

**NEW YORK CITY TRANSIT RIDERS COUNCIL**  
**MINUTES OF March 22, 2018**

A meeting of the New York City Transit Riders Council (NYCTRC) was convened at 12:00 noon on March 23, 2017 in the 20th Floor Board Room at 2 Broadway, New York, New York

The following members were present:

Andrew Albert	Trudy L. Mason
Christopher Greif	Burton M. Strauss, Jr.
William K. Guild	
Sharon King Hoge	

The following members were absent:

Stuart Goldstein	Marisol Halpern
Edith Prentiss	Scott Nicholls

In addition, the following persons were present:

William Henderson	-PCAC Executive Director
Ellyn Shannon	-PCAC Associate Director
Bradley Brashears	-PCAC Planning Manager
Sheila Binesh	-PCAC Transportation Planner
Karyl Cafiero	-PCAC Research Associate
Shaun Wong	-PCAC Intern
Jeff Hanft	-NYCT
Aaron Sugiura	-NYCDOT
Deborah Hall-Moore	-NYCT
Ken Stewart	-Concerned citizen
Matt Shotkin	-Concerned citizen
Michael Howard	-Concerned citizen
David Canas	-Concerned citizen
Andria Alefhi	-Concerned citizen

**NYCTRC MINUTES March 23, 2017**

**- 2 -**

**Time  
Point**

**Video**

**Part 1**

00:22 **Approval of Agenda**

02:45 **Approval of Minutes as amended**

02:50 **Chairs Report (attached)**

10:55 T. Mason: Have we done anything for setting up a meeting with Darryl Irick regarding buses?

A. Albert: We are working to get a meeting.

12:22 C. Greif: Staten Island bus open houses discussion.

16:03 **Board Report**

MTA Board's discussed four working groups – construction costs working group chaired by Scott Rechler, procurement working group chaired by Charles Moerdler, paratransit working group chaired by Veronica Vanterpool, accessibility working group chaired by Ira Greenberg.

17:45 Board discussion on the concept of congestion pricing, whether the FixNYC proposal is right for the MTA, and if the MTA should take a position on it in regards to sustainable MTA funding.

22:44 T. Mason: Attended an event at Hunter College's Roosevelt House bringing together leaders of Port Authority and the MTA discussing the interconnectivity of transportation and infrastructure expressing the need for the Gateway Project. The event also covered the need for congestion pricing and issues with for-hire-vehicles, the need for dedicated revenues, design-build, and value capture.

29:49 A. Albert: There was a board discussion of value capture and how the City is not in favor of it because revenues will be given to the MTA and not the City.

30:12 E. Shannon: Polly Trottenberg of NYCDOT wants to have more discussions on value capture before the State passes legislation.

31:25 A. Albert: Some say that the only way to fund the second phase of Second Avenue Subway (SAS) is through value capture.

## **NYCTRC MINUTES March 23, 2017**

**-3 -**

- 31:30 T. Mason: Right now there is no infrastructure money from the federal government for New York and SAS phase 2.
- 32:30 E. Shannon: Has there been a study if value capture had been used for phase one of SAS – how much could have been brought in?  
T. Mason: Yes, they could have used it. There have been independent studies of the increase in property values.
- 40:00 ***Old Business***
- 40:10 K. Stewart: Issue with bus drivers not making stop announcements. What can be done about this?  
D. Hall-Moore: There is a whole grid of accessibility issues that is being covered, and bus announcements is one of them.
- 43:12 ***New Business***
- 43:16 C. Greif: Requests to be part of the MTA working groups on accessibility.
- 45:26 C. Greif: Request letter to the cleaners who have been shoveling snow – appreciation letter.
- 47:56 W. Henderson: We have sent legislators our resolution supporting congestion pricing.
- 50:25 ***Introduction of NYC Transit's Jeffrey Hanft and NYCDOT's Aaron Sugiura to discuss plans for the upcoming L Line closure.***
- 01:14:34 A. Albert: We learned a lot from the so-called "Summer of Hell", people did not use the buses, instead went to alternate train stations. Isn't it likely that the majority of people are going to alter their route and take different subway lines? After about 3 or 4 months or sooner you might find that instead of taking the L1, L2, L3, that riders might just take different subway lines, especially if their destination is not 14<sup>th</sup> Street. New subway transfers coming online as well.  
J. Hanft: Yes, we expect about 85% of riders will switch to different subway lines.
- 01:22:20 A. Albert: Could there be shuttle service between Bedford and Court Square?  
J. Hanft: It is not a time competitive service, and the B32 operates in this corridor.
- 01:23:03 T. Mason: Since all the work will be done in the tunnel, why does the L have to be shutdown along 14<sup>th</sup> Street? Couldn't it just be used as shuttle train?  
J. Hanft: The major problem is there is no yard to put trains into service and maintain them and the Third Avenue station is not designed to be a terminal to turn around trains.

## **NYCTRC MINUTES March 23, 2017**

**-4 -**

- 01:37:00 C. Greif: Is 14<sup>th</sup> Street going to be closed at all times and will it be open to Access-A-Ride vehicles?  
A. Sugiura: We have never said it will be closed at all times.
- 01:38:14 A. Albert: The bus treatments on both Grant Street and 14<sup>th</sup> Street, are we talking about weekends as well as weekdays?  
A. Sugiura: We have not yet determined that either.
- 01:38:32 C. Greif: If someone gets on the L train trying to go to Bedford Av, can someone get on the ferry there?  
J. Hanft: Yes, they can. It will be similar to the SBS fare machines prior to boarding the ferry. You can move from the ferry directly to the bus with your proof of payment.
- 01:39:35 C. Greif: Will there be ambassadors at Myrtle-Wyckoff to help the accessibility community?  
J. Hanft: Station staffing is something we are working with the department of stations with. Not sure if that specifically has been identified. We will take that question back with us.
- 01:41:04 E. Shannon: How much of the street traffic on 14<sup>th</sup> Street is because of deliveries? Are you working with the primary delivers to speed up the time they are stopped there?  
A. Sugiura: We are more concerned about regular vehicle traffic. There are discussions to do off-hour deliveries with some of the bigger retailers.
- 01:45:16 D. Hall-Moore: If this anybody wants to make formal recommendations, they need to do so in a hurry as they are approaching a final plan.
- 01:45:39 B. Guild: There is a group that is concerned about the placement of an elevator on the north side of 14<sup>th</sup> Street at Avenue A on a roadway island. This is a dangerous intersection already. Any consideration in changing direction of traffic or enforcement that will make it a safer intersection?  
A. Sugiura: We have spoken with these individuals. It is too soon to weigh in on the subject now. One matter is changing the side the elevator door opens to, and the other matter is possibly using the service road to expand pedestrian access.
- 01:48:36 S. Wong: Is there a possibility of adding bus lanes to Grand Street? Are cars not going to be allowed on Grand Street? Will the project remove parking?  
A. Sugiura: Trying to establish priority for buses and bike lanes and working to remove one side of parking. Trying to divert regular traffic to other streets.
- 01:50:09 S. Binesh: Lane enforcement – since current legislation allows 16 cameras but not all of them are in use, why are you asking for more cameras?



**NYCTRC MINUTES March 23, 2017**

**- 5 -**

A. Sugiura: We are working within current legislation to use those cameras for the shutdown and then return them back to the pool for other routes once the shutdown is over. There will eventually be a need for more cameras.

01:54:51 T. Mason: Existing parking garages on 14<sup>th</sup> Street – Is there going to be limited access to those garages?

A. Sugiura: Yes, we do need to make sure that there isn't a loophole in the rule that cars can't drive on 14<sup>th</sup> Street. Day-rate parkers will be allowed to use the access, but only if they exit as soon as possible and not travel on 14<sup>th</sup> Street.

01:58:40 B. Brashears: Recommends writing a resolution supporting and expanding legislation to have cameras on the bus lanes during the L shutdown.

A. Sugiura: Yes, that would be helpful for the HOV lanes, and it is still an open matter.

02:00:28 Camera enforcement resolution is approved.

02:01:02 ***Adjournment***

**Summary of Action Items**

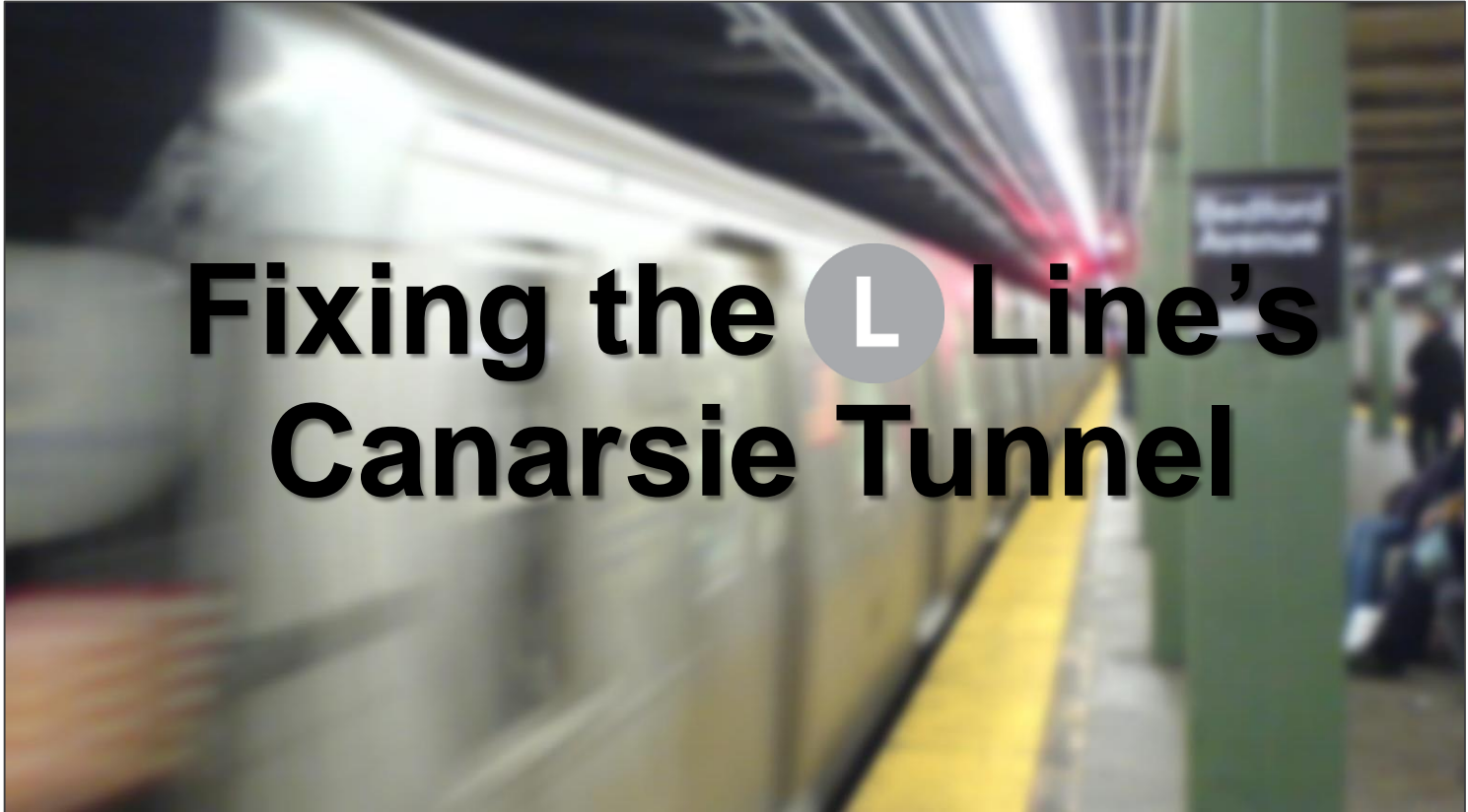
- Schedule bus meeting with Darryl Irick
- Write letter of appreciation for snow removal
- Draft bus lane camera enforcement legislation resolution

Respectfully submitted,

William Henderson  
Executive Director



# Fixing the **L** Line's Canarsie Tunnel





# WHAT INFORMED OUR PLANNING PROCESS SO FAR?

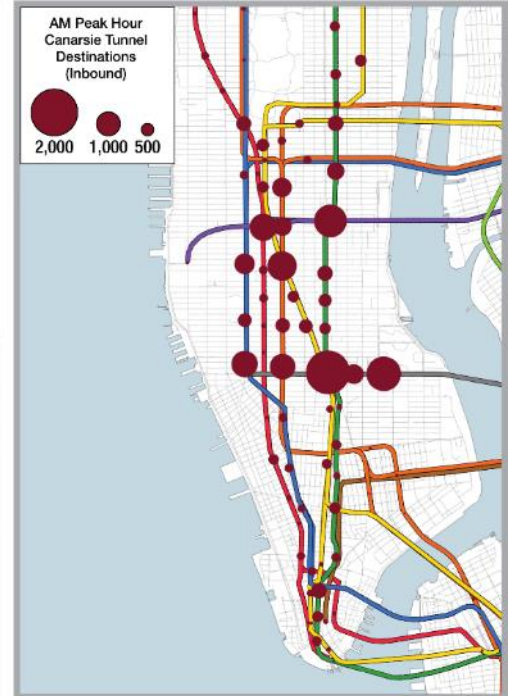
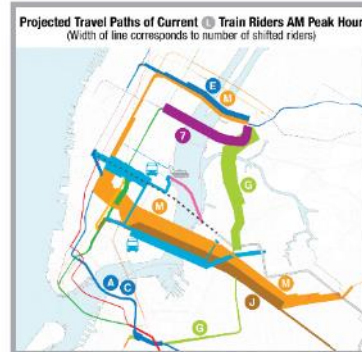
## Input from over 40 community meetings

### Most frequent comments:

- Buses need dedicated lanes
- Provide multiple options, including ferry
- Simple, direct inter-borough bus routing, connecting to subways
- Bike lanes should be physically separated
- Street treatments should take emergency vehicle and delivery access needs into consideration
- Manhattan residents fear traffic spillover on narrow, mostly residential side streets
- Balance the needs of riders, residents and businesses.

### Technical Analysis:

- Current travel patterns
- Traffic and transit modeling
- Testing of multiple scenarios.





# SANDY DAMAGE

The Canarsie Tube was inundated with saltwater during Superstorm Sandy causing corrosion of cabling, circuit breakers and power and track equipment.

The tunnel needs a complete overhaul

Contract for Tube repairs awarded (April 2017)

15 Month Closure remains on schedule to begin April 2019

Bonus for early completion & \$400,000-per-day penalty for delays

## Tunnel work needed





# MANHATTAN CONSTRUCTION UPDATE

## • Ongoing Work:

- Relocating ConEd ducts and power cables.
- Installing Support of Excavation - sheet-piles on north side of E 14th St & Avenue B for new substation
- Installing Support of Excavation - support piers on north side of E 14th St & Avenue A for new entrance/shaft
- Starting installation of Support of Excavation - sheet-piles on south side of E 14th St & Avenue A for new entrance/shaft by middle of February.
- Work is also underway at Bedford Ave Station in Brooklyn

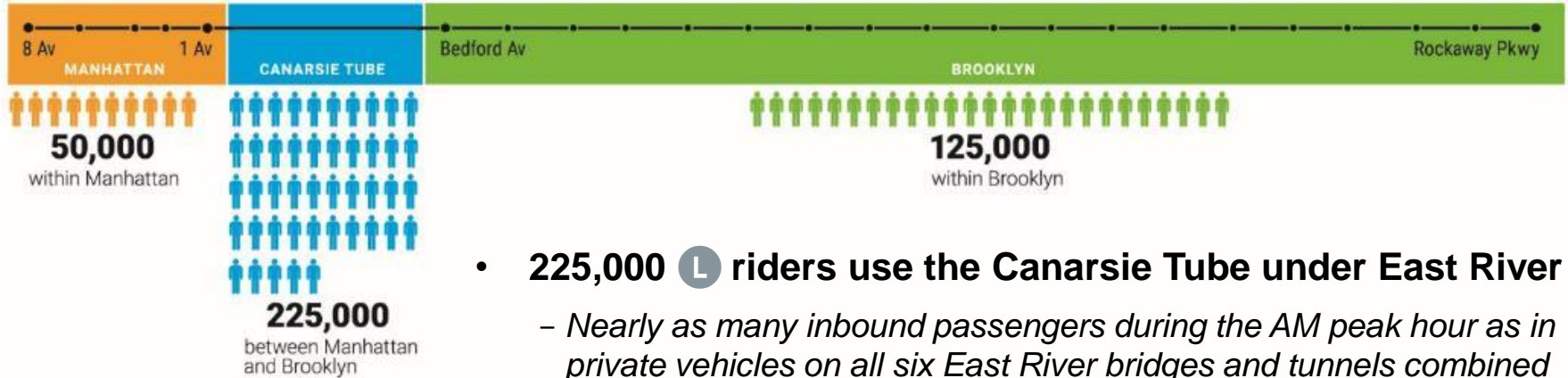






# L SERVICE PLAN





- **225,000** **L** riders use the **Canarsie Tube** under **East River**
  - *Nearly as many inbound passengers during the AM peak hour as in private vehicles on all six East River bridges and tunnels combined*
- **50,000** **L** riders travel **solely in Manhattan**
  - *Greater than busiest NYC Bus route (Bx12 - 48,000 riders/day)*
- **30,000** riders on **M14A** and **M14D**
- **125,000** **L** riders travel **solely in Brooklyn**



# OUR STRATEGY



Increased alternate subway service



Temporary bus service



Temporary ferry service



Station Access and Capacity Improvements



More bike and pedestrian infrastructure



Peak period traffic management strategies

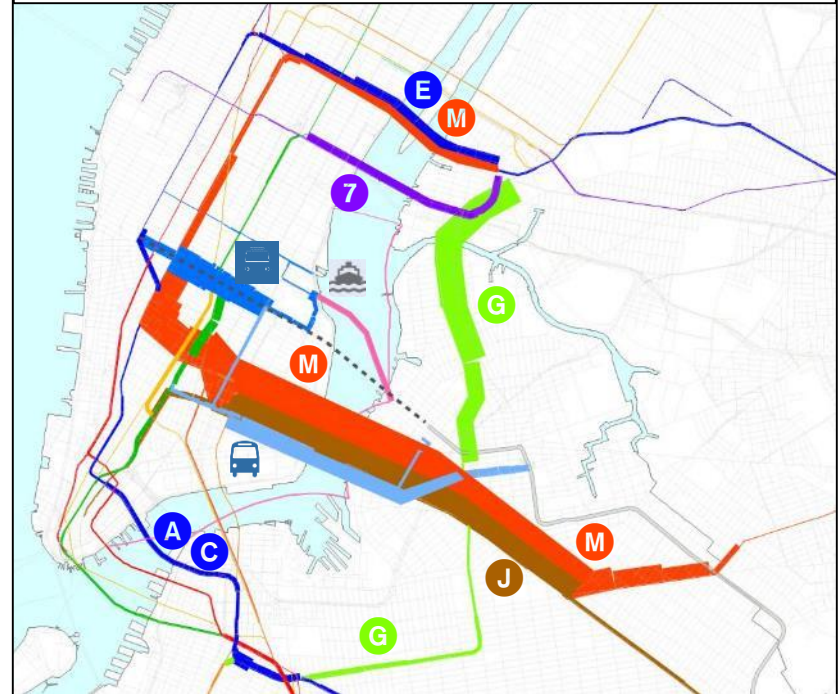




# SUBWAY SERVICE

- Subway service increased on **G J M Z**
- **J Z** trains run local from Myrtle Av to Marcy Av to serve additional demand at Hewes St, Lorimer St, Flushing Av
- Free MetroCard transfers between:
  - Broadway **G** and Lorimer St / Hewes St **J M Z**
  - Junius St **3** and Livonia Av **L**
  - 21 St **G** and Hunters Point Av **7**
- Weekends and Overnights, **M** runs to 96 St / 2<sup>nd</sup> Av

Transit Travel Paths of Current **L** Riders During Closure - AM Peak Hour  
(Width of line corresponds to number of shifted riders)





# PERMANENT STATION IMPROVEMENTS

Prior to the tunnel closure, we are improving access to and capacity in stations along the **G**, **J**, **M** and **Z** lines, that will provide alternatives to **L** service. During the tunnel closure, we will also enhance stations along the **L** line.





# INTER-BOROUGH BUS ROUTING





# PROPOSED TRANSIT PRIORITY TREATMENTS







# BICYCLE NETWORK CONNECTIONS





# HOW TO MAKE L TRAIN CROSS-RIVER BUSES WORK

- Combined frequency of about 70 buses per hour in peak
- Target: end-to-end bus run times of about 25 minutes
- Near free-flowing speeds across the bridge





## IF WE DO NOTHING

- Highly variable travel times across Williamsburg Bridge: **10-40 minutes** in AM Peak
- Buses will be stuck in traffic and not be a reliable travel option
- Significant crowding on the **J** and **M** trains
- Some transit riders shift to for-hire vehicles, adding to existing congestion
- Peak hour demand for ferry will exceed capacity

**Doing nothing is not acceptable**





# WILLIAMSBURG BRIDGE: EXISTING CONDITIONS

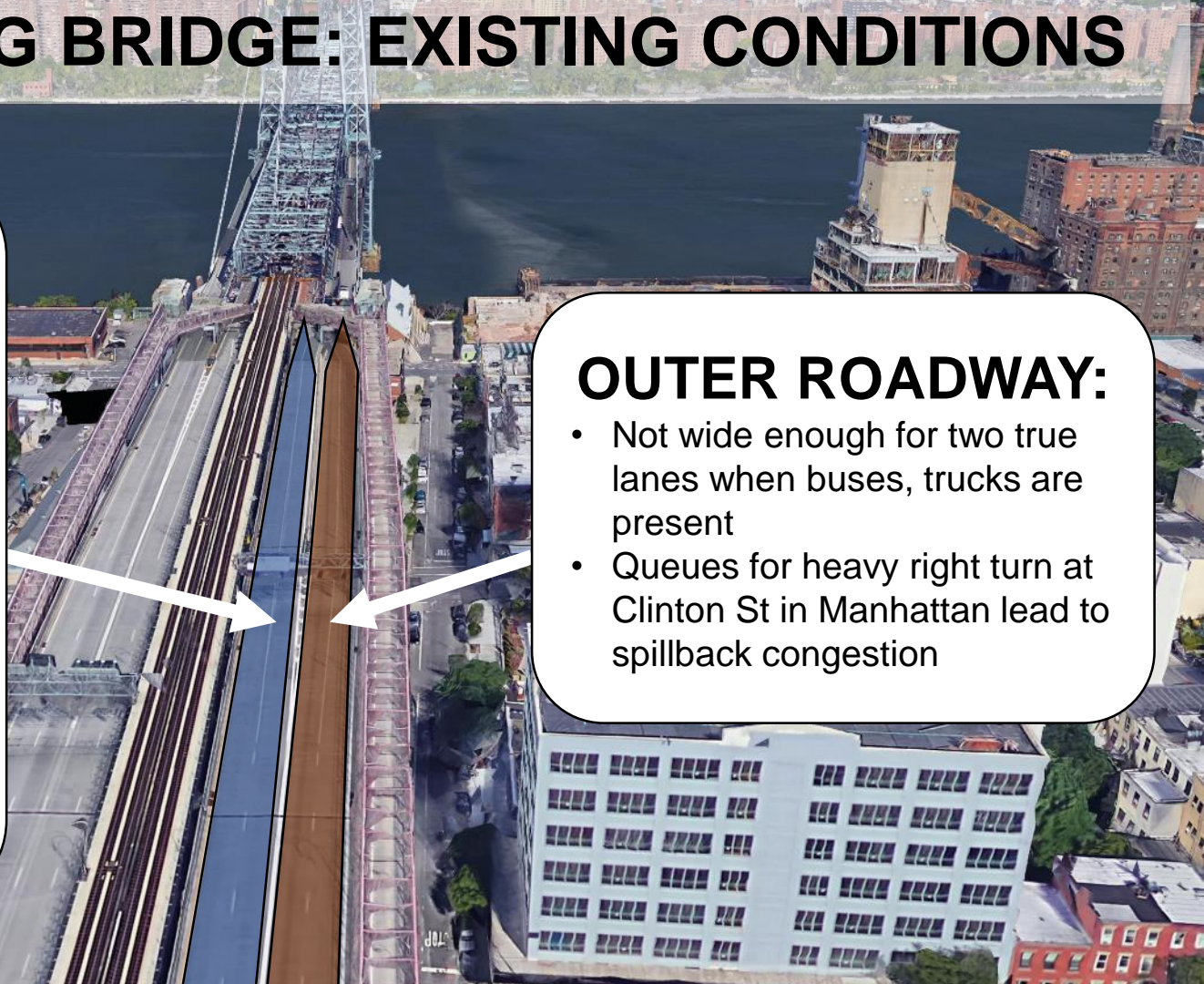
## INNER ROADWAY:

- Buses and truck not permitted on inner roadway
- Traffic from BQE and local streets backs up past inner/outer roadway split



## OUTER ROADWAY:

- Not wide enough for two true lanes when buses, trucks are present
- Queues for heavy right turn at Clinton St in Manhattan lead to spillback congestion





# DURING THE SHUTDOWN

- Shifting 2,200+ cars currently using outer deck to inner deck for a bus lane would lead to very long queues spilling on to local streets
- Even with bus lanes on approach streets, traffic sorting at ingress and egress of bridge slows buses to “do nothing” speeds



**HOV 3 restrictions on all lanes** are necessary to reduce traffic volume enough to make bus lane work



# HOV 3+ RESTRICTIONS ON WILLIAMSBURG BRIDGE

## Policy

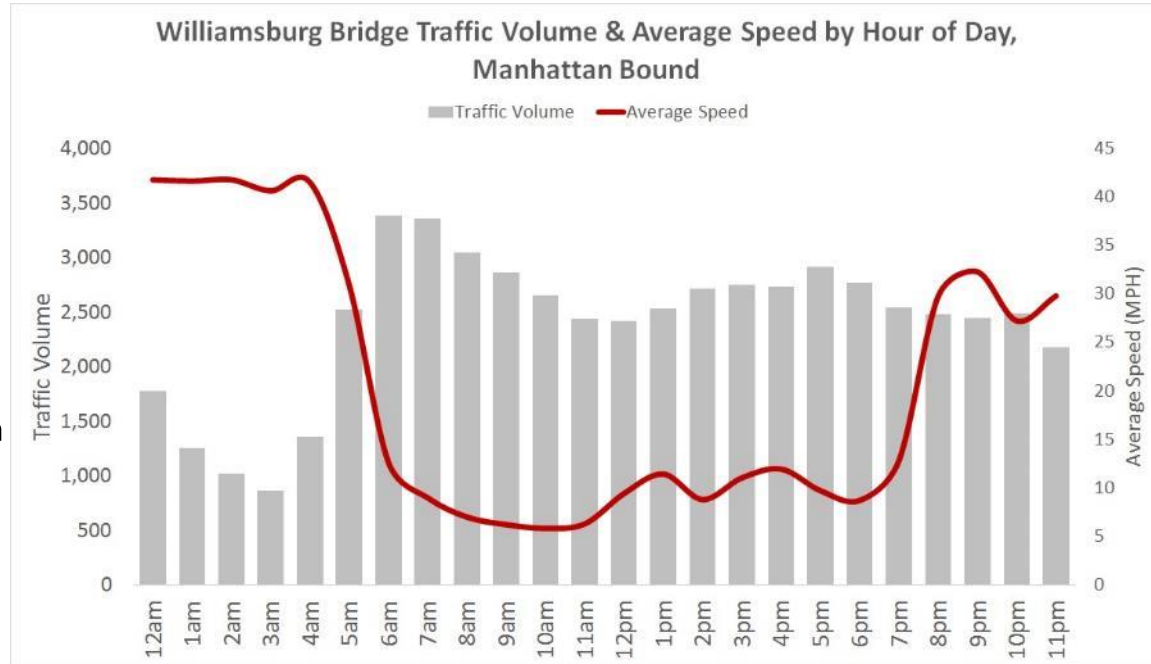
- Buses, Trucks & HOV 3+ Only
- Manhattan-Bound & Brooklyn-Bound
- All Lanes
- Peak Hours (*hours under development*)

## Enforcement:

- Standard NYPD enforcement
- Automated enforcement under consideration

## Travel Information:

- City/MTA will facilitate carpool & other alternatives
- Go Smart program to communicate travel options to affected commuters





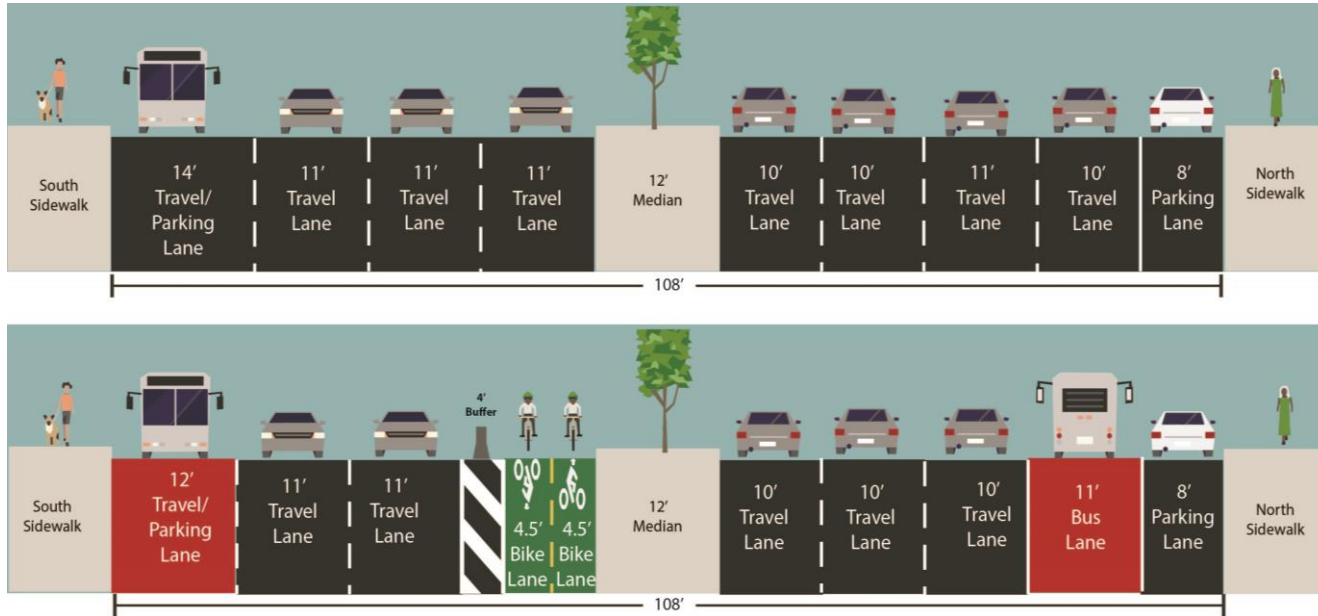
# AREA CONTEXT





# DELANCEY STREET

From Williamsburg Bridge to Bowery



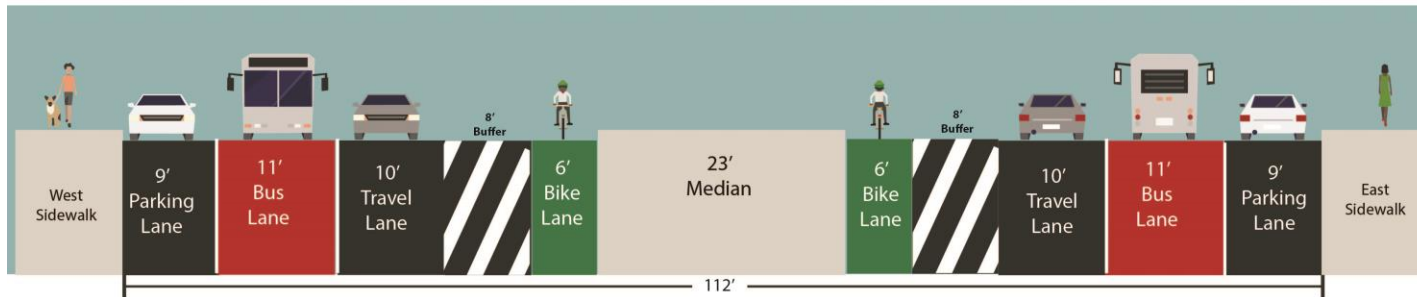
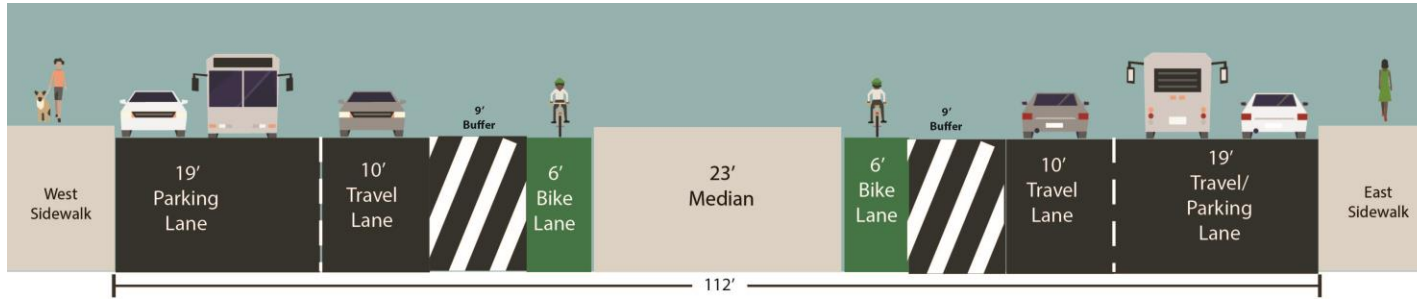
- Continues bus priority from Williamsburg Bridge
- Provides a safe bike facility connecting the Williamsburg Bridge, Allen Street and Chrystie Street
- Ongoing analysis of traffic and curb regulations
- Additional bus priority for Kenmare Street under development





# ALLEN STREET

From Delancey Street to Houston



- Maintains the existing bike lane
- M15SBS/local will be able to use the bus lanes



## THE CHALLENGE WITHOUT THE TRAIN



Manhattan-only L Train riders will need a reliable replacement for high-volume subway service



More people will walk along already congested sidewalks, magnifying pedestrian safety issues



14<sup>th</sup> St businesses need loading space during shutdown

14<sup>th</sup> St residents need local access and deliveries

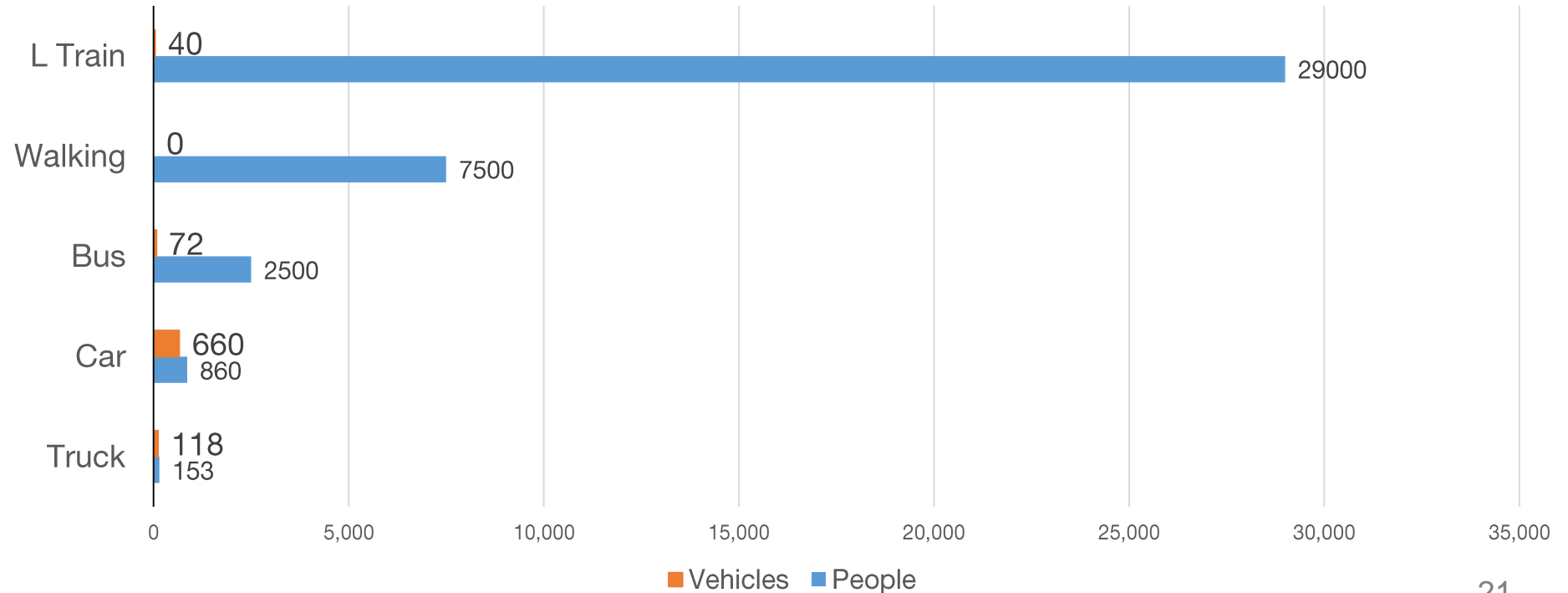


Residents of adjacent residential blocks have expressed concern about effects of spillover traffic



# HOW ARE PEOPLE GETTING AROUND ON 14<sup>TH</sup> STREET?

Existing Counts at Union Sq: 8-9 AM Peak Hour





# HOW 14<sup>TH</sup> STREET OPERATES NOW

Buses and traffic on 14<sup>th</sup> Street are slow due to:



Heavy pedestrian volumes  
conflicting with vehicle turns



Double parking



Importance of moving north-  
south traffic on avenues





# 14<sup>TH</sup> ST: **VISION ZERO** PRIORITY CORRIDOR






Currently:

- 6 Vision Zero priority intersections
- Over 30,000 weekday bus passengers
- 21,000 people in autos or taxis

During **L** closure:

- Pedestrian surges of up to 2x current volumes at major intersections

 Priority Intersections  Priority Corridors  Priority Areas



# 14<sup>TH</sup> ST DESIGN OPTIONS

DOT evaluated the following options:

- Existing Conditions
- Do Nothing (L Train Closes, No Bus Priority)
- Short Busway (*Third Av – Sixth Av*)
- ✓ Busway (*Third Av – Eighth/Ninth Av*)

Standard Select Bus Service bus lane design is not recommended because of

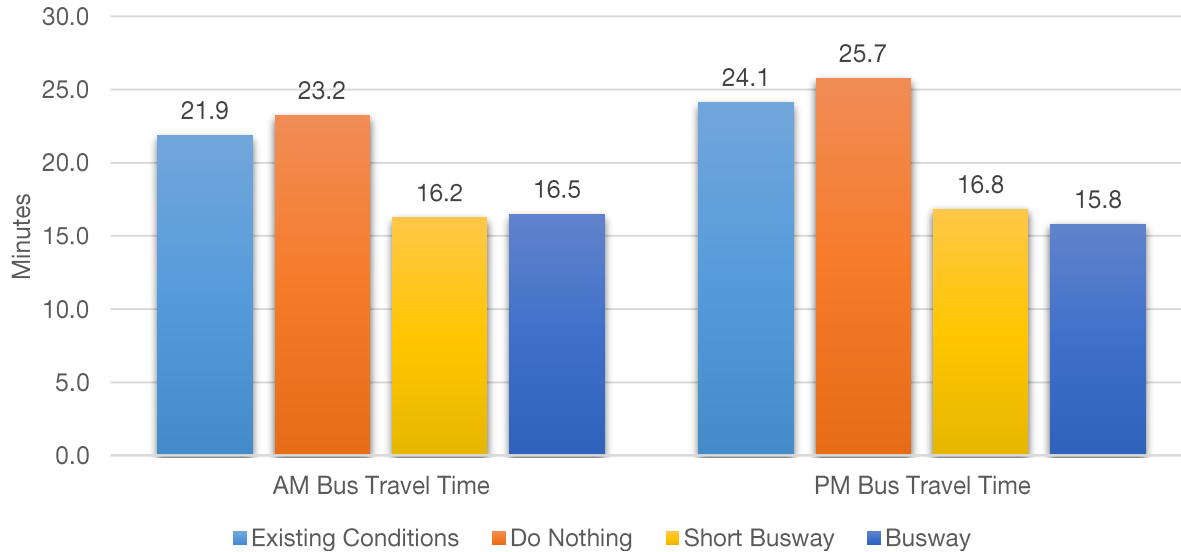
- Need for additional pedestrian space on the busiest blocks of 14th Street
- Very frequent bus service would be undermined by bus lane blockages





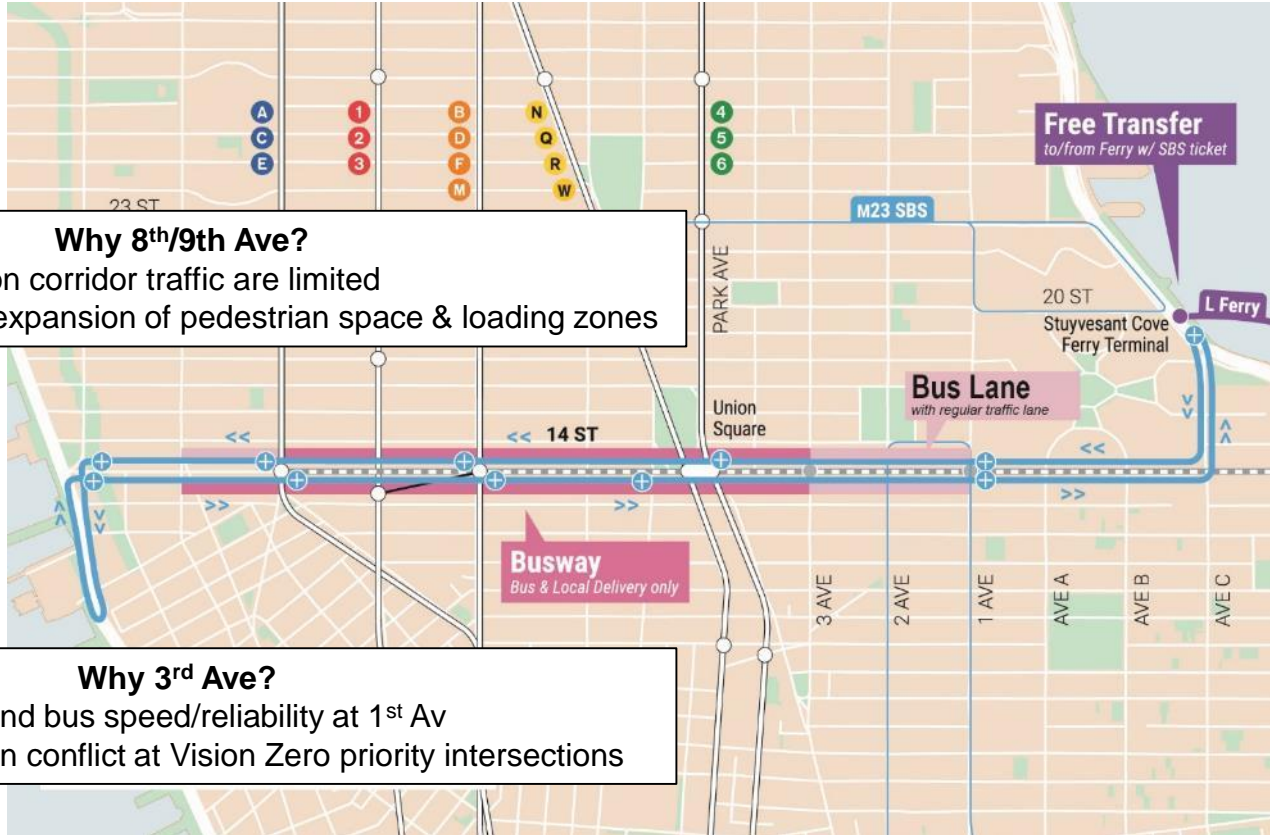
# 14<sup>TH</sup> ST DESIGN OPTIONS

14th St Bus Travel Time (Avenue C to Eighth Avenue)



- Busway Plan delivers faster bus travel times on 14<sup>th</sup> St
- Busway Plan brings additional pedestrian space farther west than Short Busway
- Short Busway would see additional delay at Sixth Avenue eastbound as general traffic queues to turn off 14<sup>th</sup> Street

# 14<sup>TH</sup> ST CORRIDOR DESIGN:



## Why 8<sup>th</sup>/9<sup>th</sup> Ave?

- Additional effects on corridor traffic are limited
- Allows for greater expansion of pedestrian space & loading zones

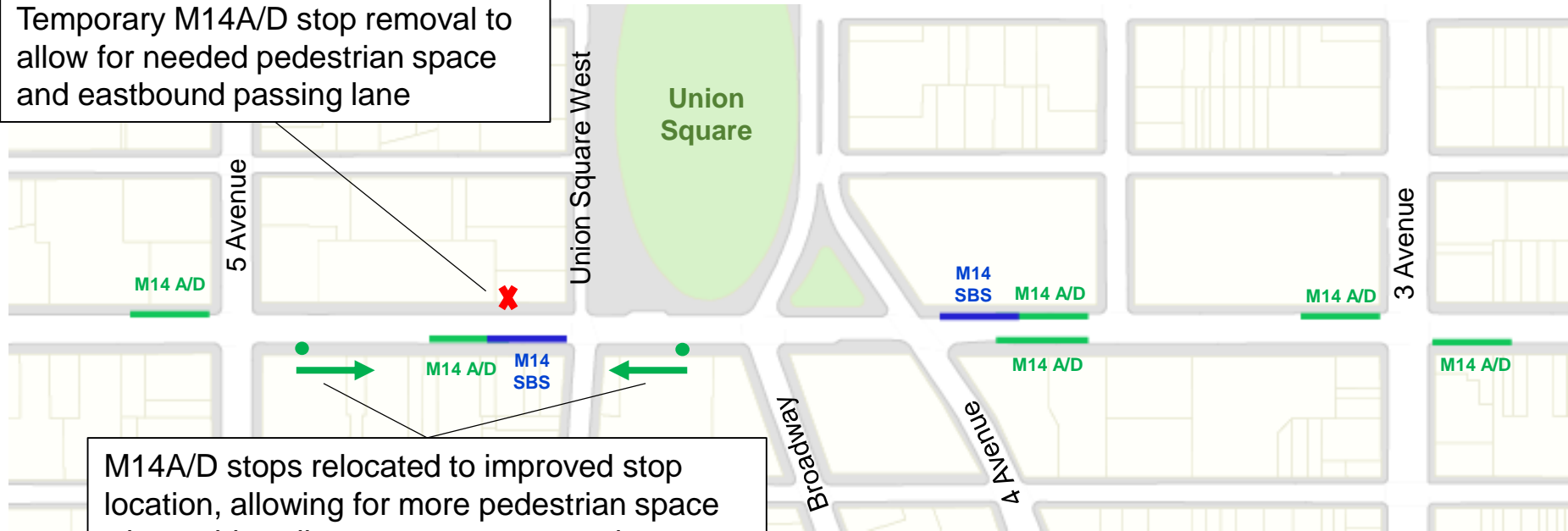
## Why 3<sup>rd</sup> Ave?

- Increases westbound bus speed/reliability at 1<sup>st</sup> Av
- Reduces pedestrian conflict at Vision Zero priority intersections



# PROPOSED 14<sup>TH</sup> ST LOCAL STOP CHANGES

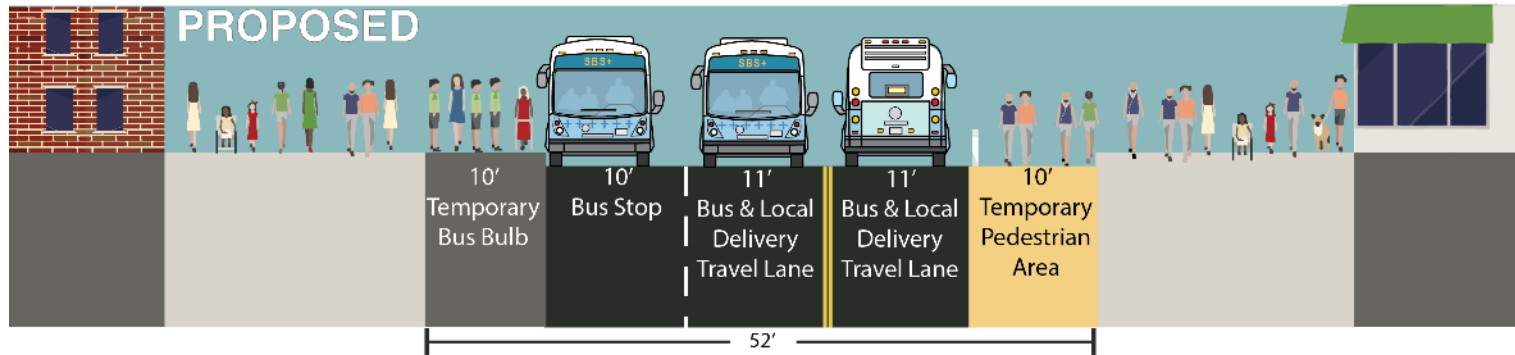
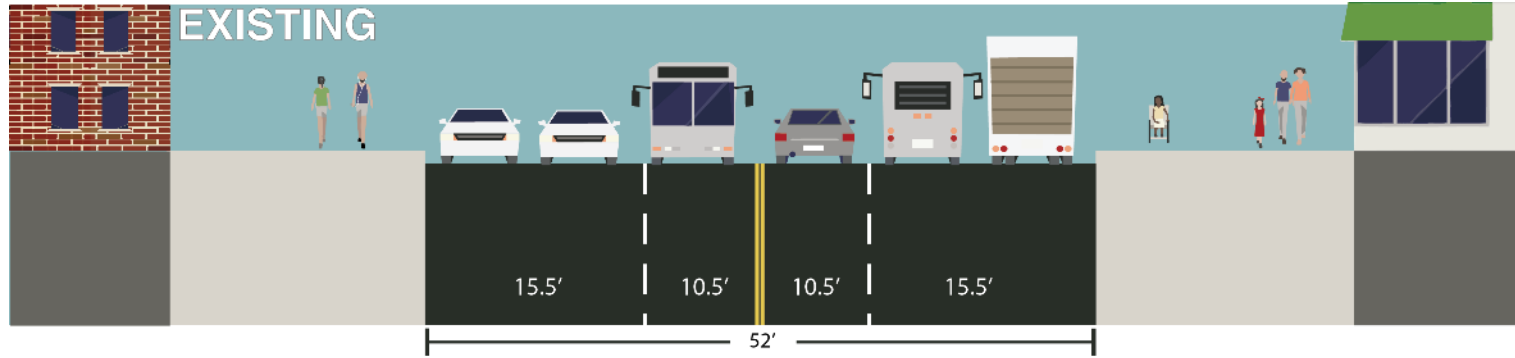
Temporary M14A/D stop removal to allow for needed pedestrian space and eastbound passing lane



M14A/D stops relocated to improved stop location, allowing for more pedestrian space where sidewalks are most congested



# 14<sup>th</sup> STREET BUSWAY DESIGN



**14TH STREET**

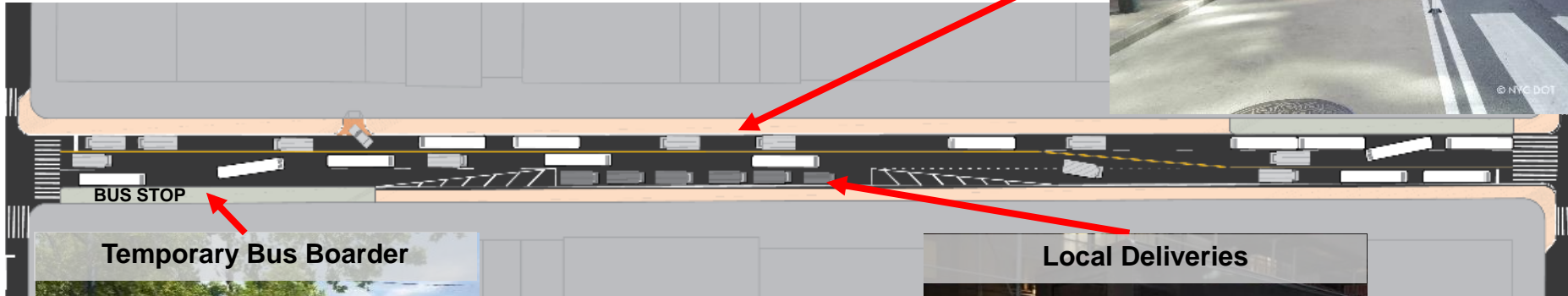




# 14<sup>th</sup> STREET BUSWAY DESIGN



Pedestrian Space



BUS STOP

Temporary Bus Boarder



Local Deliveries





## WHO CAN ACCESS THE BUSWAY?

### YES:

Buses

Access-A-Ride vehicles

Emergency vehicles

Local delivery vehicles

**Cars accessing private garages**

### NO:

Taxis & other FHV's

Private Cars

Through-trucks

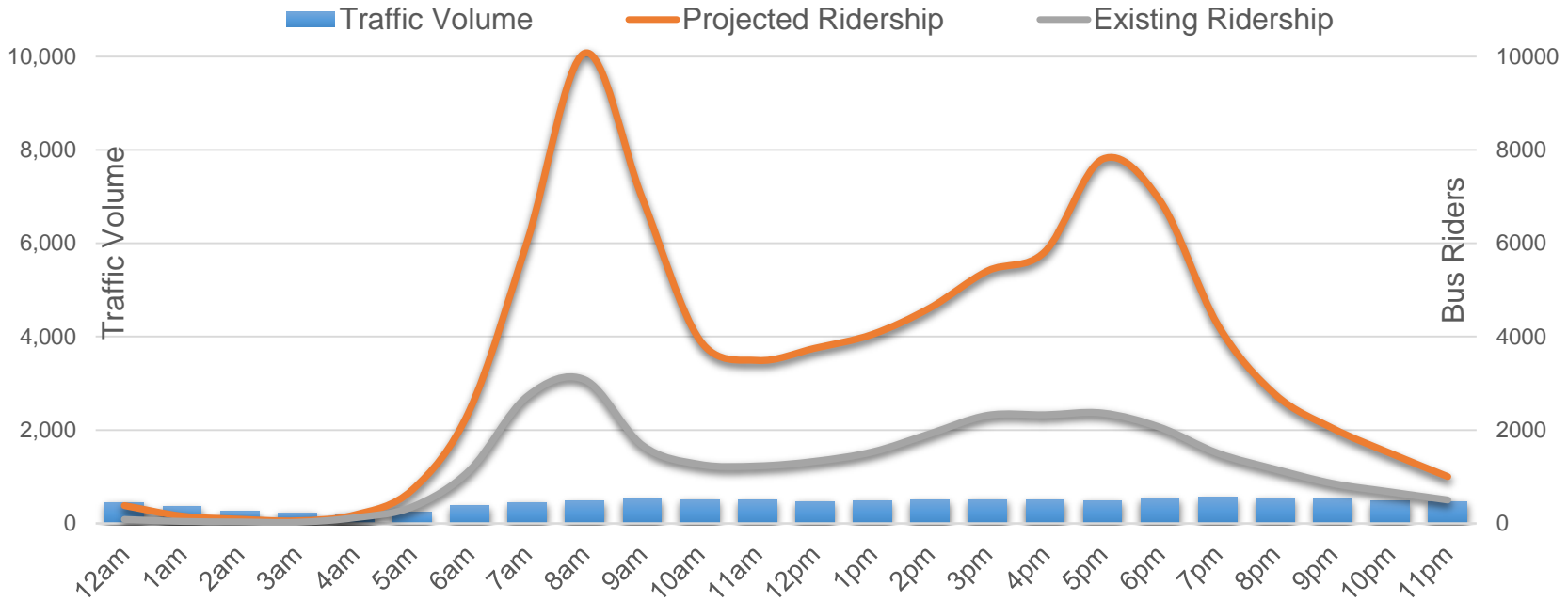




# BUSWAY OPERATION

**Buses and Local Access Only Peak Hours** (*hours under development*)

14th Street Traffic Volume & Bus Ridership by Hour of Day





# ADDITIONAL BIKE AND PEDESTRIAN MITIGATIONS

- Additional conventional bike parking and high capacity bike parking
- Potential CitiBike expansion, valet service
- Targeted pedestrian safety improvements, including at **Vision Zero** priorities and subway entrances

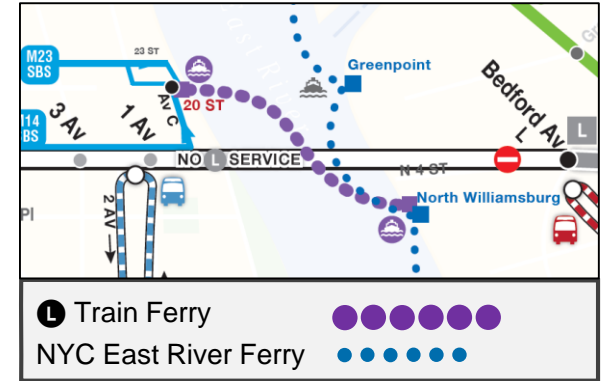




# FERRY

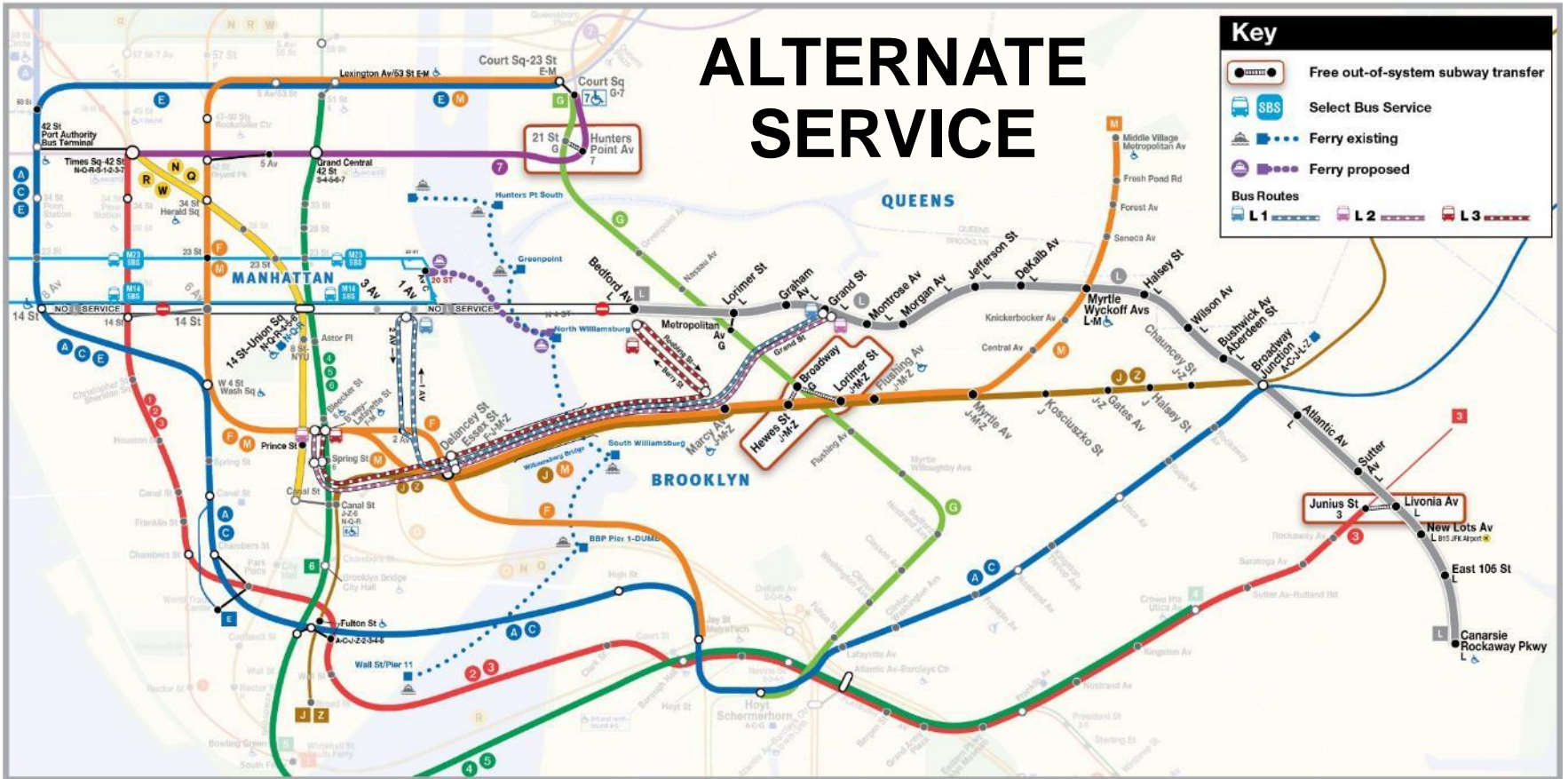
## Service Plan:

- Weekdays/Sunday: 6 AM – midnight  
Friday/Saturday: 6 AM – 2 AM (pending NYCDPR coordination)
- Rush hours: 8 boats per hour per direction, carrying up to 1200 passengers per hour per direction
- Fares will be integrated with the M14 SBS and M23 SBS
- Transfer to these bus routes at temporary bus terminal at Stuyvesant Cove (E 20<sup>th</sup> St and Avenue C)
- Temporary landing modifications at N Williamsburg
- Ongoing coordination with NYCEDC, NYCDOT, and NYCDPR





# ALTERNATE SERVICE





# NEXT STEPS

## Ongoing Through 2020

- Construction at street level to support tunnel project

## Winter 2018

- Present conceptual plan and solicit feedback at community meetings/open houses
- Present final plan to stakeholders and community

## Winter/Spring 2018

- Stakeholder outreach, design and service plan refinement

## Spring 2018

- Full  service restored





# NEXT STEPS

## Summer/Fall 2018

- Construction begins for street modifications

## Summer 2018 - March 2019

- Multiple weekend and overnight  closures to support tunnel project

## Winter 2019

- Completion of temporary street and/or site modifications for SBS service, bus terminal and parking, and ferry operations

## April 2019

- Start of Canarsie Tunnel Closure, alternative service plan begins



# APPENDIX



Every weekday more than 225,000 trips are taken by commuters who rely on the L to travel between Brooklyn and Manhattan.



## Canarsie Tunnel Reconstruction Resources

- 14th Street Corridor Traffic Analysis Memo
- 14th Street Traffic Memo Appendices
- Brooklyn Community Board 1 Presentation-- February 13, 2018
- Manhattan Community Board 3 Presentation-- February 13, 2018
- Manhattan Community Board 6 Presentation – February 5, 2018
- Winter 2018 Open House Presentation Boards
- Service Mitigation Proposal:
- Summer 2017 Community Board Presentation
- May 2016 Video

[← Back](#)



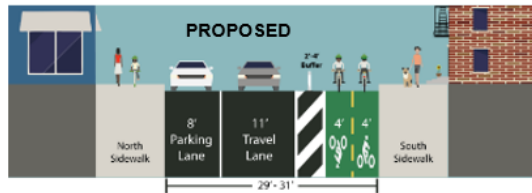
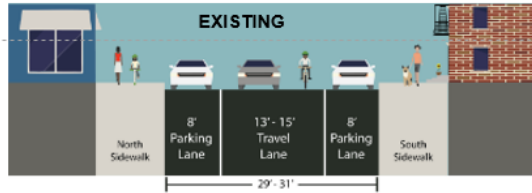


# APPENDIX: 13<sup>th</sup> STREET BIKE PATH

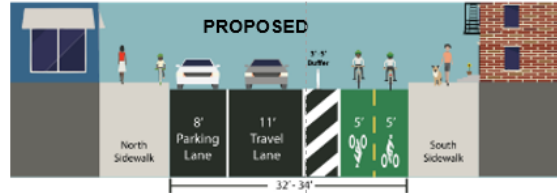
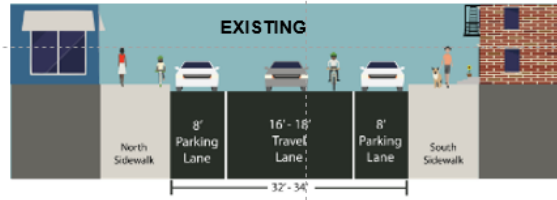
## Route Details

### 13<sup>th</sup> Street

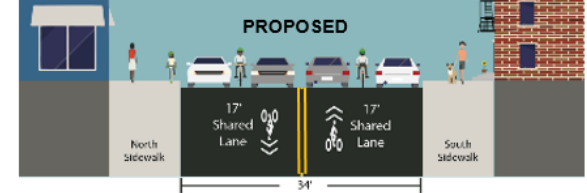
13<sup>th</sup> St: Greenwich Ave – 6 Ave  
5<sup>th</sup> Ave – 3<sup>rd</sup> Ave, 1<sup>st</sup> Ave – Ave A



13<sup>th</sup> St: 6<sup>th</sup> Ave – 5<sup>th</sup> Ave  
3<sup>rd</sup> Ave – 1<sup>st</sup> Ave, Ave A – Ave B



13<sup>th</sup> St: Ave B – Ave C



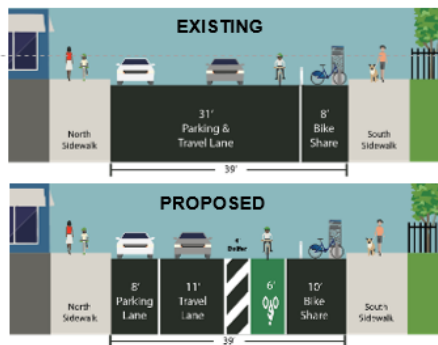


# APPENDIX: 13<sup>th</sup> STREET BIKE PATH

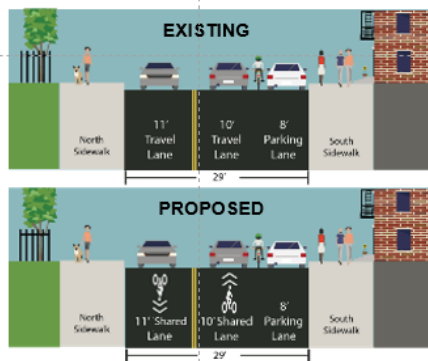
## Route Details

### Network Connections: Horatio St, Greenwich Ave

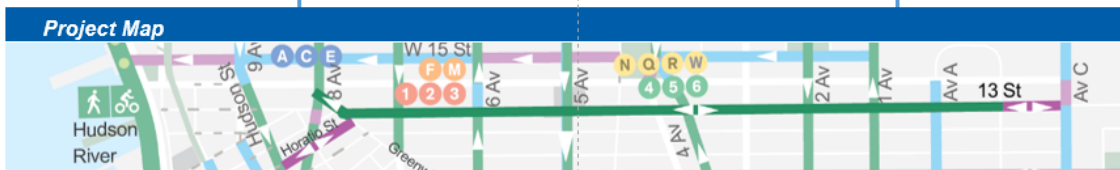
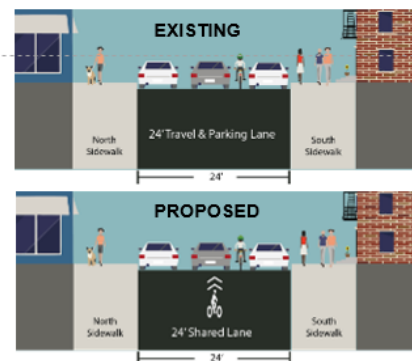
#### Greenwich Avenue: 8<sup>th</sup> Ave – 13<sup>th</sup> St



#### Horatio St: 8<sup>th</sup> Ave – 13<sup>th</sup> St



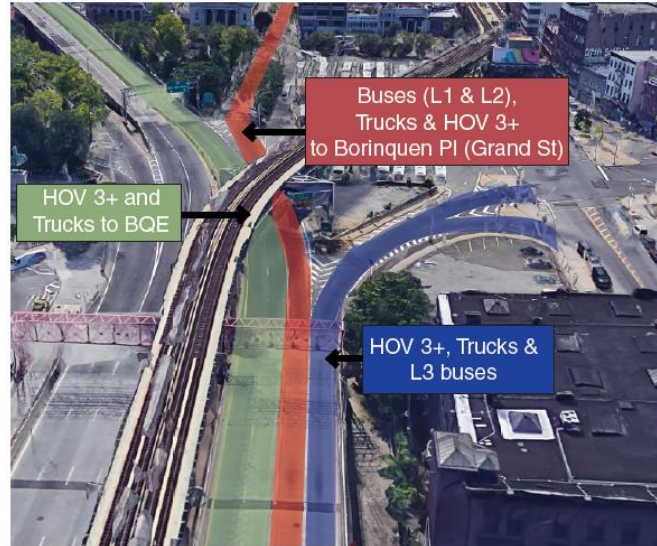
#### Horatio St: Hudson St – 8<sup>th</sup> Ave







## Brooklyn Bound

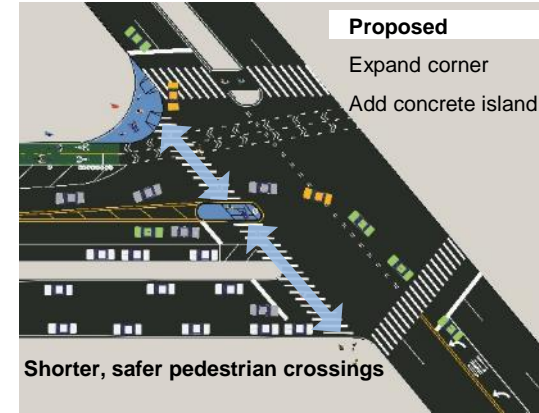
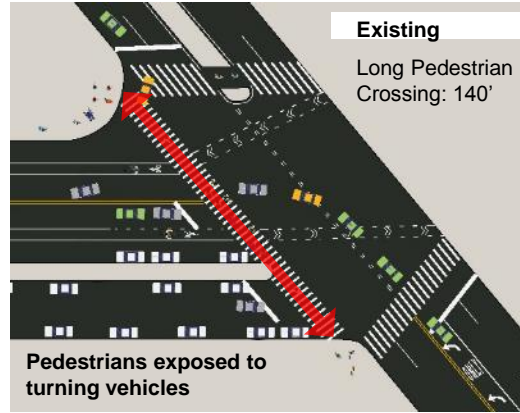
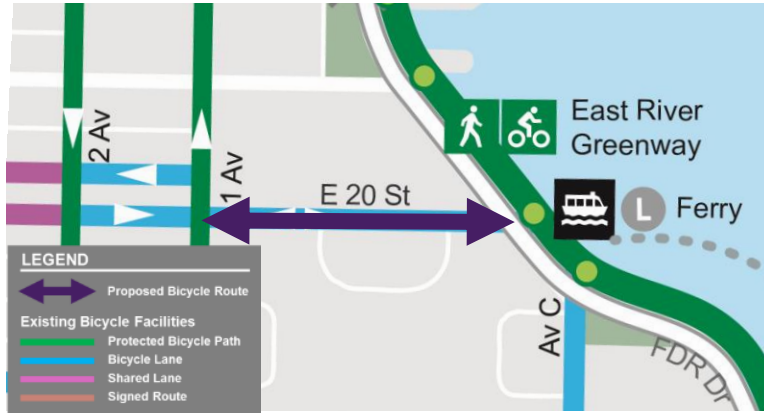


**Bus, truck and HOV 3+ only restrictions in Brooklyn bound direction ensure that buses can make reliable round trips**



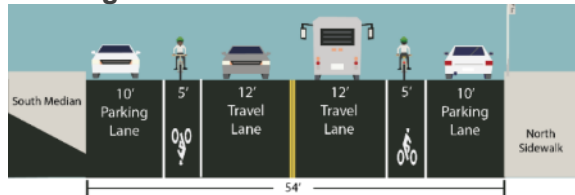


# 20<sup>th</sup> STREET BIKE PATH

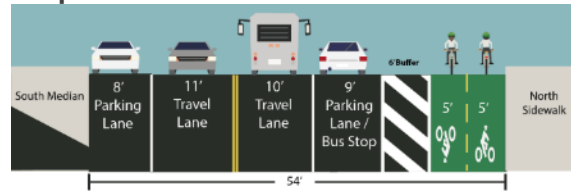


## E 20th St, Facing West

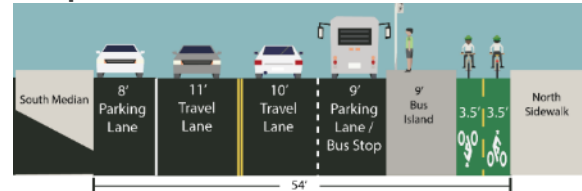
**Existing:** Standard bike lanes



**Proposed:** Upgrade bike lanes to two-way protected path

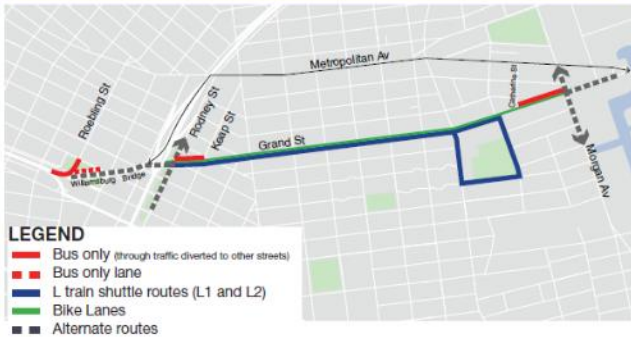


**Proposed:** Bus Stop Treatment

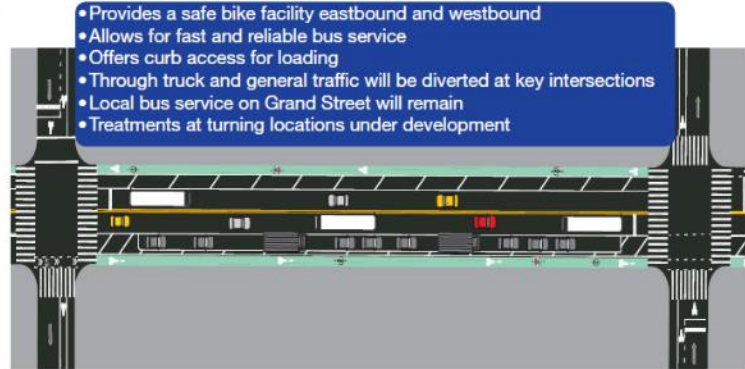




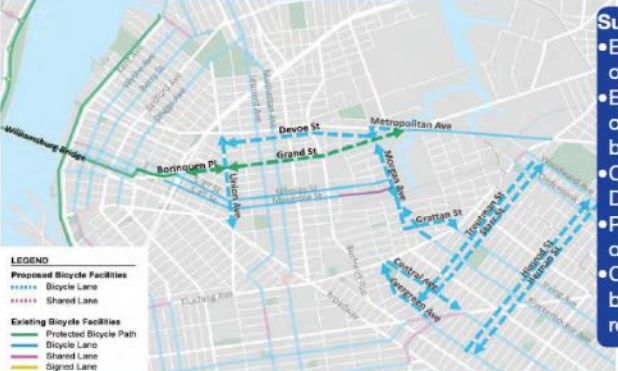
## How to Make Grand Street Work



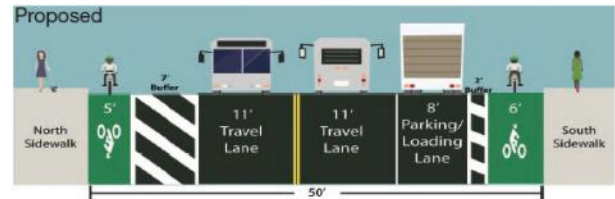
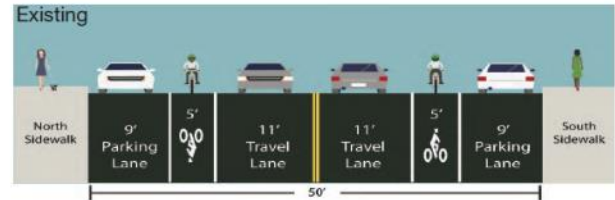
- Traffic traveling eastbound from the Williamsburg bridge offers a variety of options for turning off Grand Street
- Westbound traffic should use Metropolitan Avenue to access the bridge
- Further analysis of traffic and curb regulations on Grand Street, Metropolitan Av, and adjacent cross streets is ongoing



## Williamsburg Bike Network



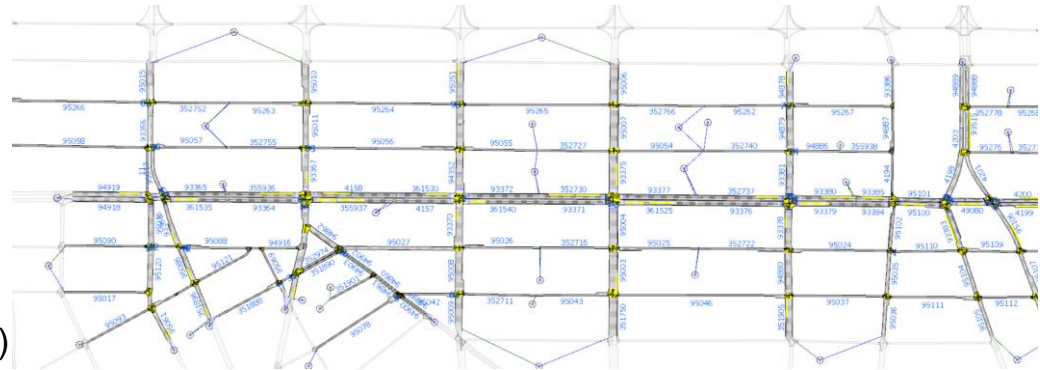
- Summary of Proposals**
- Enhance eastbound bike route on Grand St to protected
  - Enhance westbound bike route on Grand St to curbside with a buffer
  - Create alternative bike route on Devoe St in westbound direction
  - Provide north/ south connections on Union Av and Morgan Av
  - Continue to develop Bushwick bike network with additional routes





# HOW WE EVALUATED OPTIONS

- Aimsun traffic models developed for 14<sup>th</sup> Street and adjacent side streets (12<sup>th</sup> through 16<sup>th</sup> Streets)
- Accounts for:
  - Increased bus service
  - Proposed access changes
  - Related traffic diversions
- Results include:
  - Person delay (including transit riders)
  - Vehicle delay
  - Projected changes to traffic volumes
  - Travel times
- Loading and pedestrian space needs are also prioritized outside of model

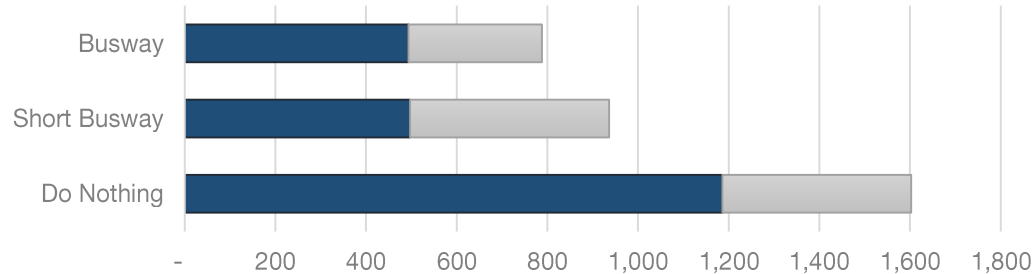




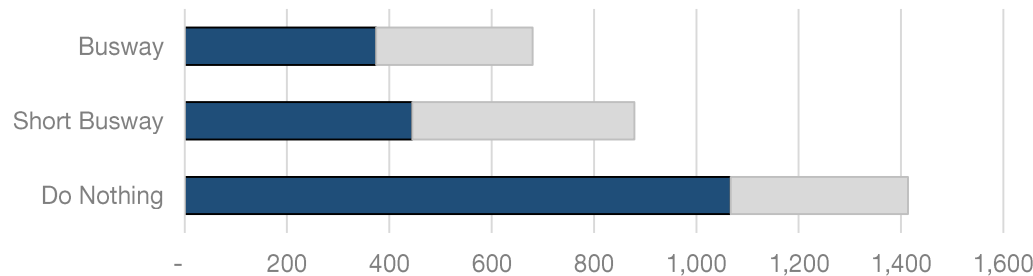


# 14<sup>TH</sup> ST DESIGN OPTIONS

Person-Hours of Delay AM Peak: 12<sup>th</sup> to 16<sup>th</sup> Streets



Person-Hours of Delay PM peak: 12<sup>th</sup> to 16<sup>th</sup> Streets



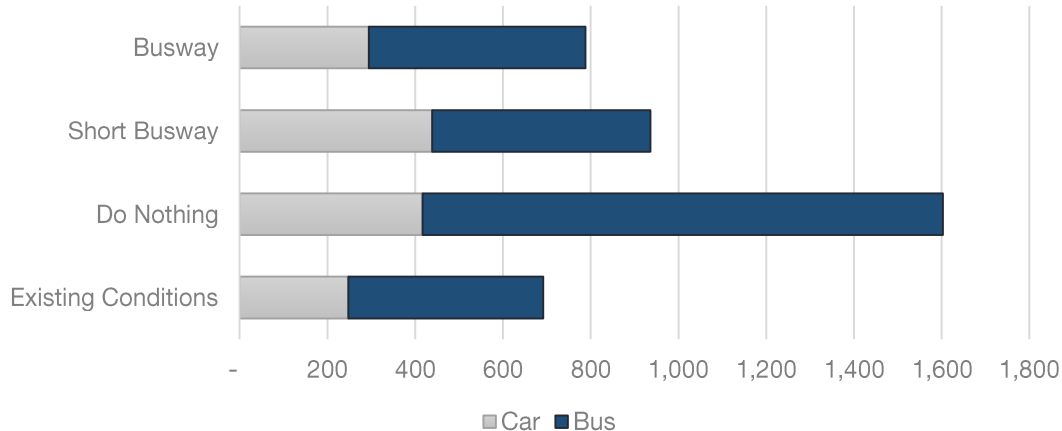
■ Bus ■ Car

- Person-Hours of Delay accounts for the passengers on buses and in cars within the corridor
- Significantly more passengers will be carried on buses on 14th St than in cars on side streets
- Busway Plan offers the least overall delay to all street users



# 14<sup>TH</sup> ST DESIGN OPTIONS

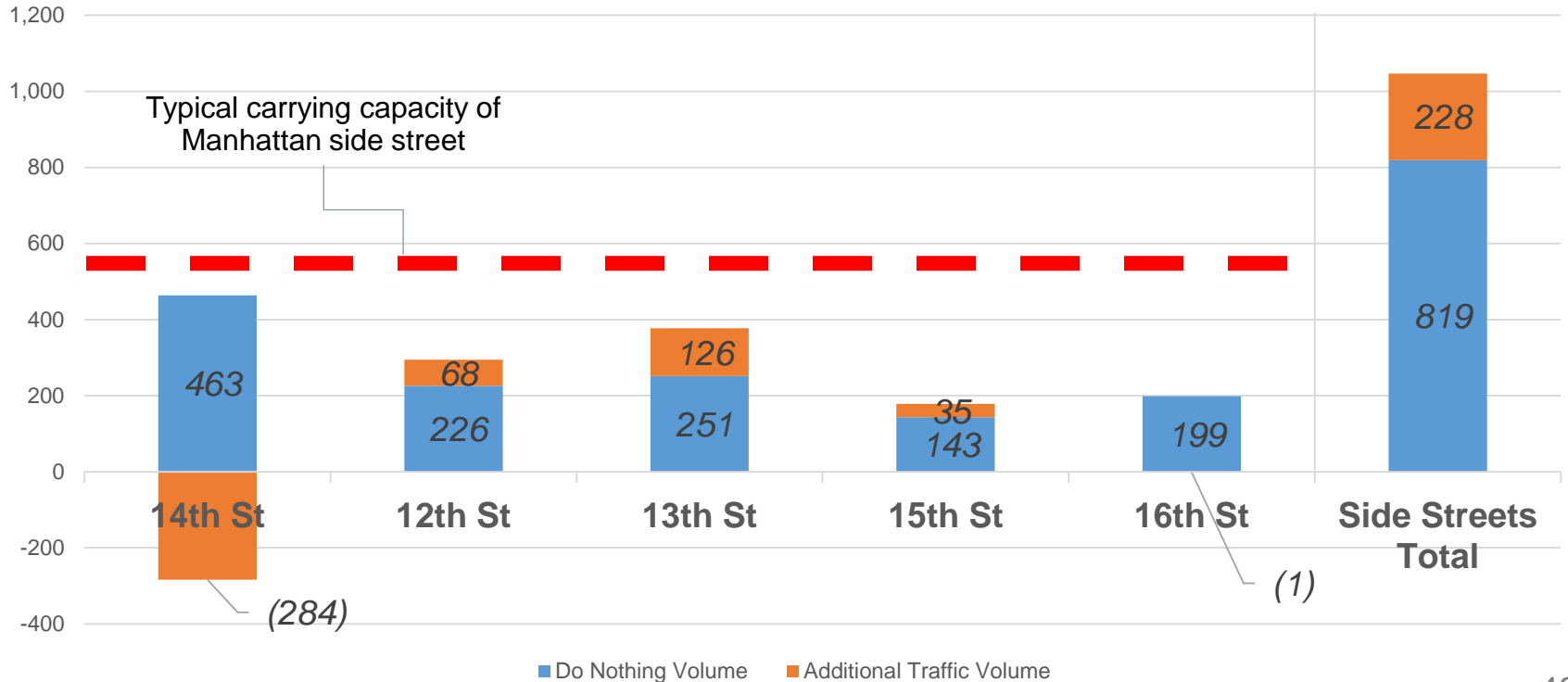
Person-Hours of Delay, AM Peak:  
All East-West Streets



- Person-Hours of Delay accounts for the passengers on buses and in cars within the corridor
- Significantly more passengers will be carried on buses on 14th St than in cars on side streets
- Busway Plan offers the least overall delay to all street users



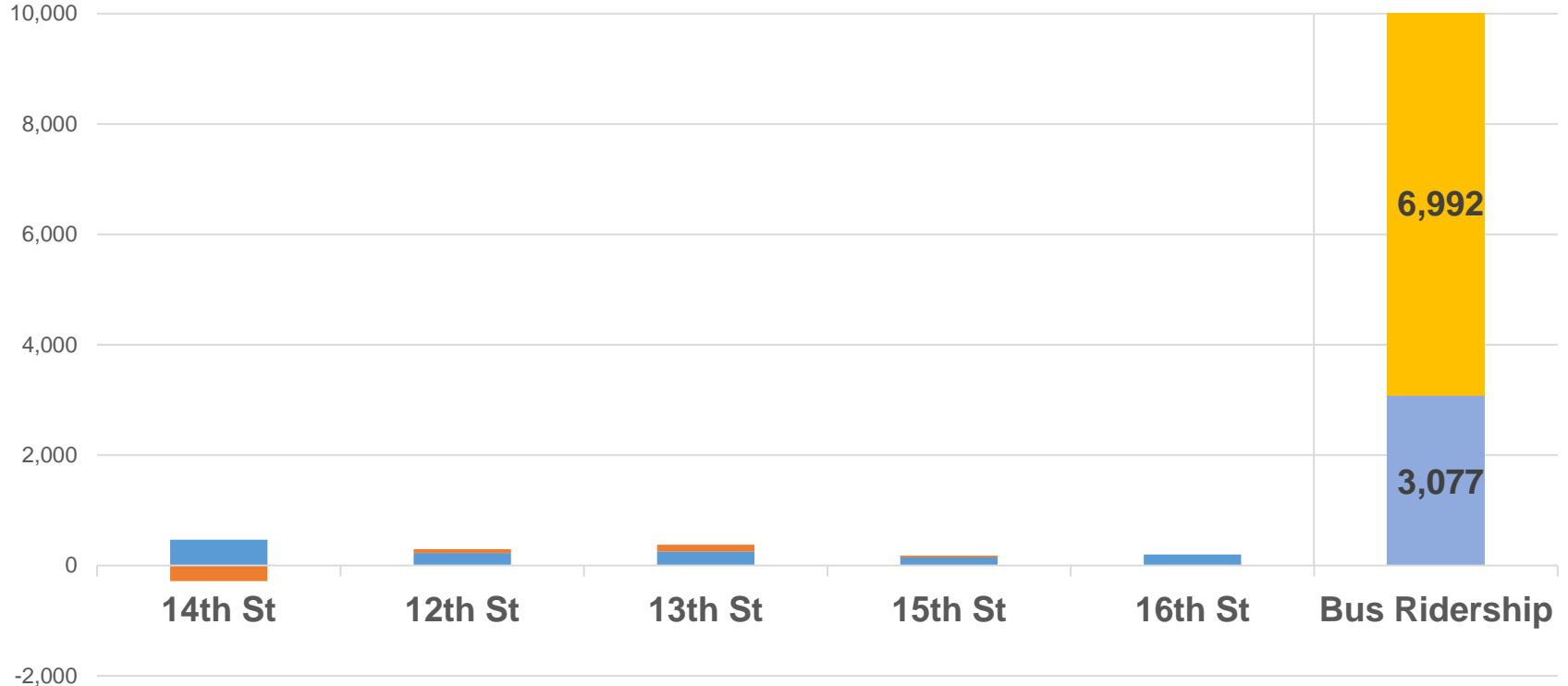
# TRAFFIC VOLUMES IN BUSWAY SCENARIO



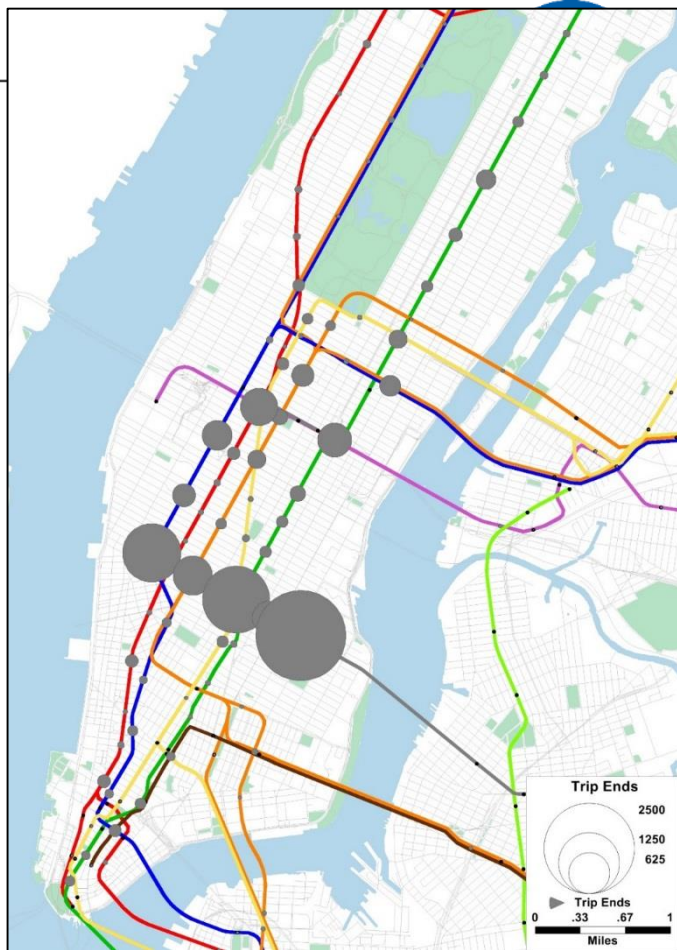
AM Peak hour: 8 to 9 AM




# TRAFFIC VOLUMES COMPARED TO BUS RIDERSHIP




AM Peak hour: 8 to 9 AM



Trip Ends of Intra-Manhattan  Riders



Flow of Intra-Manhattan  Riders  
AM Peak Hour



Market Segment	Sub-Market	Current Riders	Use Busway During Shutdown	% of Current Market Using Busway
Bus	M14	30,000	30,000	100%
Intra-Manhattan L Riders	1 Av	25,000	18,500	74%
	Other	25,000	10,000	40%
	<b>Total</b>	<b>50,000</b>	<b>28,500</b>	<b>57%</b>
Brooklyn-Manhattan L Riders	To/From 14th St Destinations	64,000	23,300	36%
	Other Destinations	161,000	2,200	1%
	<b>Total Along 14th</b>	<b>225,000</b>	<b>25,500</b>	<b>11%</b>
Total Riders 14th St	To/From 14th St Destinations	144,000	81,800	57%
	<b>Total Along 14th</b>	<b>305,000</b>	<b>84,000</b>	<b>28%</b>





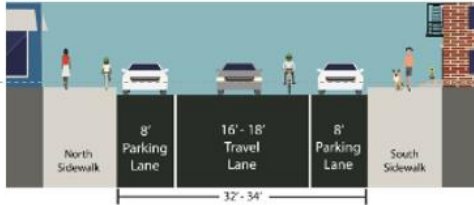
	Bus	Intra-Manhattan L Riders			Brooklyn-Manhattan L Riders			Total L		Total 14th St	
	M14	1 Av	Other	Total	To/From 14th St Destinations	Other Destinations	Total Along 14th	To/From 14th St Destinations	Total Along 14th	To/From 14th St Destinations	Total Along 14th
Current Riders	30,000	25,000	25,000	50,000	64,000	161,000	225,000	114,000	<b>275,000</b>	144,000	<b>305,000</b>
Use Busway During Shutdown	30,000	18,500	10,000	28,500	23,300	2,200	25,500	51,800	<b>54,000</b>	81,800	<b>84,000</b>
% of Current Market Using Busway	100%	74%	40%	57%	36%	1%	11%	45%	<b>19.6%</b>	57%	<b>28%</b>
<i>Directly from Manhattan Origins</i>	30,000	18,500	10,000	28,500	-	-	-	28,500	<b>28,500</b>	58,500	<b>58,500</b>
<i>Use Busway Via Ferry</i>	-	-	-	-	7,800	2,200	10,000	7,800	<b>10,000</b>	7,800	<b>10,000</b>
<i>Use Busway Via Brooklyn Subway</i>	-	-	-	-	15,100		15,100	15,100	<b>15,100</b>	15,100	<b>15,100</b>
<i>Use Busway Via Brooklyn-Manhattan Bus</i>	-	-	-	-	400		400	400	<b>400</b>	400	<b>400</b>



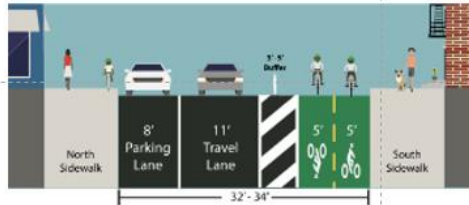
# 13<sup>th</sup> STREET BIKE PATH

## 13th St, Typical Design

**Existing:** Wide travel lane



**Proposed:** Two-way bike path on south curb



**Conceptual Intersection Design:** Space for left turning vehicles



**LEGEND**

- Proposed Bicycle Route (indicated by a purple double-headed arrow)
- Existing Bicycle Facilities:
  - Protected Bicycle Path (green line)
  - Bicycle Lane (blue line)
  - Shared Lane (orange line)
  - Signed Route (red line)





# 13<sup>th</sup> STREET BIKE PATH

## Route Selection

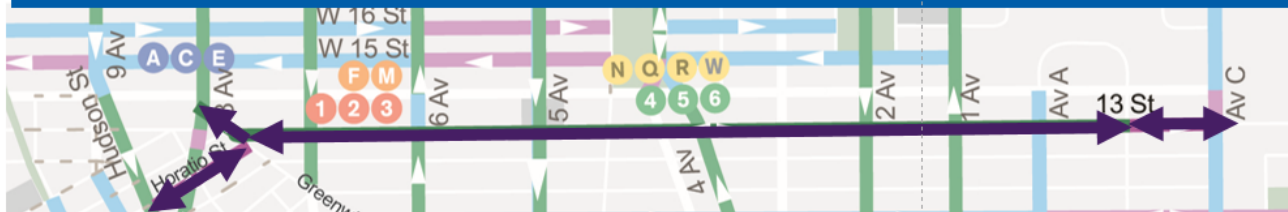
### Why 13<sup>th</sup> Street?

- Provides longest continuous east-west connectivity (Ave C to 8th Ave), with potential to continue shared or standard lanes to Hudson St
- Minimizes parking loss to other crosstown streets
- Proximity to 14<sup>th</sup> Street retail and transit hub on University Pl.
- Directly connects to new bike parking
- Fewer land use conflicts on blocks in Union Square core

### Why not other streets?

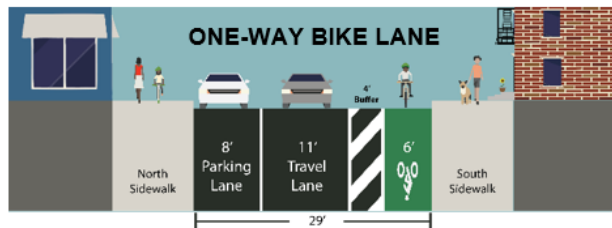
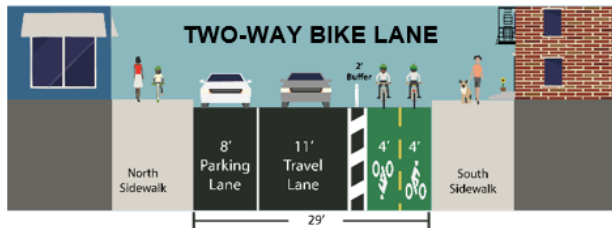
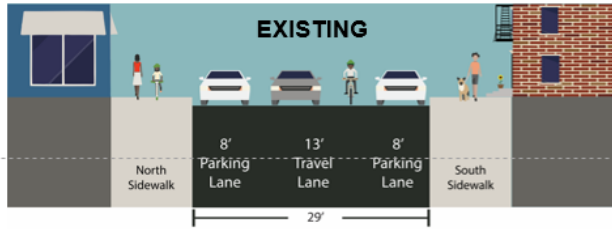
- **Additional parking loss**
- **15<sup>th</sup> St & 16<sup>th</sup> St:** Interrupted connection due to heavily congested Union Square Park, Stuyvesant Square Park, Stuyvesant Town, and not a full east west connection
- Bikes could not be diverted through parks due to the potential for unsafe conflicts with high pedestrian volumes
- **14<sup>th</sup> St:** Heavy pedestrian and bus volumes

## Project Limits



# 13<sup>th</sup> STREET BIKE PATH

## Route Selection



## Why not a one-way pair on 12<sup>th</sup> and 13<sup>th</sup> Streets?

*12<sup>th</sup> Street is feasible, but...*

- Design would still require parking loss on 13<sup>th</sup> St
- Pair of one-way bike lanes would more than double parking loss in the area
- Two-way path is most efficient use of space
- Farther from key retail and transit destinations on 14<sup>th</sup> St
- West of Greenwich Ave, 12<sup>th</sup> St has cobblestones and does not allow full east-west connection (street shifts southwest)

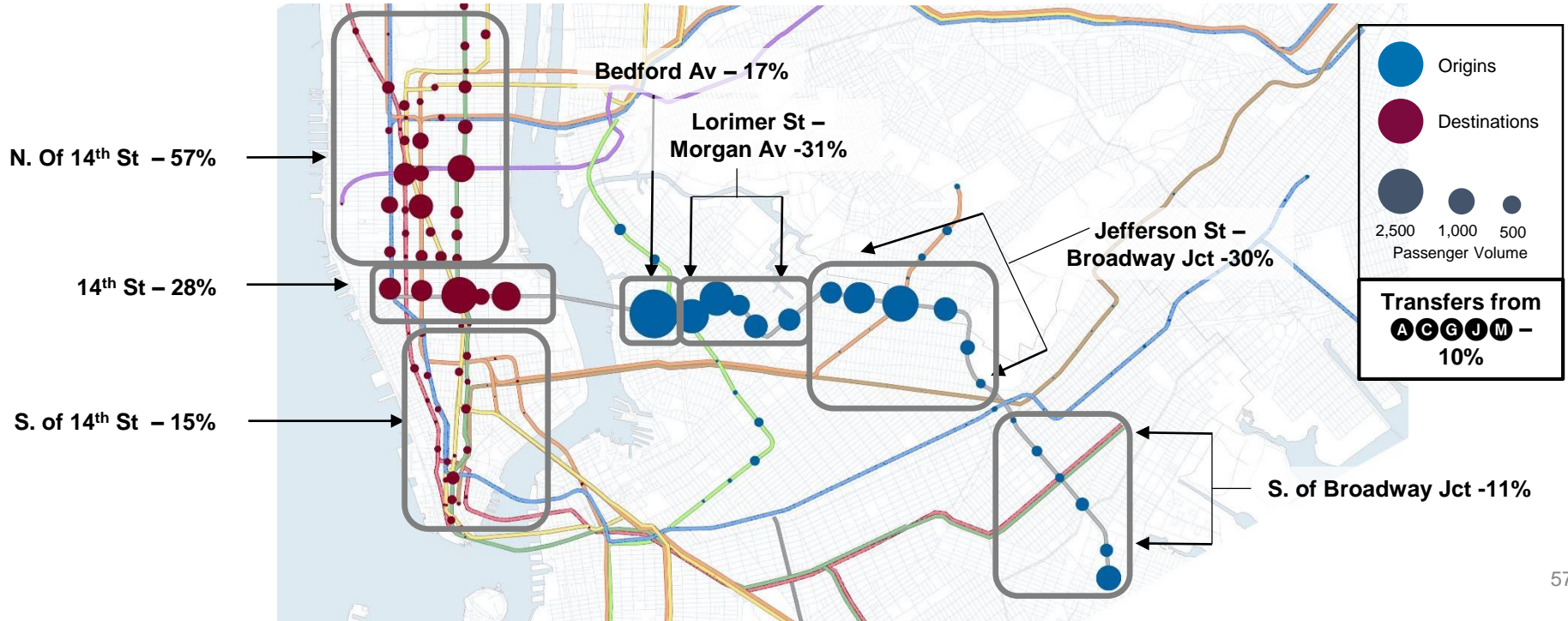


Projected M14 SBS Volume - AM Peak							
O/D	Stuy Cove	1 Av	3 Av	Union Sq	6 Av	8 Av	TOTAL
Stuy Cove	0	105	466	76	211	121	979
1 Av	16	0	1	467	929	400	1,813
3 Av	10	0	0	1	90	66	167
Union Sq	17	520	3	0	111	855	1,506
6 Av	8	647	439	219	0	20	1,334
8 Av	7	260	125	793	7	0	1,193
Total	58	1,532	1,035	1,556	1,348	1,463	6,992

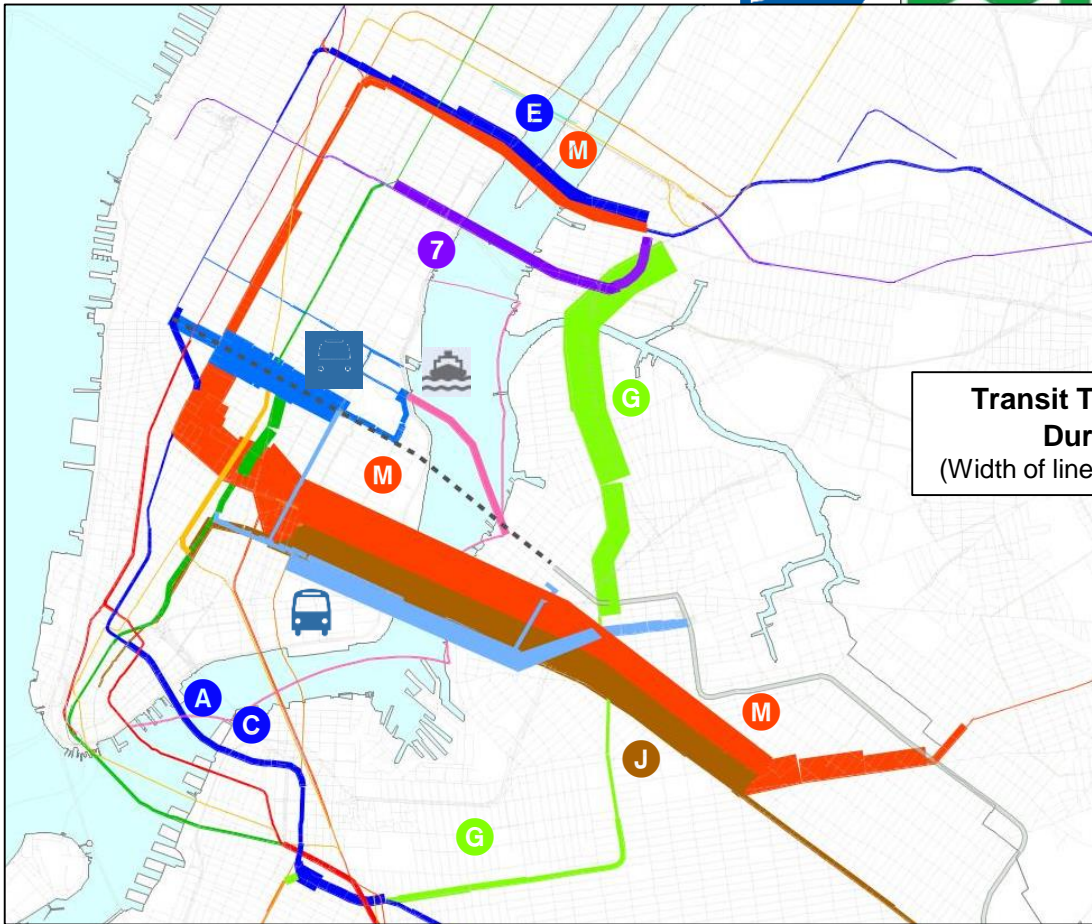


# CHALLENGE OF SERVING L CUSTOMERS USING TUBE

Origins and Destinations of L Customers  
Manhattan-Bound, AM Peak Hour







**Transit Travel Paths of Current L Riders  
During Closure - AM Peak Hour**  
(Width of line corresponds to number of shifted riders)

**E 10th St & 3rd Ave, New York, NY 1000**

**Pennsylvania Station, New York, NY 101**

Add destination

Leave now

OPTIONS

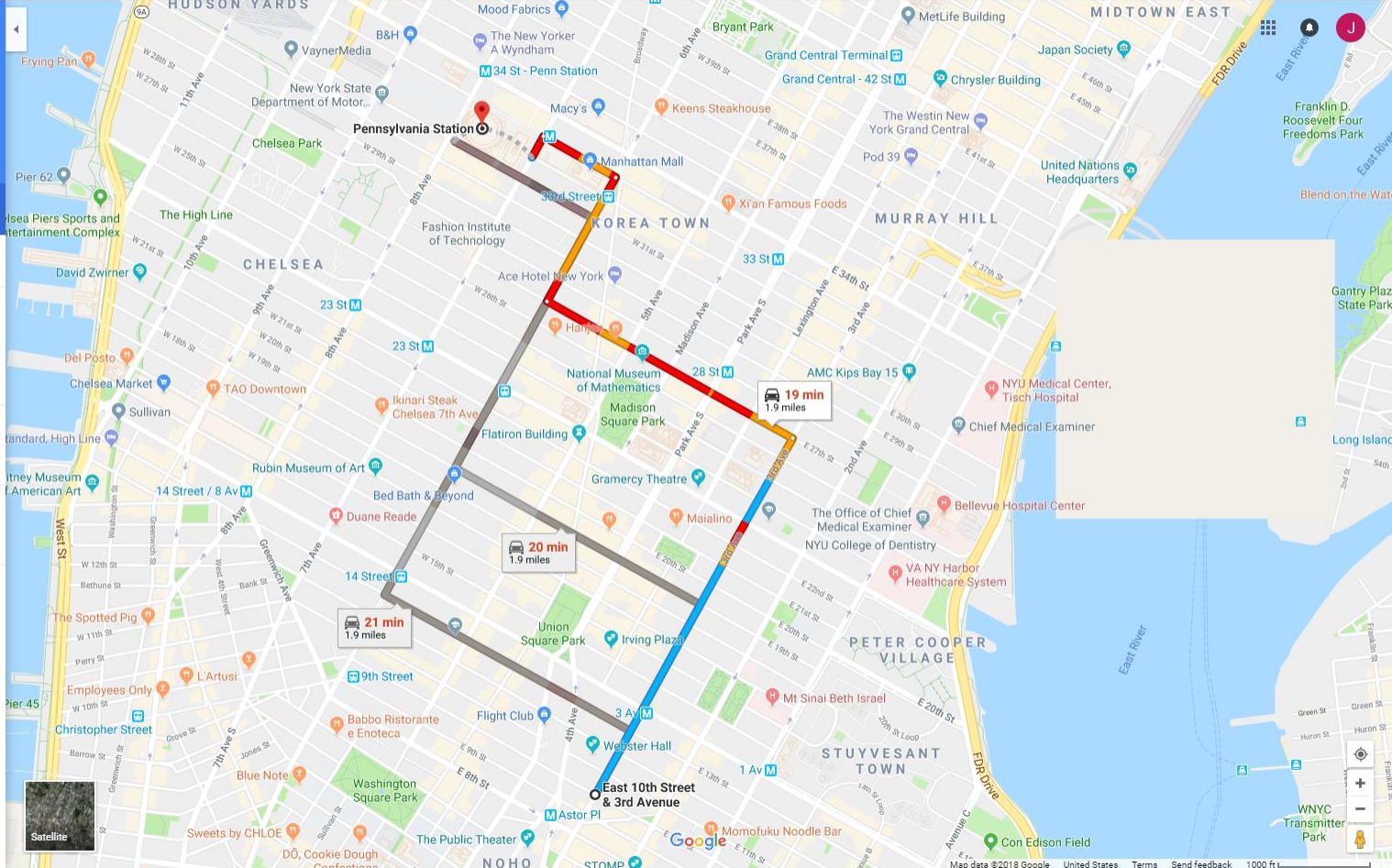
Send directions to your phone

via 3rd Ave and E 27th St **19 min**  
1.9 miles  
Fastest route now due to traffic conditions

DETAILS

via E 19th St and 6th Ave **20 min**  
1.9 miles  
Heavy traffic, as usual

via E 13th St and 6th Ave **21 min**  
1.9 miles  
Heavy traffic, as usual





**E 10th St & 2nd Ave, New York, NY 10003**  
**Pennsylvania Station, New York, NY 10119**

Add destination

Leave now **OPTIONS**

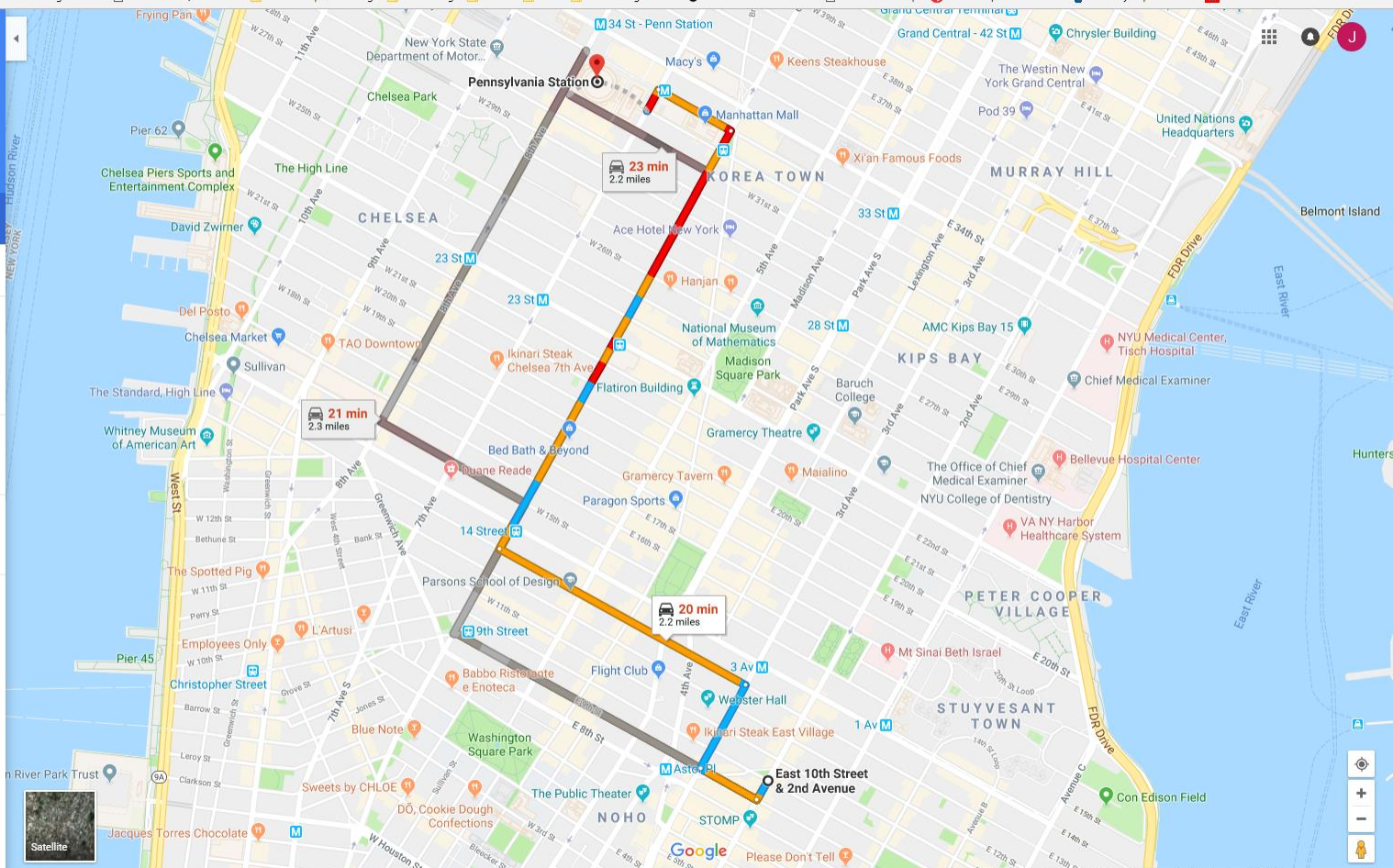
Send directions to your phone

**via E 13th St and 6th Ave** **20 min**  
Fastest route now due to traffic conditions  
2.2 miles

**DETAILS**

**via E 9th St and 8th Ave** **21 min**  
Heavy traffic, as usual  
2.3 miles

**via E 9th St and 6th Ave** **23 min**  
Heavy traffic, as usual  
2.2 miles









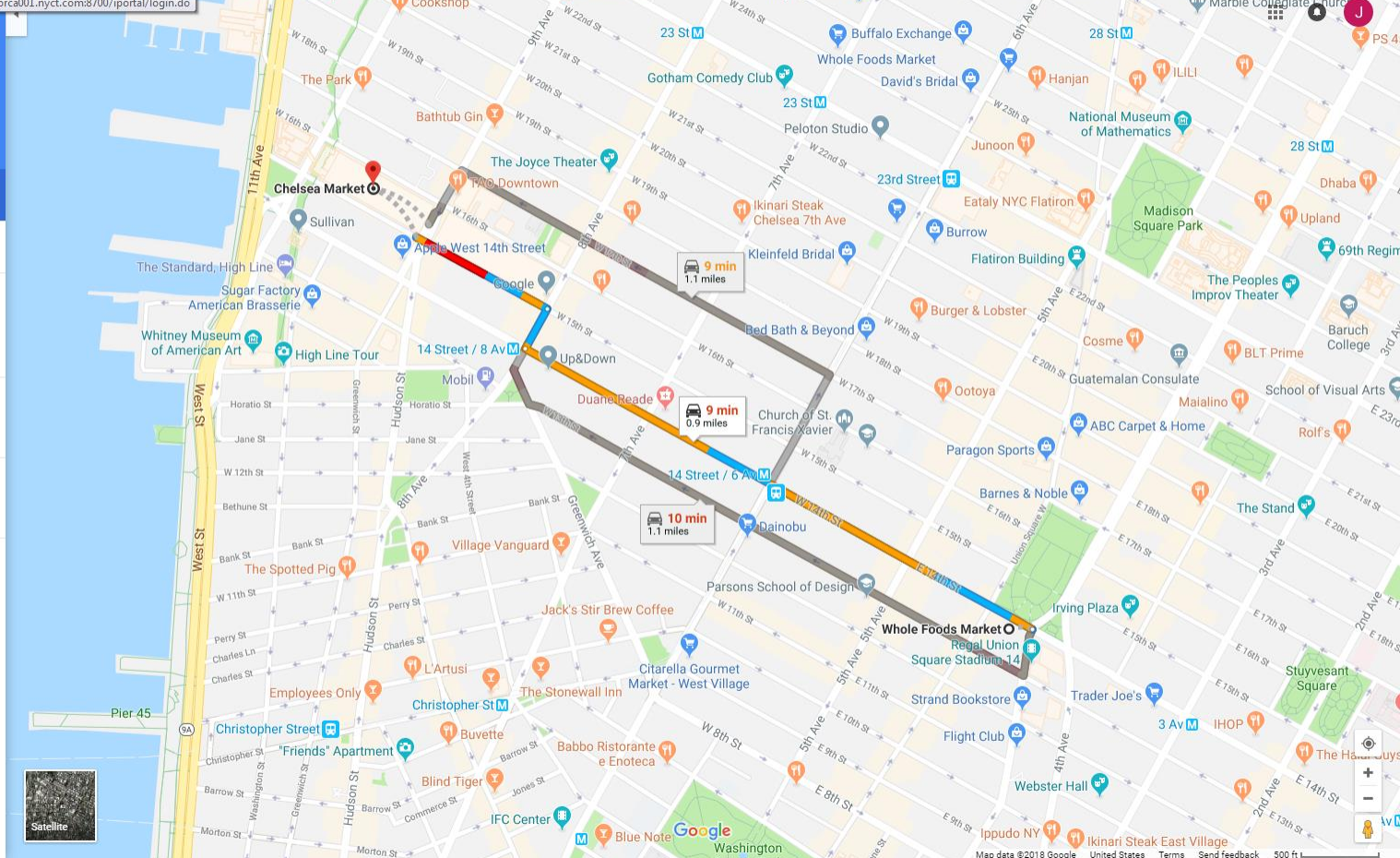
Information Console - [Login screen] nyc12bwyrcr001.nycct.com:8700/portal/login.do

Whole Foods Market, 4 Union Square E  
 Chelsea Market, 75 9th Ave, New York, NY 10011

Add destination

Leave now OPTIONS

- Send directions to your phone
- via E 14th St **9 min**  
Fastest route, despite the usual traffic 0.9 mile
- via E 14th St and W 17th St **9 min**  
Some traffic, as usual 1.1 miles
- via E 13th St **10 min**  
Heavy traffic, as usual 1.1 miles



# LOADING SURVEY

## 14TH STREET MERCHANT DELIVERY TIME RANGES 1<sup>st</sup> Avenue to Union Square West/University Place

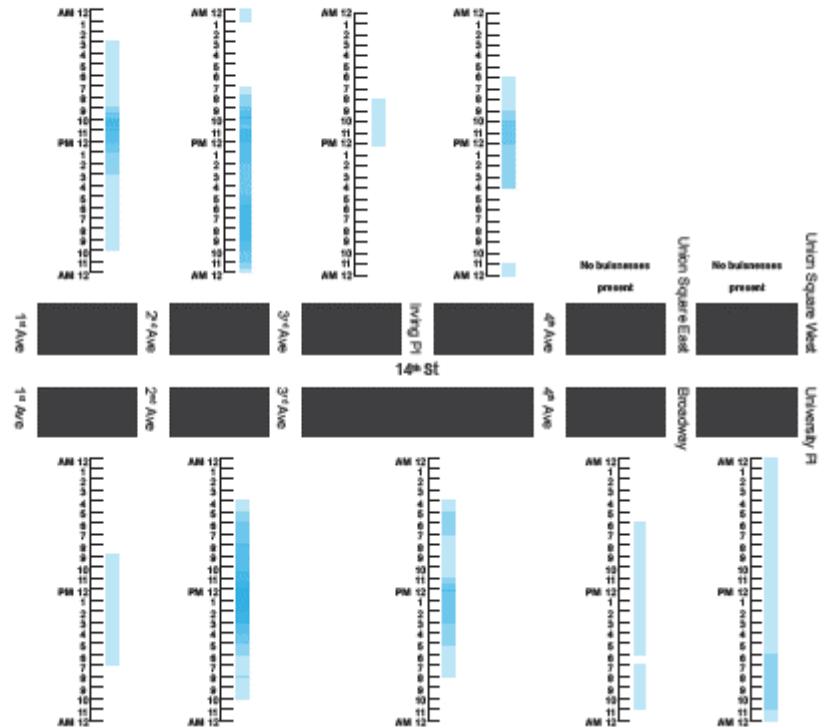


### Field Notes

For this survey, merchants along 14<sup>th</sup> St were asked to estimate the window of time in which they typically receive deliveries during the week (Monday through Friday).

The data is broken down by block, and organized into the north and south sides of the street.

All data was collected on March 8<sup>th</sup> and 17<sup>th</sup>, 2017.





# LOADING SURVEY

## 14TH STREET MERCHANT DELIVERY TIME RANGES Union Square West/University Place to 10<sup>th</sup> Avenue

**Legend**



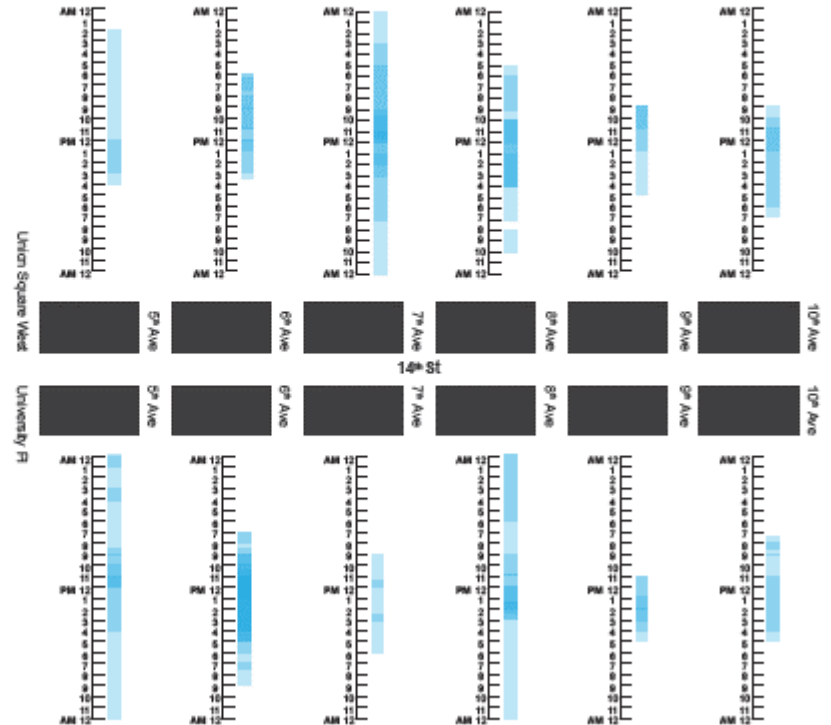
- Delivery window indicated by 1 business
- Delivery window indicated by 2 businesses
- Delivery window indicated by 3 businesses or more

### Field Notes

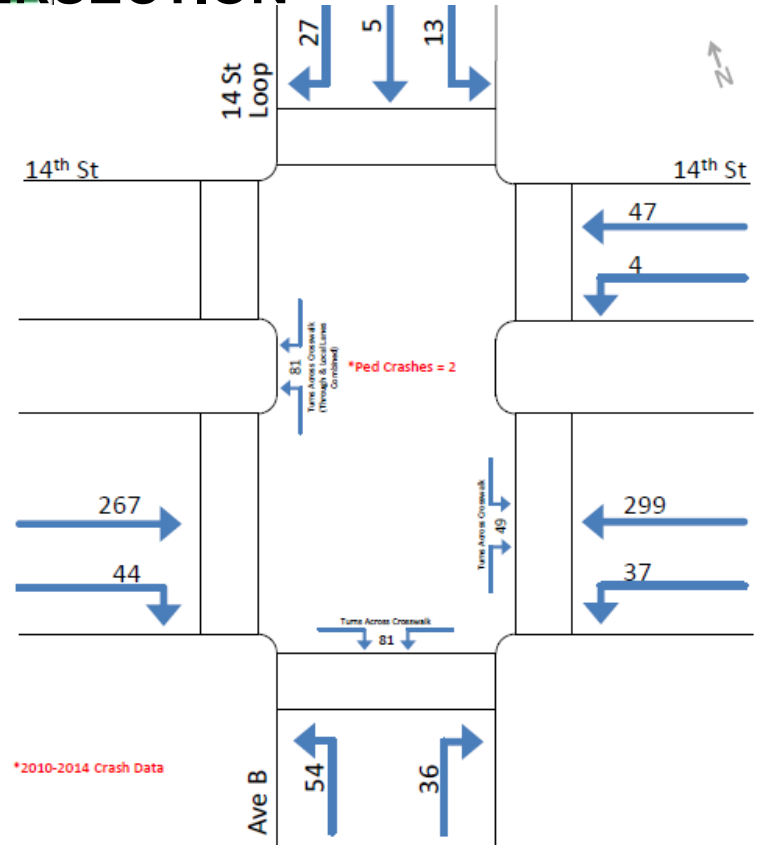
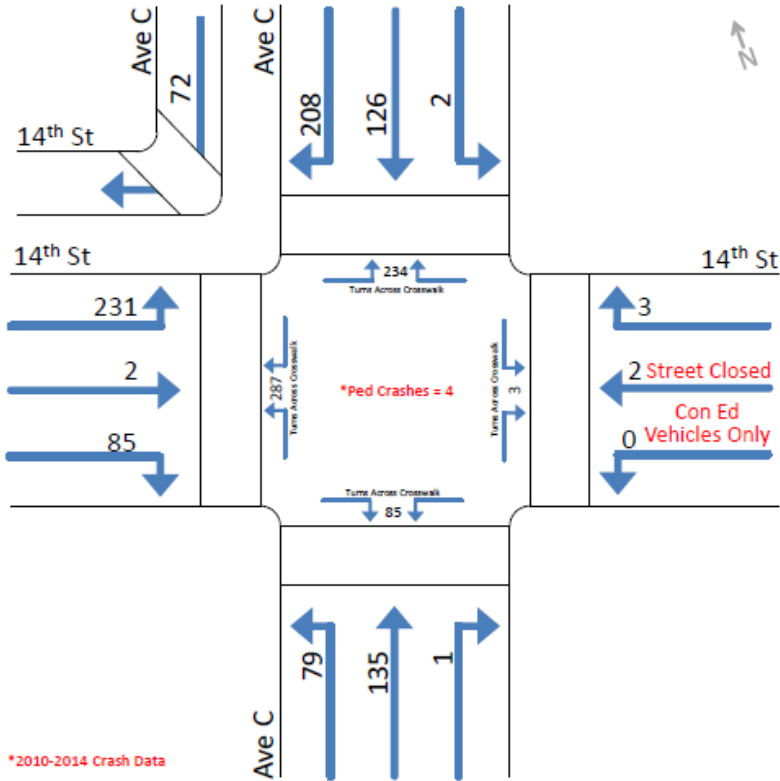
For this survey, merchants along 14<sup>th</sup> St were asked to estimate the window of time in which they typically receive deliveries during the week (Monday through Friday).

The data is broken down by block, and organized into the north and south sides of the street.

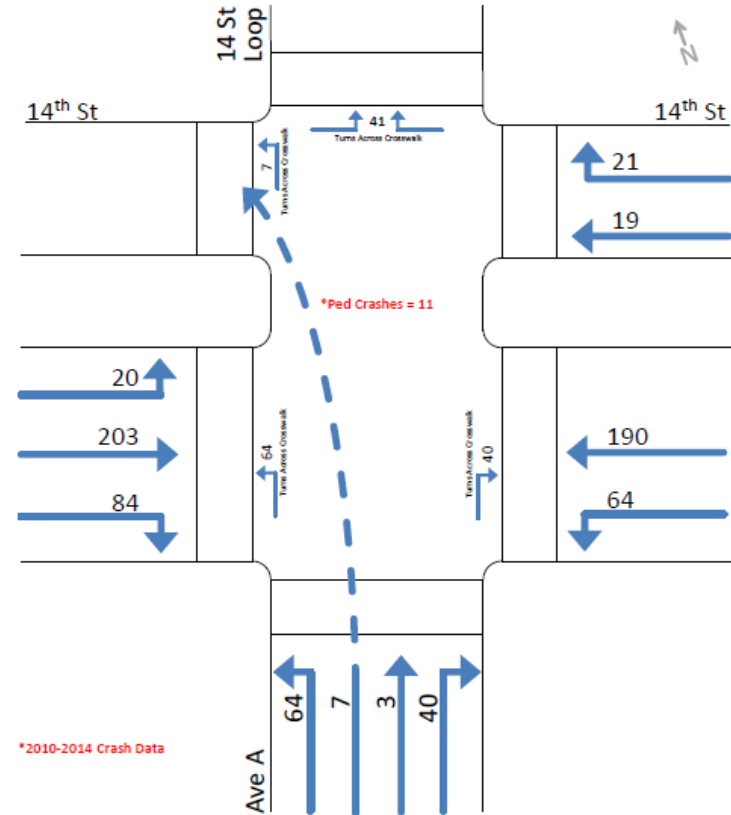
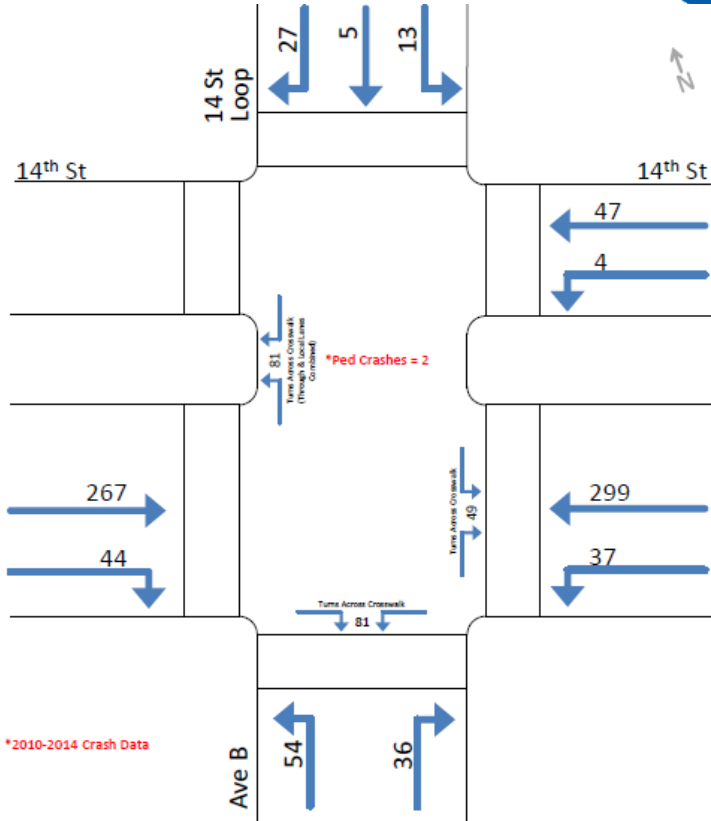
All data was collected on March 8<sup>th</sup> and 17<sup>th</sup>, 2017.



# EXISTING AM PEAK TRAFFIC BY INTERSECTION

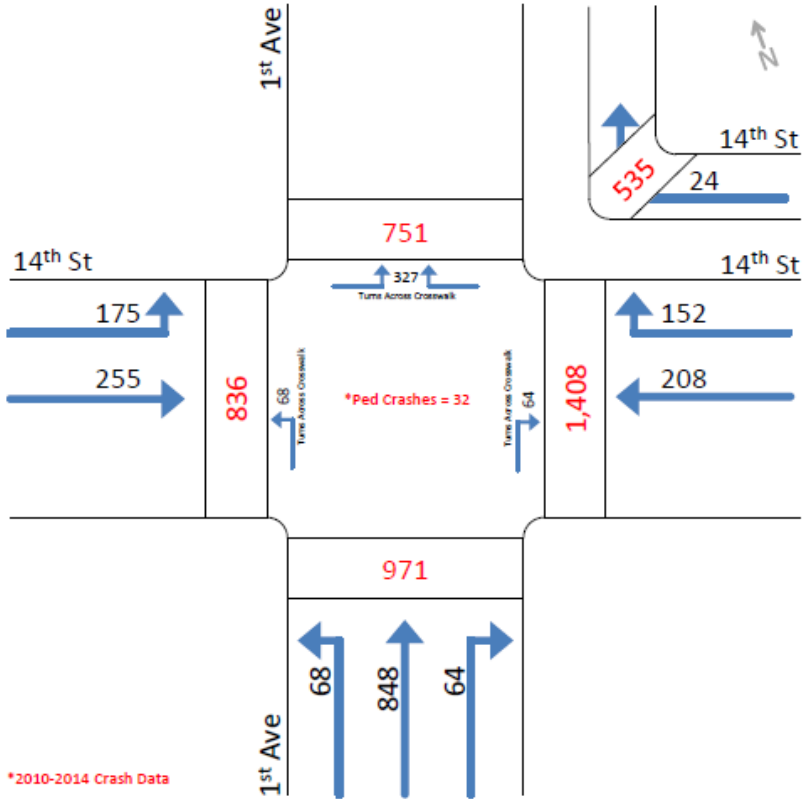


# EXISTING AM PEAK TRAFFIC BY INTERSECTION

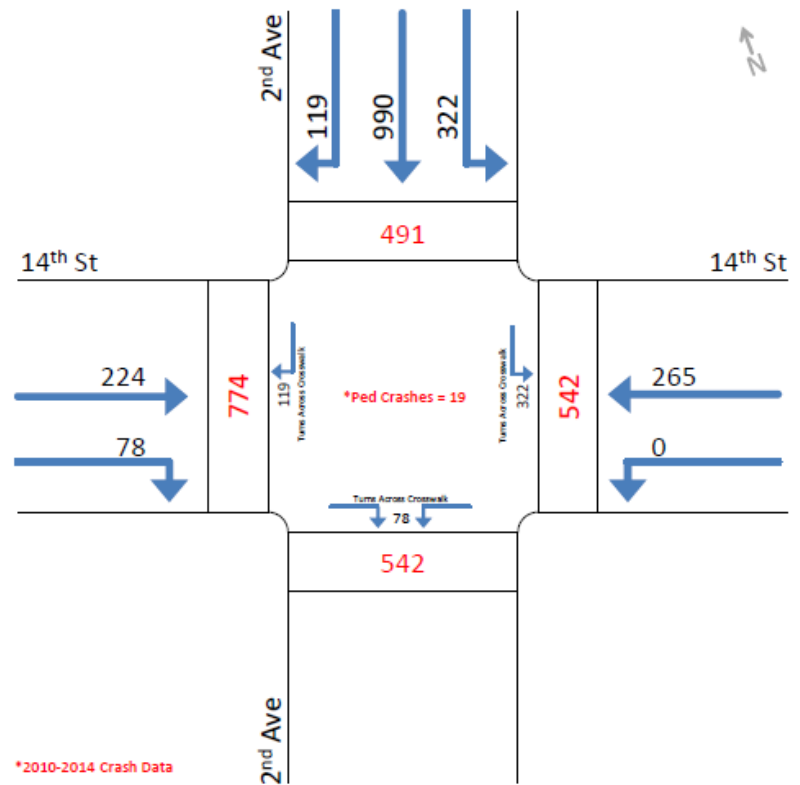




# EXISTING AM PEAK TRAFFIC BY INTERSECTION

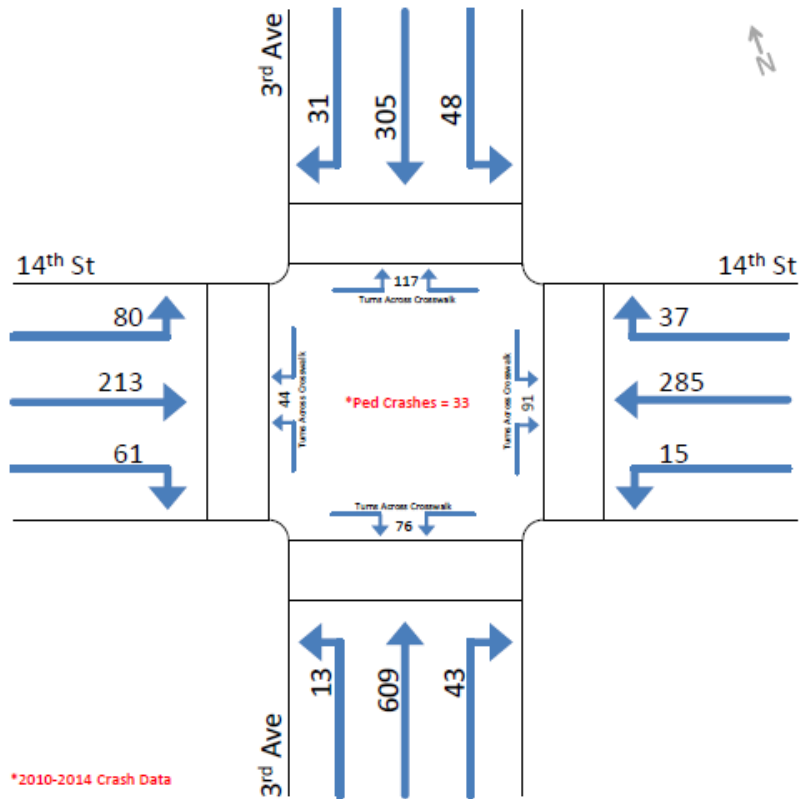


\*2010-2014 Crash Data

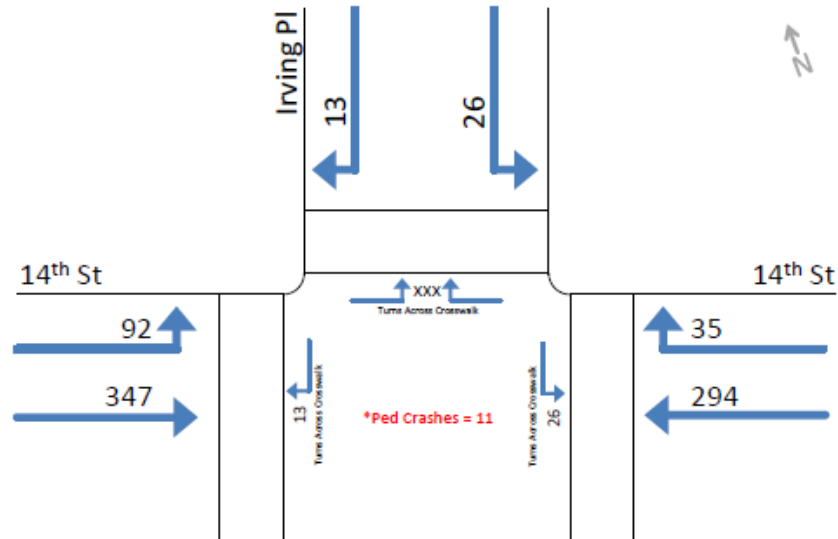


\*2010-2014 Crash Data

# EXISTING AM PEAK TRAFFIC BY INTERSECTION



\*2010-2014 Crash Data

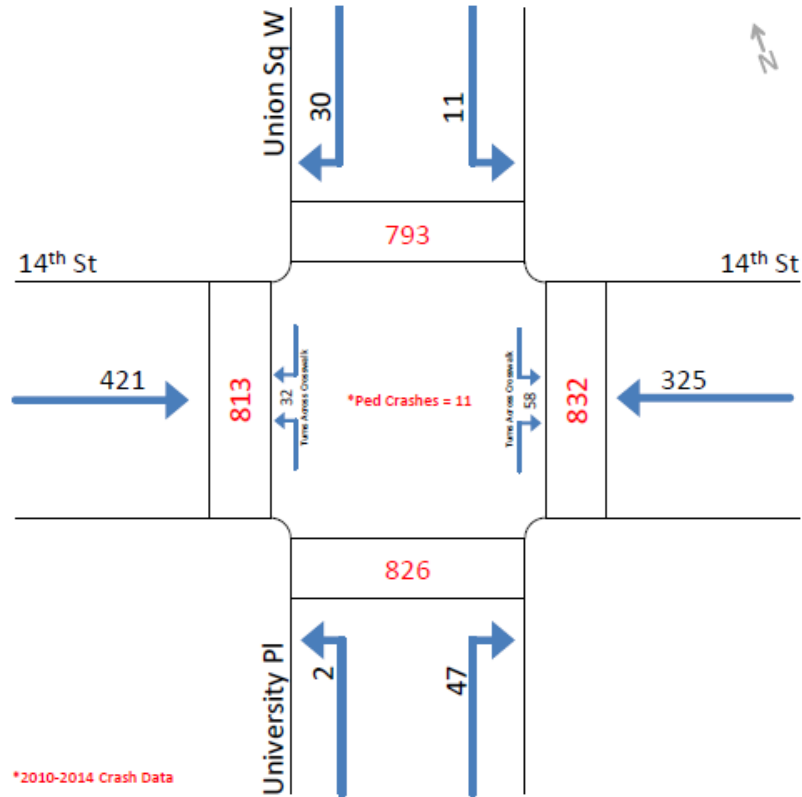




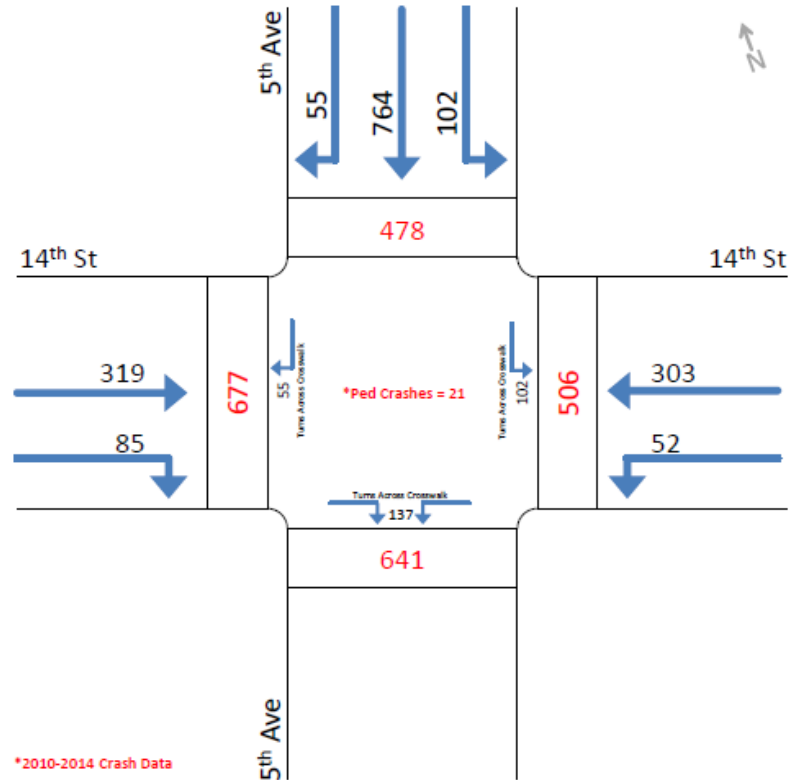




# EXISTING AM PEAK TRAFFIC BY INTERSECTION



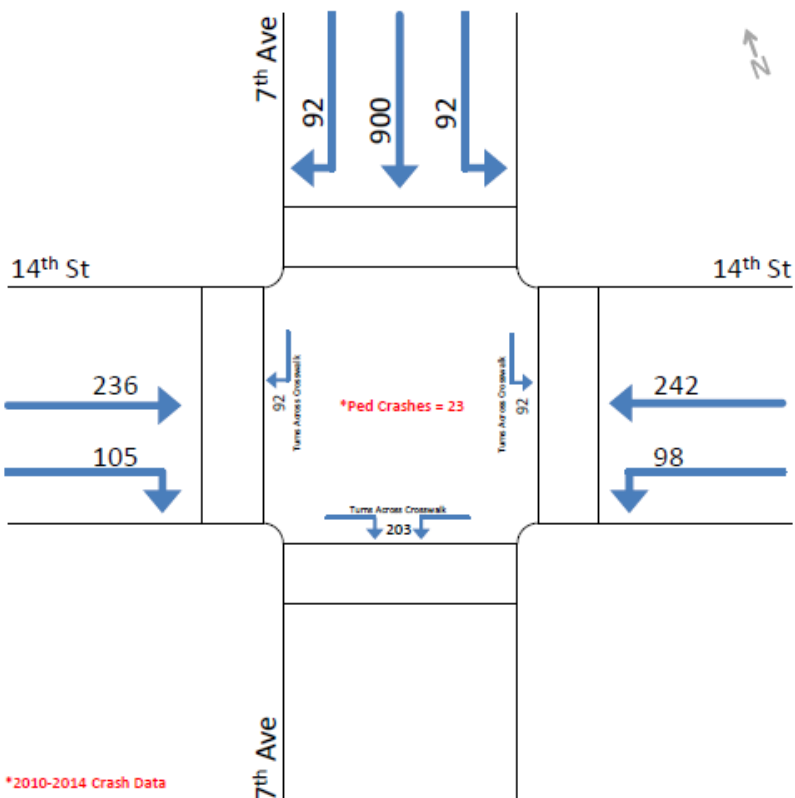
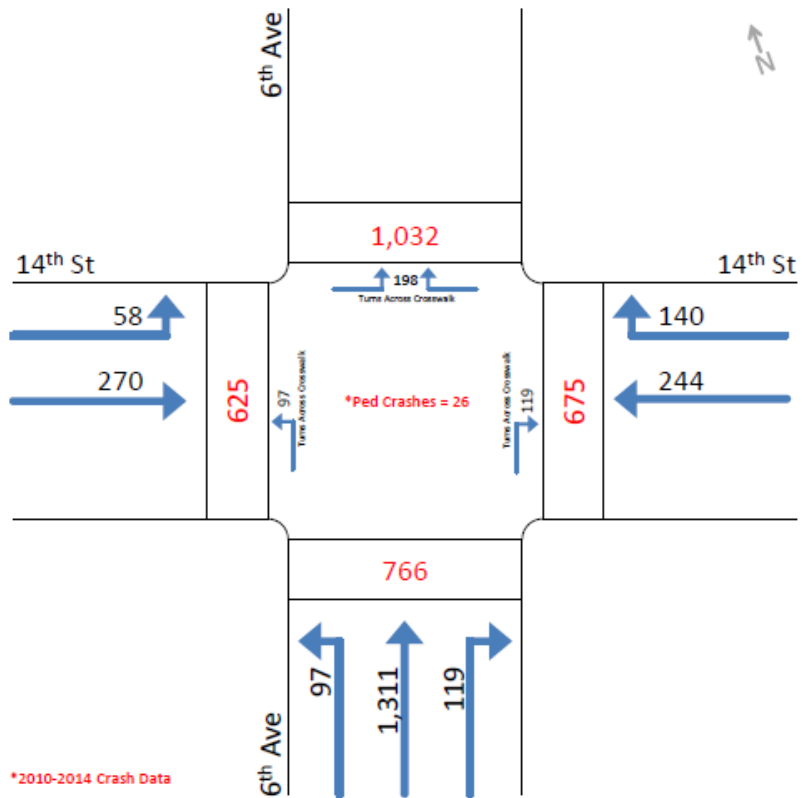
\*2010-2014 Crash Data



\*2010-2014 Crash Data



# EXISTING AM PEAK TRAFFIC BY INTERSECTION

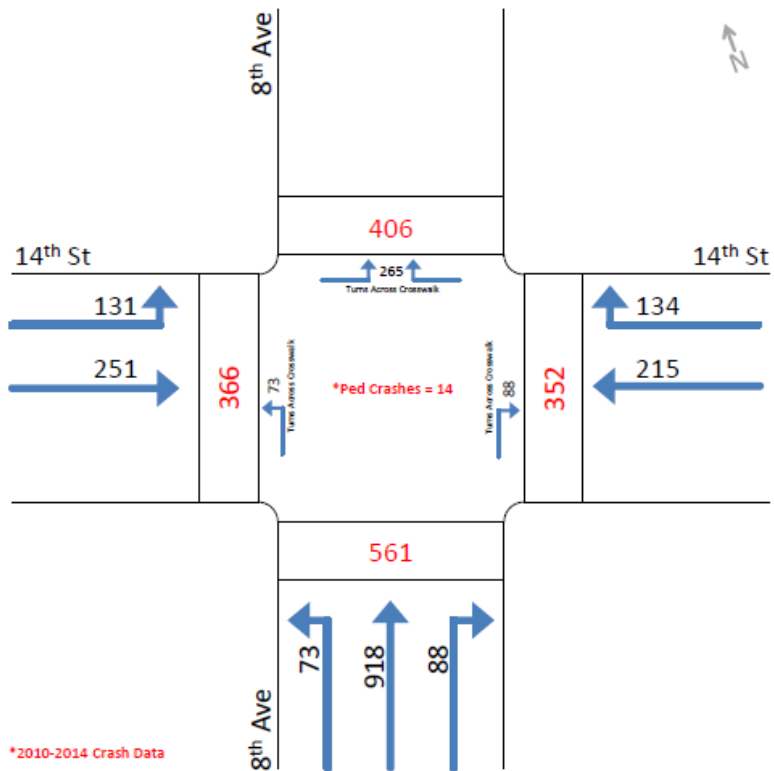


\*2010-2014 Crash Data

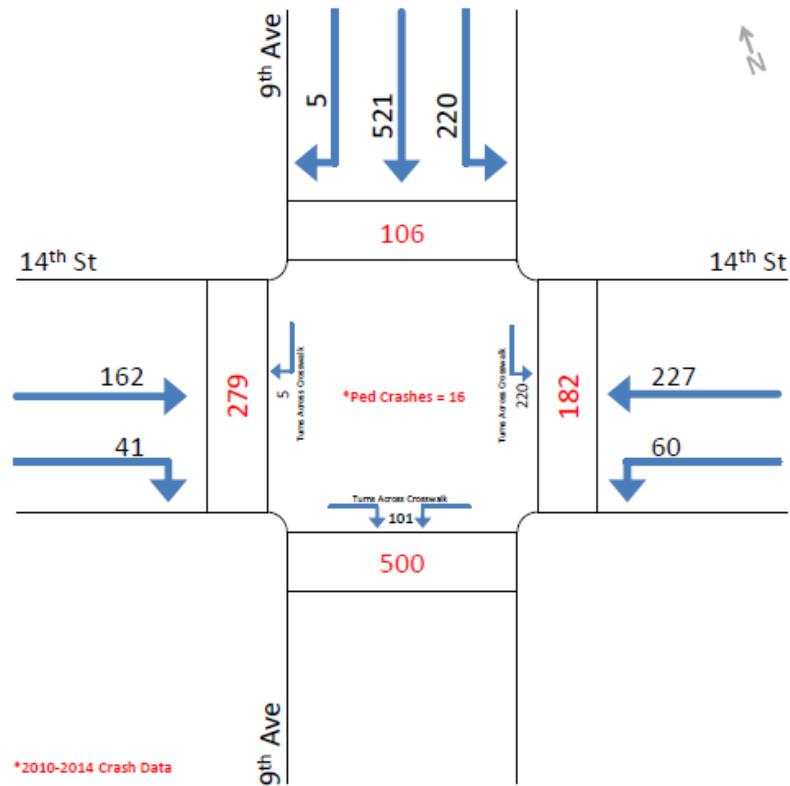
\*2010-2014 Crash Data



# EXISTING AM PEAK TRAFFIC BY INTERSECTION

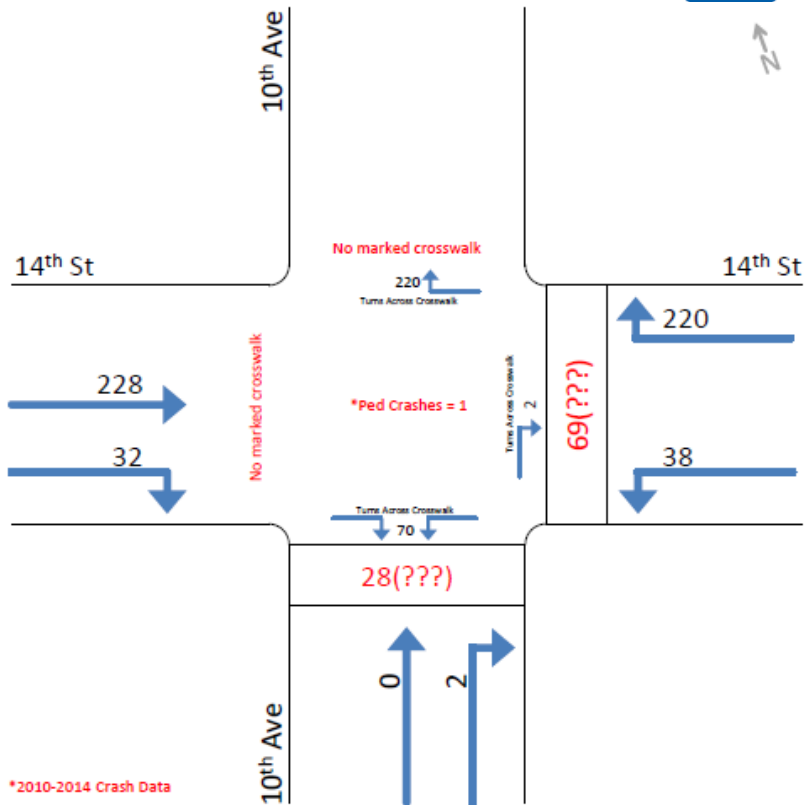


\*2010-2014 Crash Data

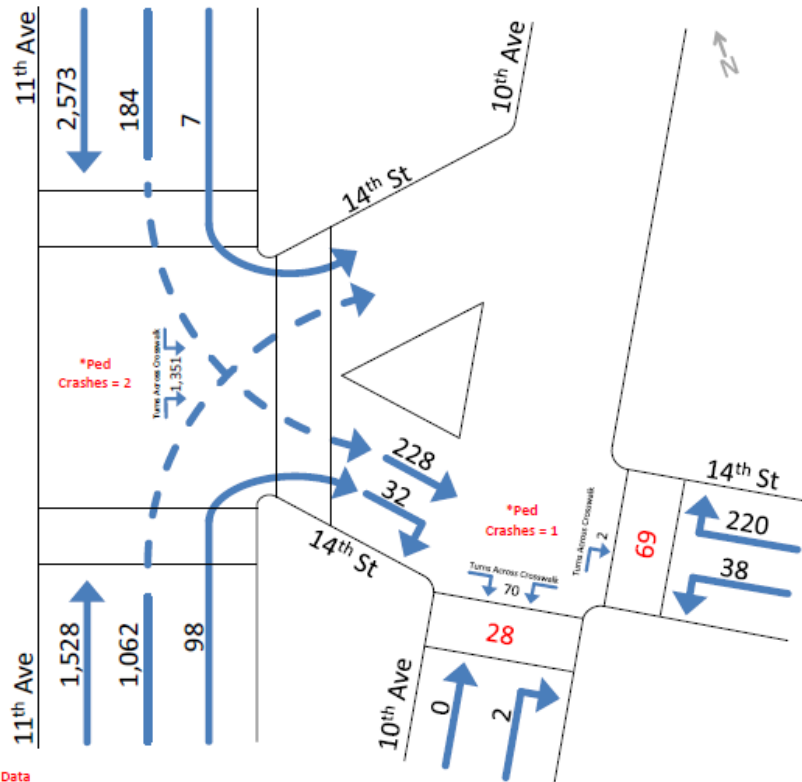


\*2010-2014 Crash Data

# EXISTING AM PEAK TRAFFIC BY INTERSECTION



\*2010-2014 Crash Data



\*2010-2014 Crash Data