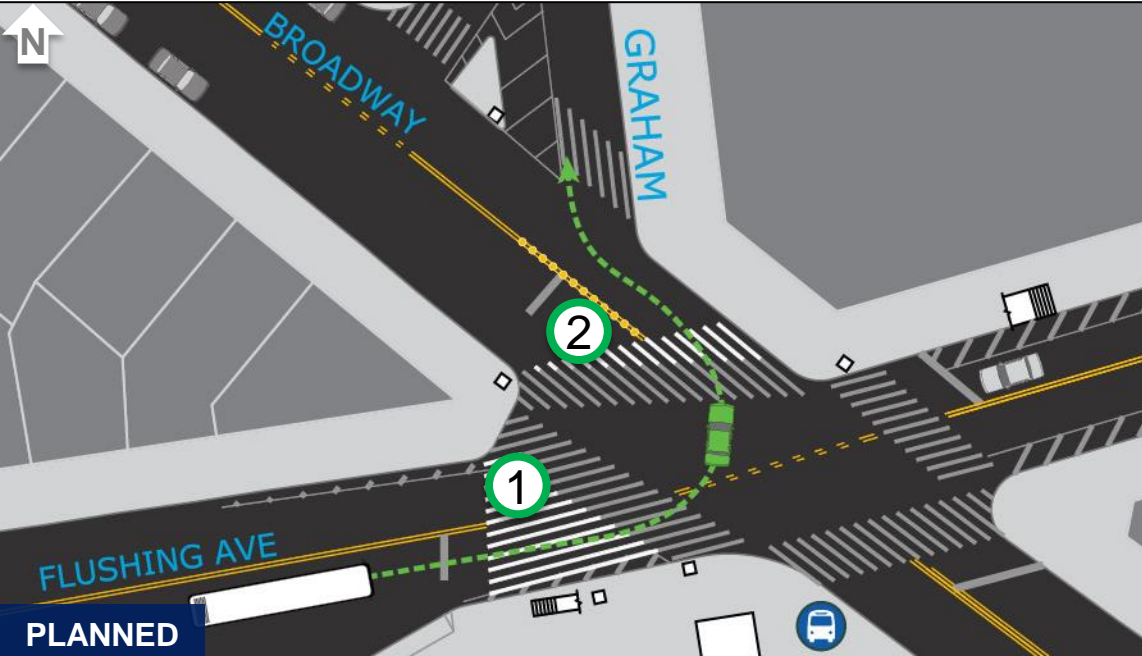
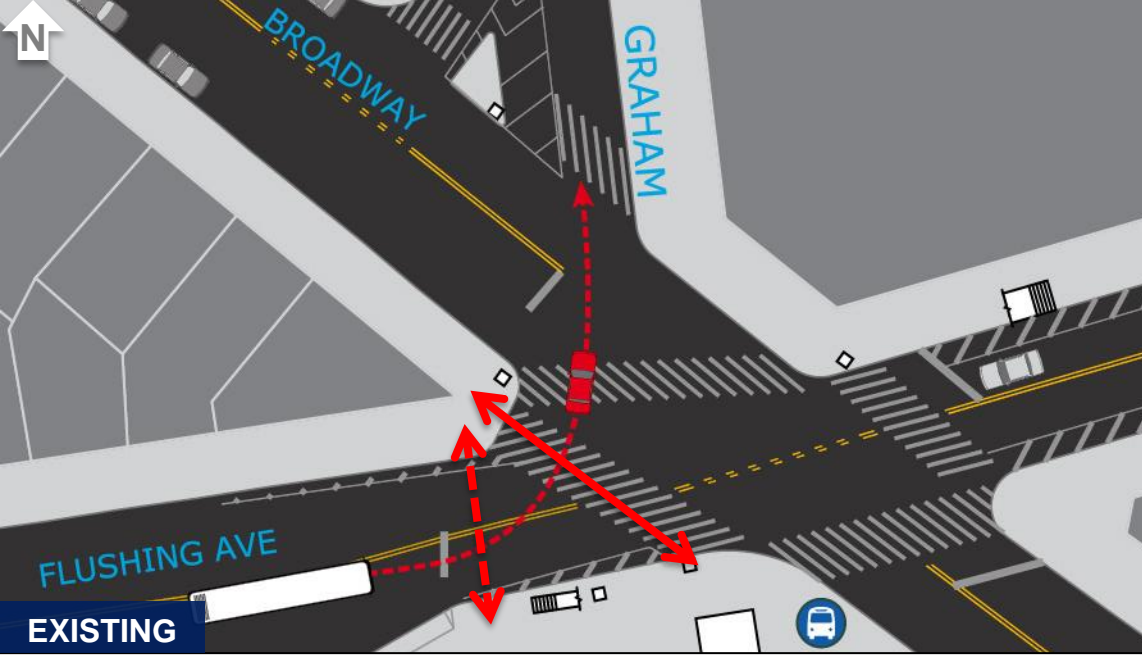


- 1 Add painted curb extension on the northern side of Debevoise St
- 2 Realign crosswalk to be in front of the bus stop

FLUSHING AVE – EXISTING



FLUSHING AVE – PROJECT PLAN



Hardened Centerline

- 1 Flare the crosswalk on Flushing Ave and Broadway
- 2 Install hardened centerline to calm turns from Flushing onto Broadway