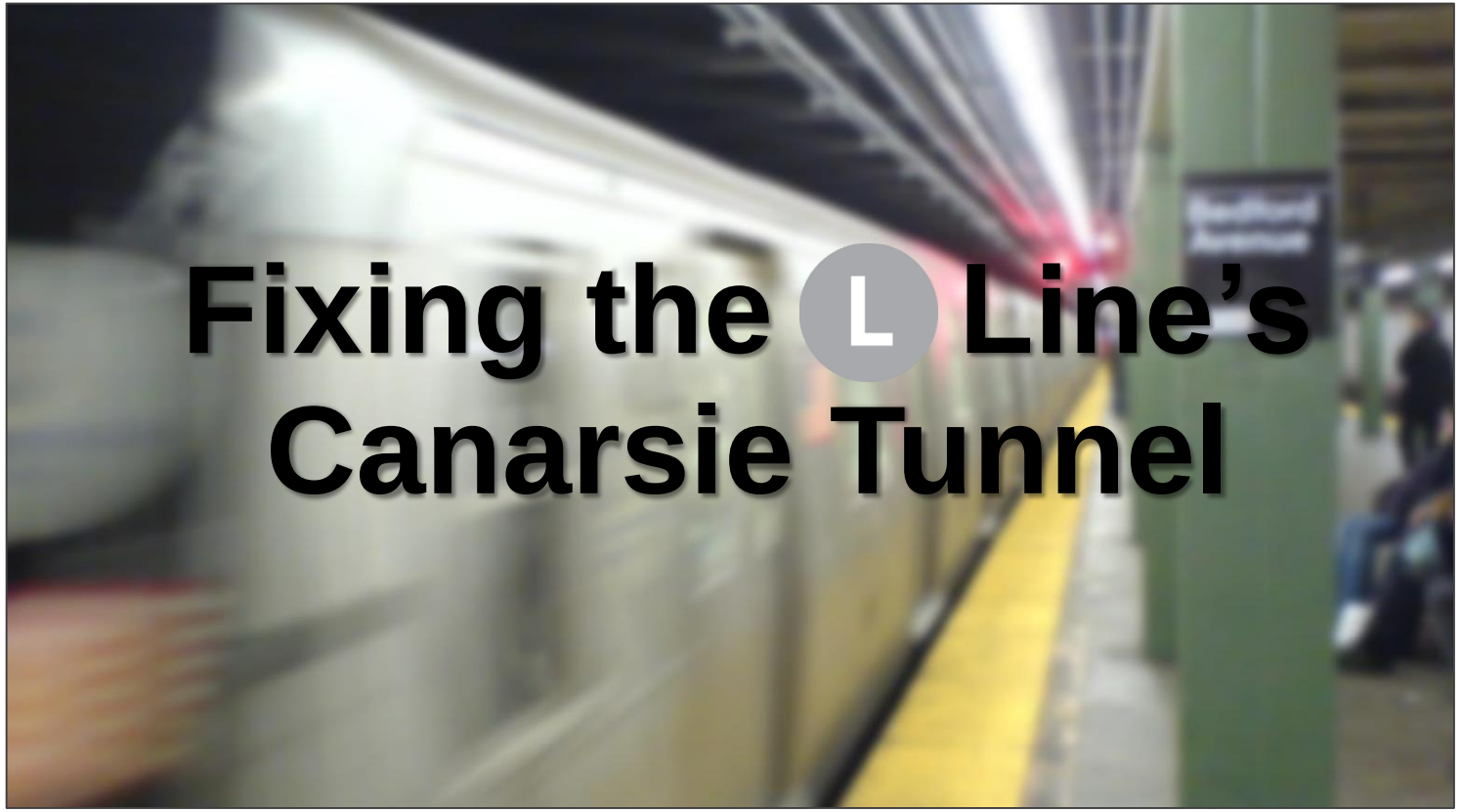

Fixing the L Line's
Canarsie Tunnel

WHAT INFORMED OUR PLANNING PROCESS?

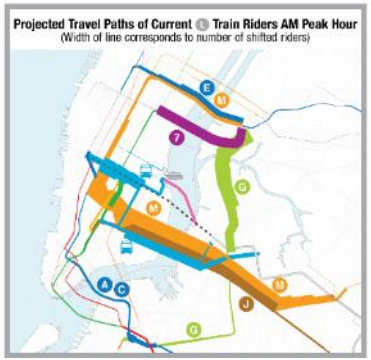
Input from over 40 community meetings

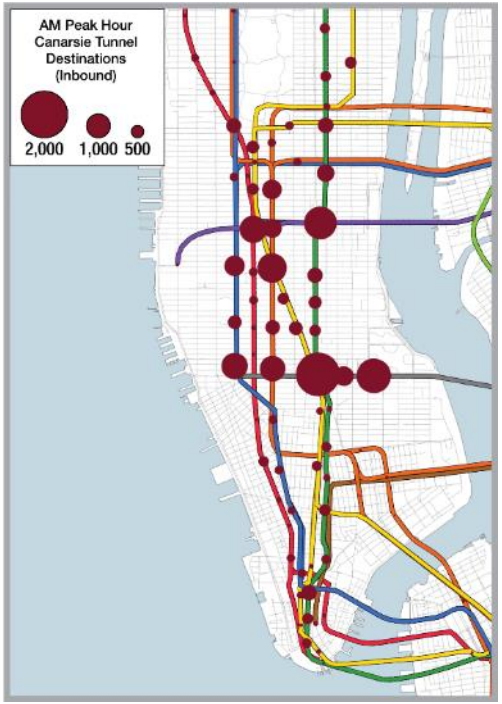
Most frequent comments:

- 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

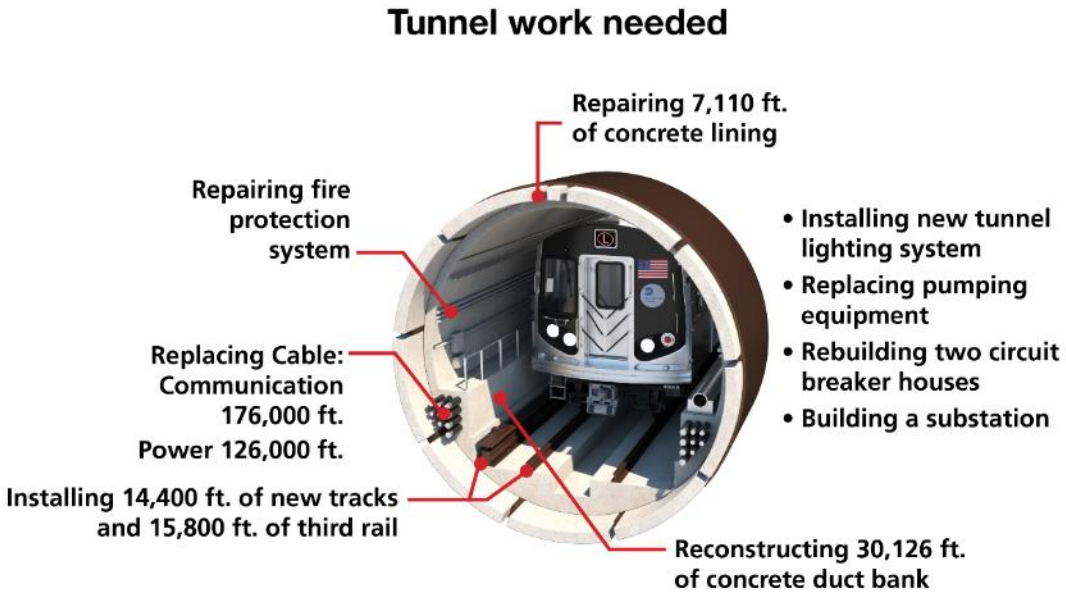
The Canarsie Tube was inundated with saltwater during Superstorm Sandy causing corrosion of cabling, circuit breakers and power and track equipment.

The tunnel needs a complete overhaul

Contract for Tube repairs awarded (April 2017)

15 Month Closure remains on schedule to begin April 2019

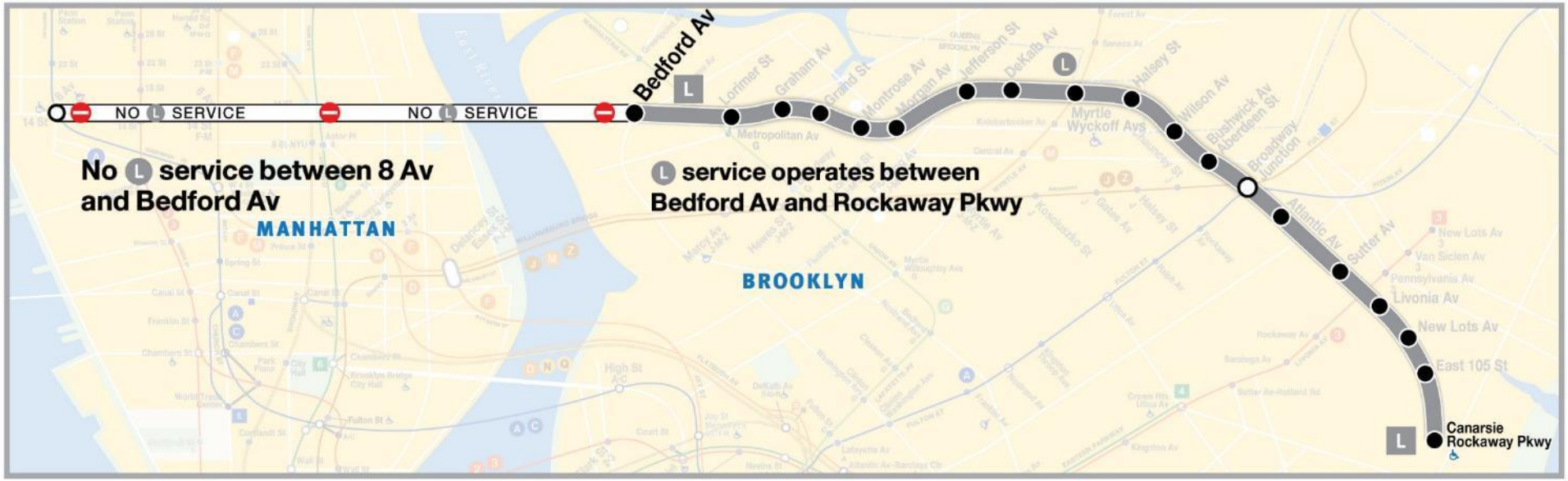
Bonus for early completion & $400,000-per-day penalty for delays



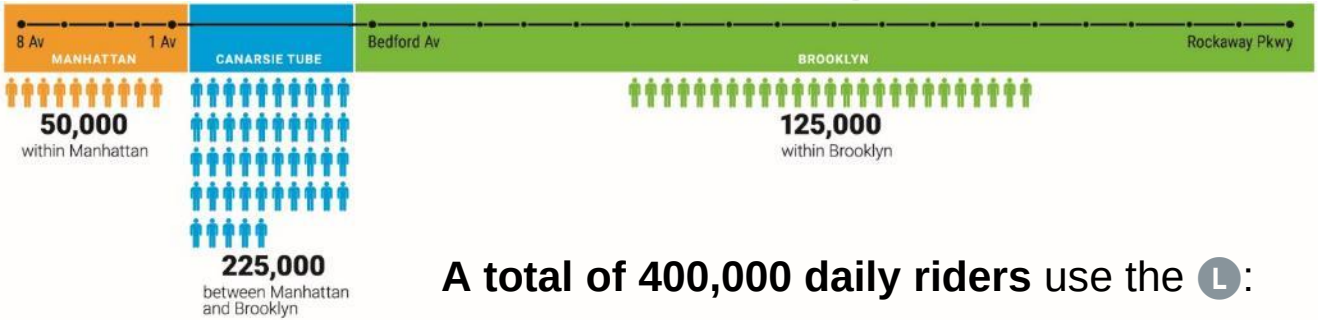
MANHATTAN CONSTRUCTION UPDATE

- **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



CHALLENGE OF SERVING L CUSTOMERS



A total of 400,000 daily riders use the L:

- **225,000 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 travel solely in Manhattan**
  - *Greater than busiest NYC Bus route (Bx12 - 48,000 riders/day)*
  - *66% greater than current M14 ridership (30,000 riders/day)*
- **125,000 travel solely in Brooklyn**

OUR STRATEGY

Increased alternate subway service

Temporary bus service

Temporary ferry service

Station Access and Capacity Improvements

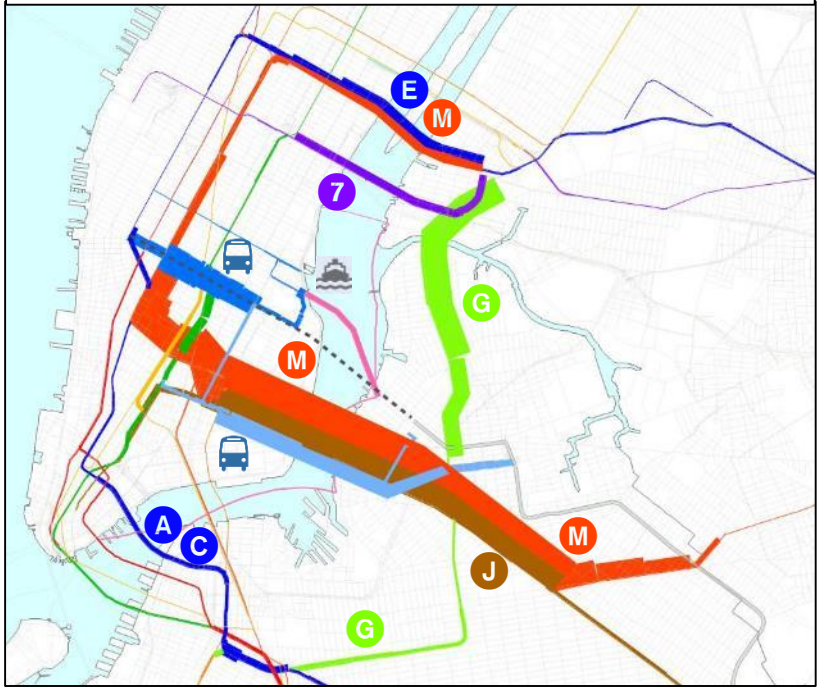
More bike and pedestrian infrastructure

Peak period traffic management strategies

SUBWAY SERVICE

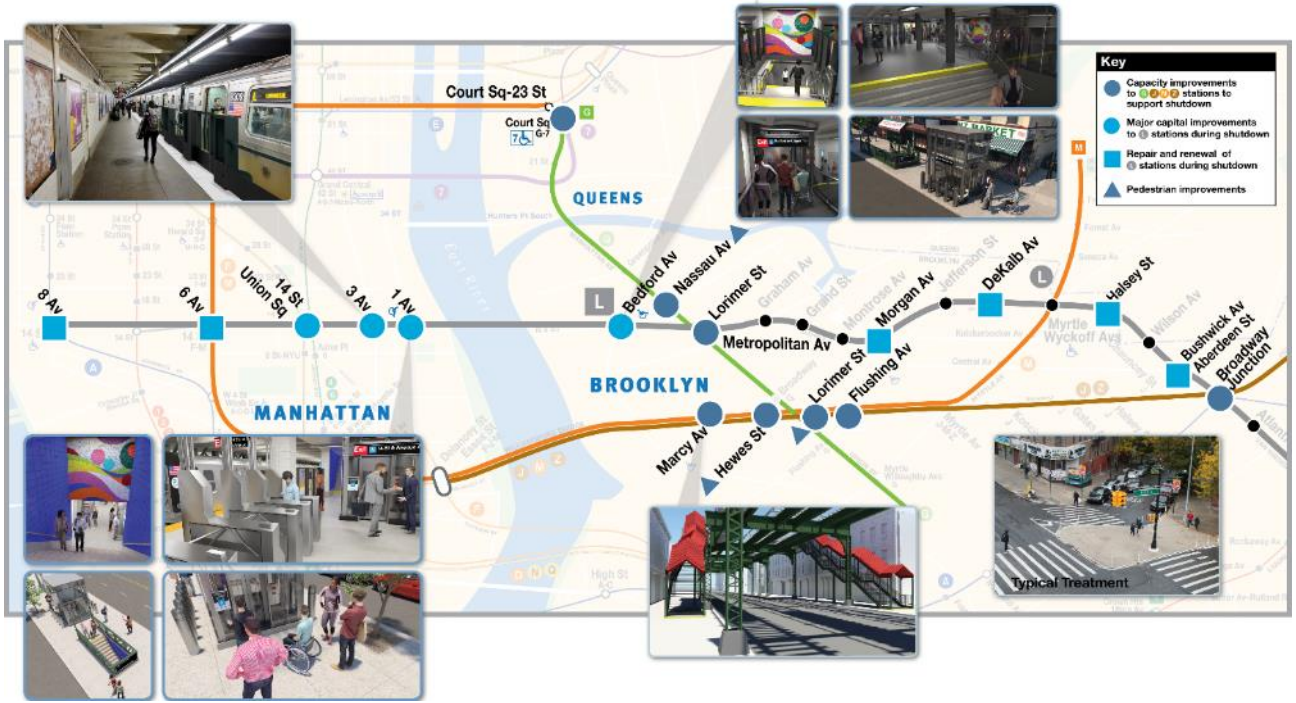
- Subway service increased on G J M Z
- J Z trains run local from Myrtle Av to Marcy Av to serve additional demand at Hewes St, Lorimer St, Flushing Av
- Free MetroCard transfers between:
  - Broadway G and Lorimer St / Hewes St J M Z
  - Junius St 3 and Livonia Av L
  - 21 St G and Hunters Point Av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

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



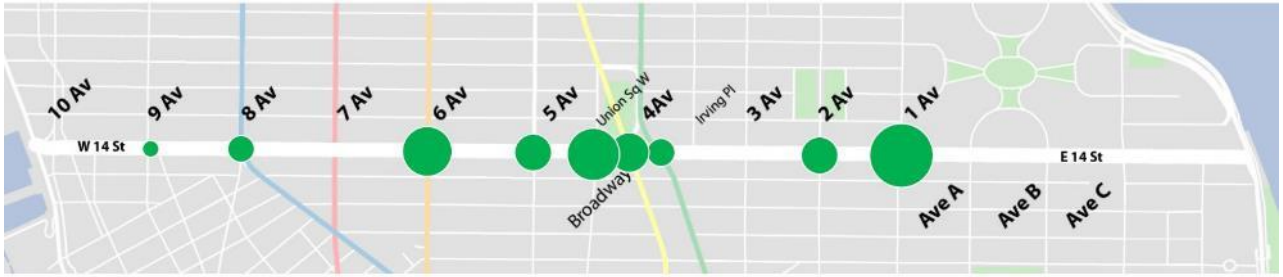
PERMANENT STATION IMPROVEMENTS

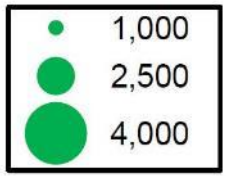
Prior to the tunnel closure, we are improving access to and capacity in stations along the G, J, M and Z lines, that will provide alternatives to L service. During the tunnel closure, we will also enhance stations along the L line.



14TH ST CORRIDOR TRAVEL PATTERNS

AM PEAK HOUR PEDESTRIAN VOLUMES: EXISTING CONDITIONS

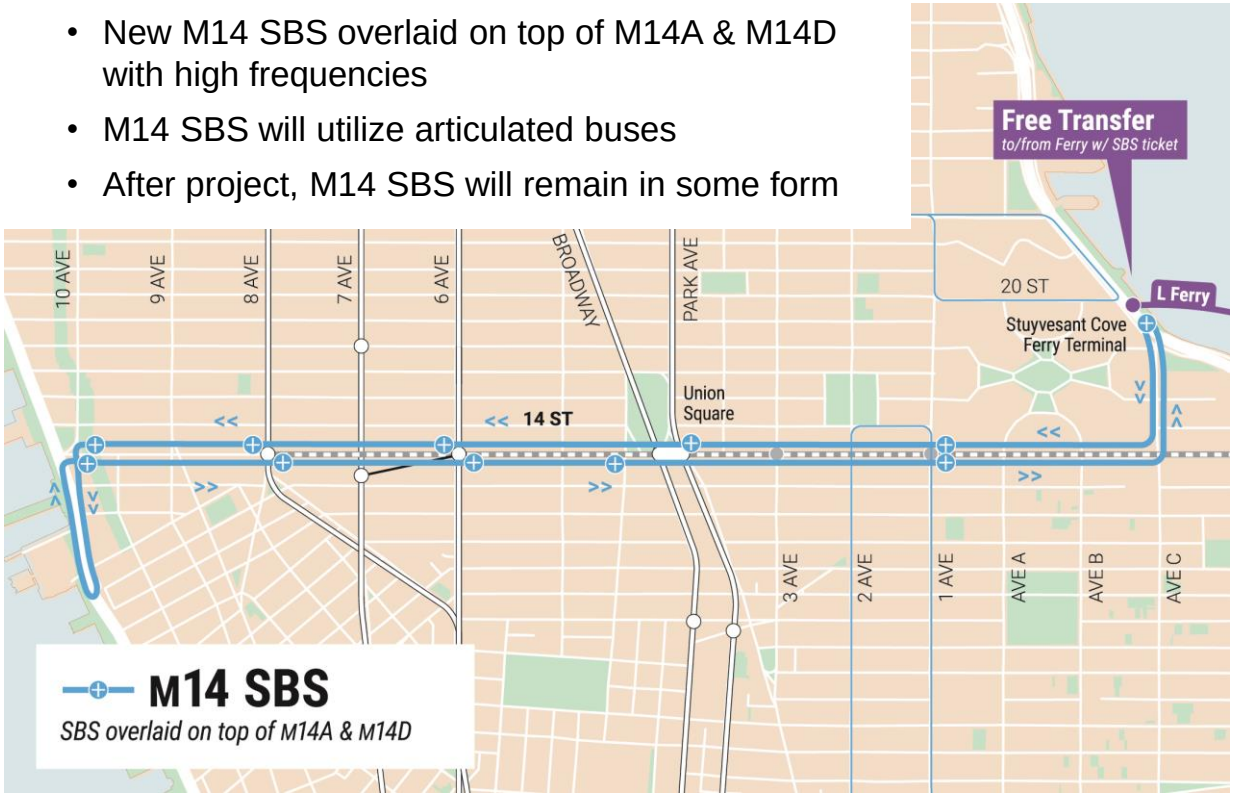




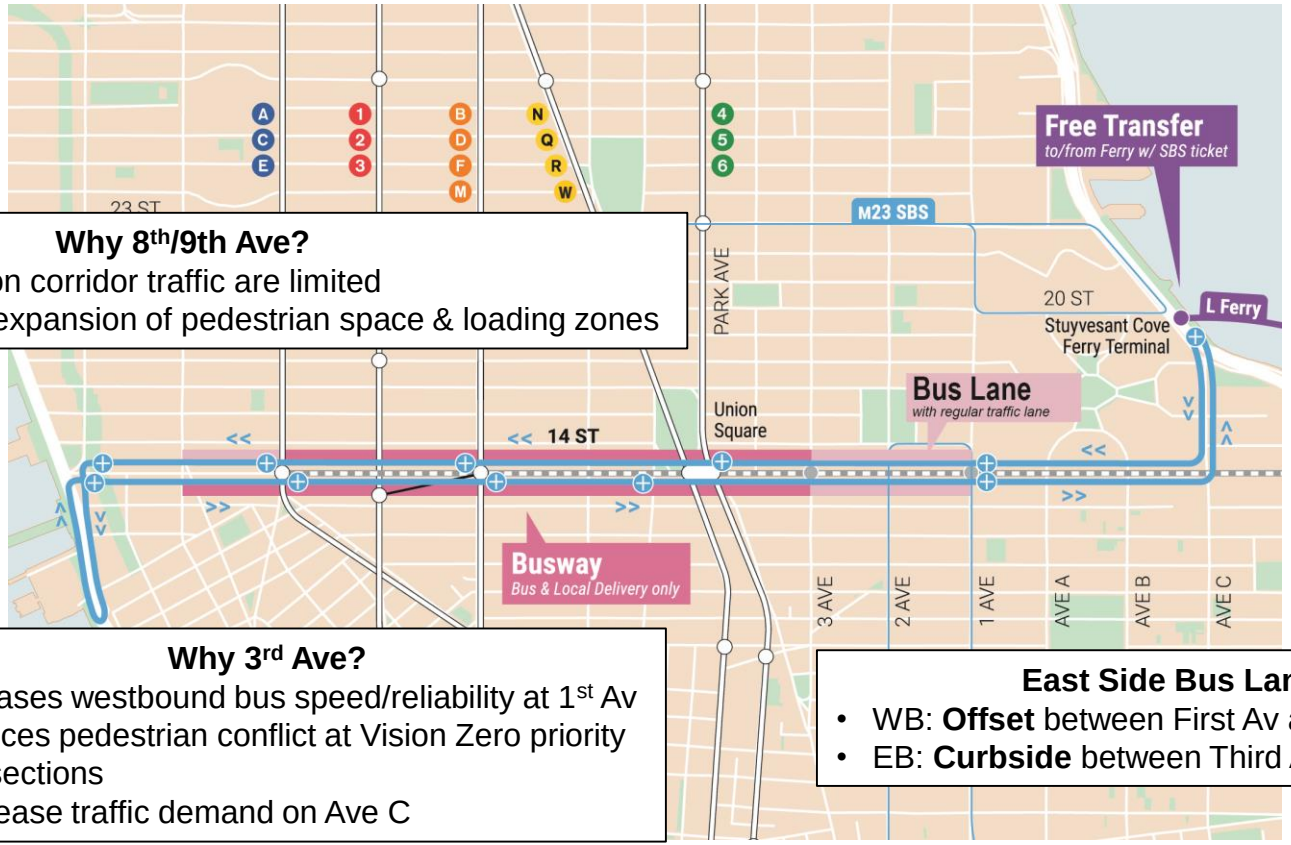
- Currently:
  - 30,000 weekday bus passengers
  - 21,000 people in autos or taxis
- During L closure:
  - Bus service will carry more than 84,000 daily riders across 14th St
  - Bus service will need to more than double to carry that demand
  - Passenger shifts to north-south subway lines will lead to peak hour pedestrian surges of up to 2x current volumes at major intersections

PROPOSED 14TH ST SBS BUS ROUTING

- New M14 SBS overlaid on top of M14A & M14D with high frequencies
- M14 SBS will utilize articulated buses
- After project, M14 SBS will remain in some form



14TH ST CORRIDOR DESIGN:



Why 8th/9th Ave?

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

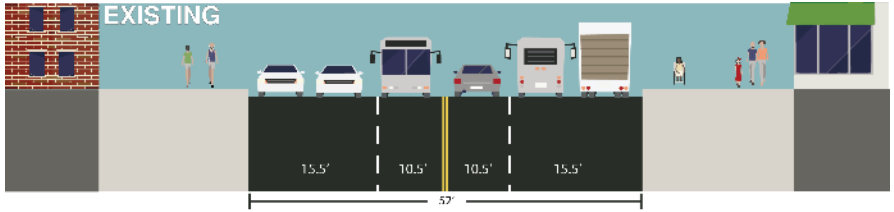
Why 3rd Ave?

- Increases westbound bus speed/reliability at 1st Av
- Reduces pedestrian conflict at Vision Zero priority intersections
- May ease traffic demand on Ave C

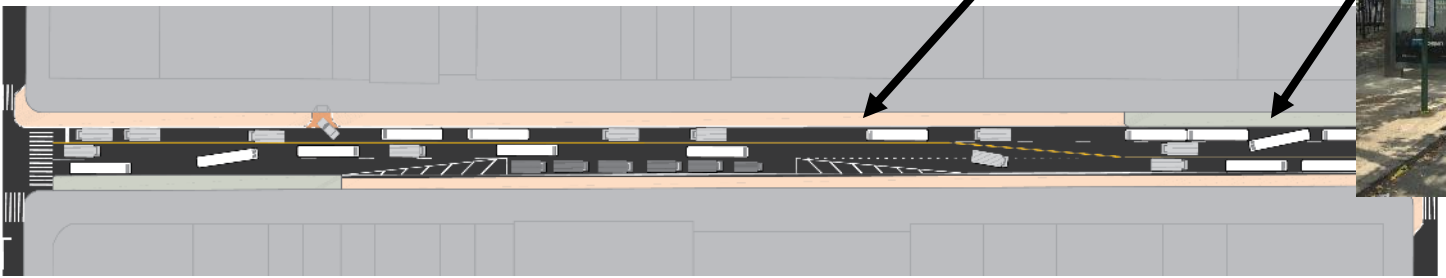
East Side Bus Lanes

- WB: **Offset** between First Av and Third Av
- EB: **Curbside** between Third Av and First Av

BUSWAY DESIGN

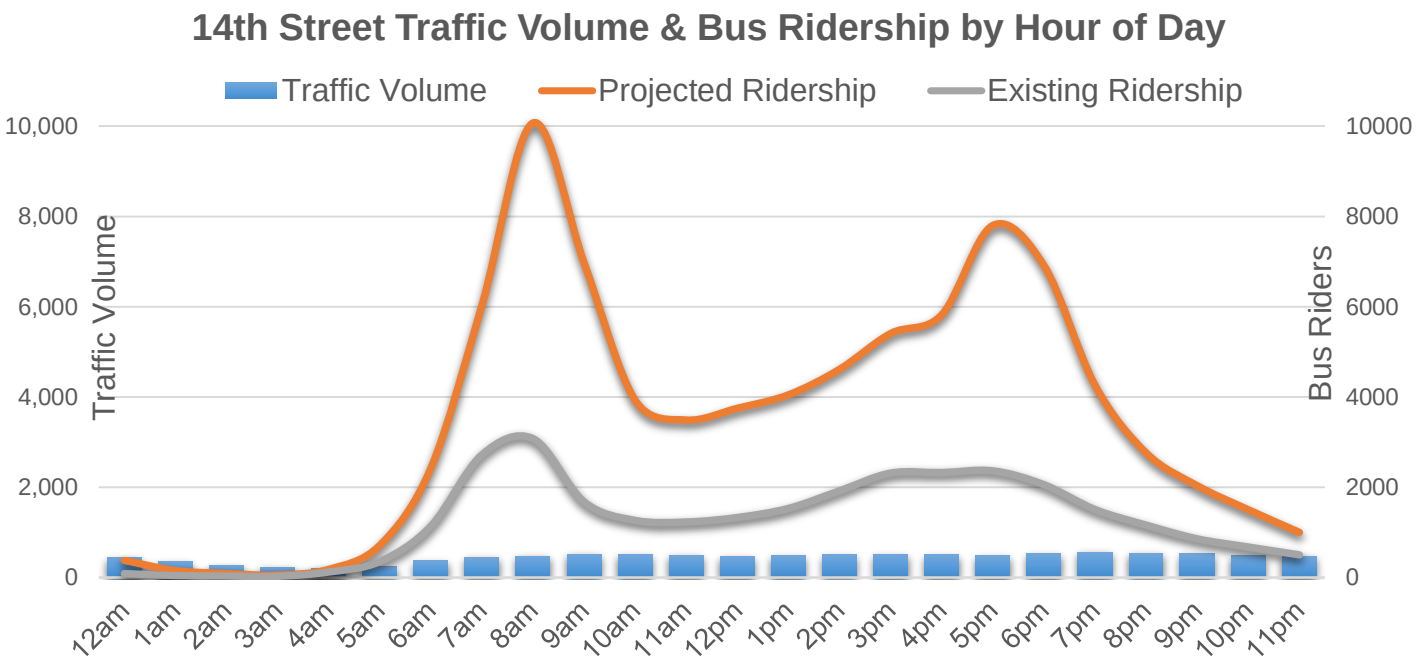


14TH STREET



BUSWAY OPERATION

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



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

14TH ST DESIGN OPTIONS

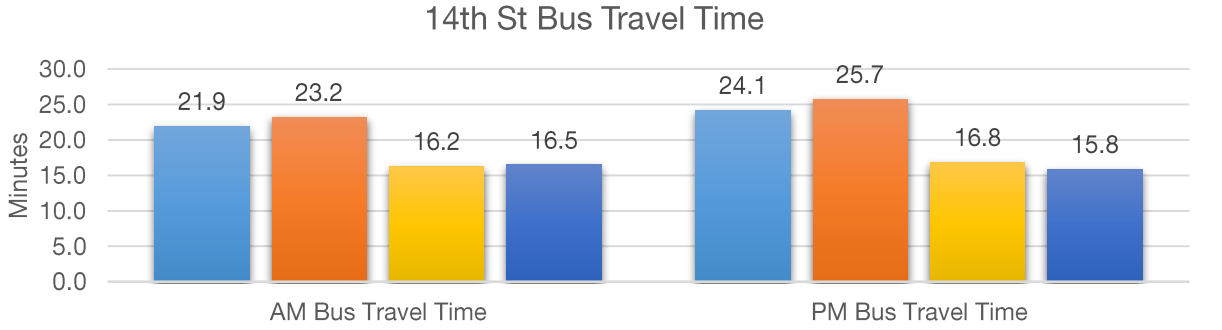
DOT evaluated the following options:

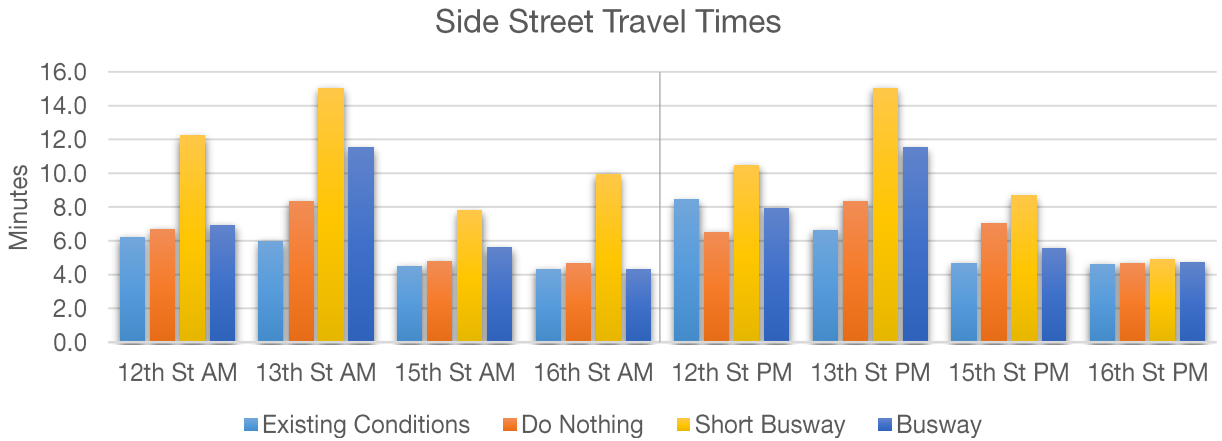
- Existing Conditions
- Do Nothing (L Train Closes, No Bus Priority)
- Short Busway (*Third Av – Sixth Av*)
- ✓ Busway (*Third Av – Eighth/Ninth Av*)

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

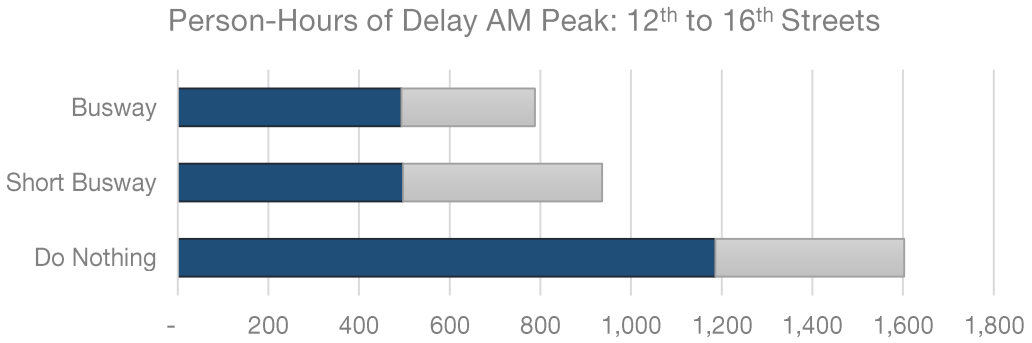
14TH ST DESIGN OPTIONS

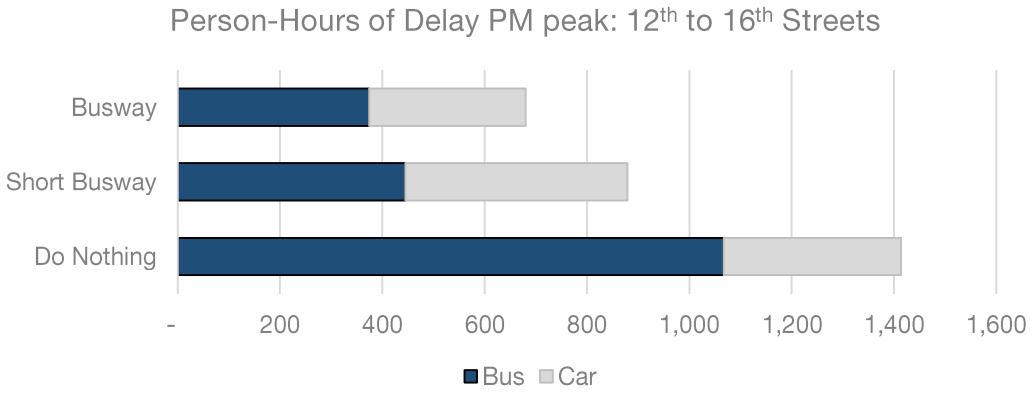




- Busway Plan delivers faster bus travel times on 14th St
- All scenarios will lead to increased travel times on side streets near 14th Street
- Busway Plan leads to some traffic shifts but diverts more through trips to other routes
- Modeling results may understate the negative effect on side streets of shifts to taxis & for-hire vehicles in Do Nothing option

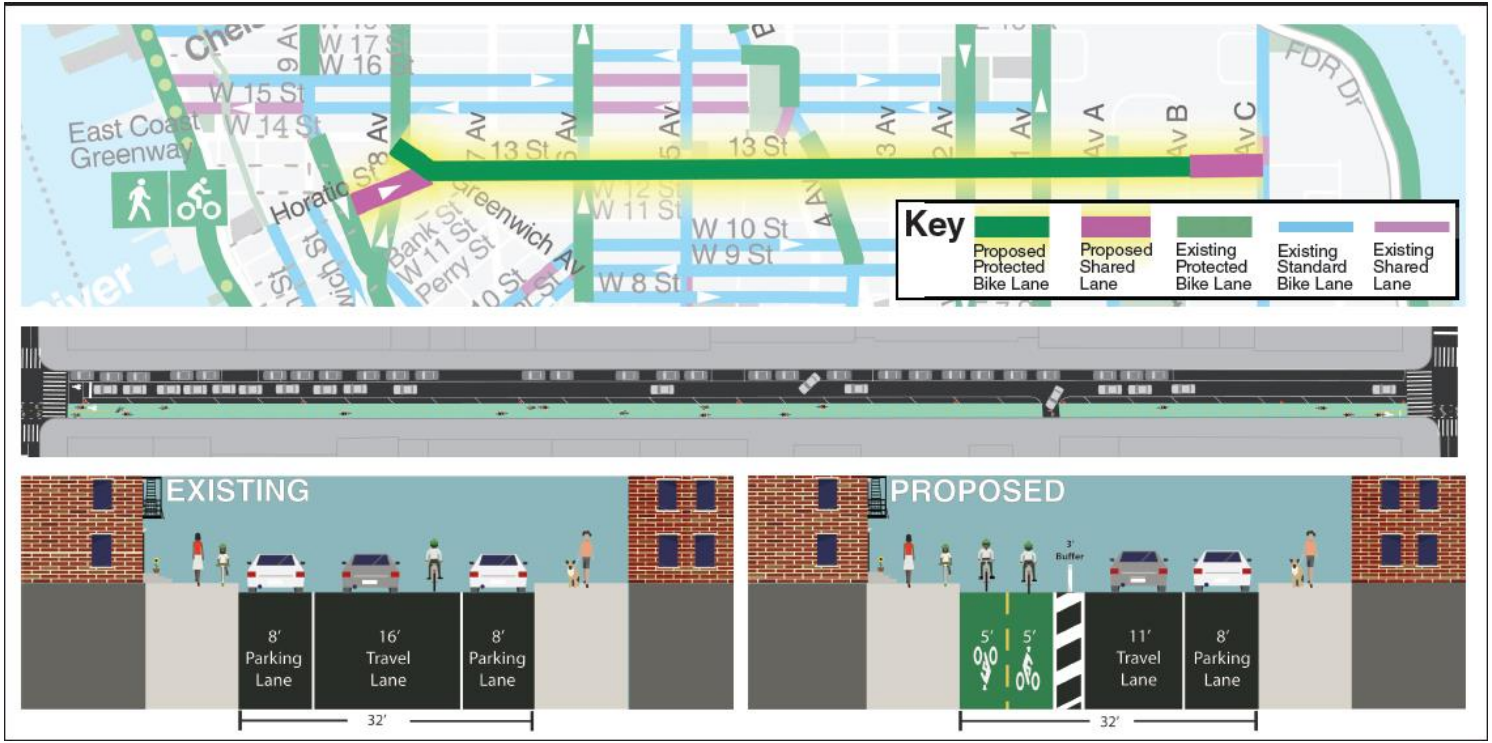
14TH ST DESIGN OPTIONS



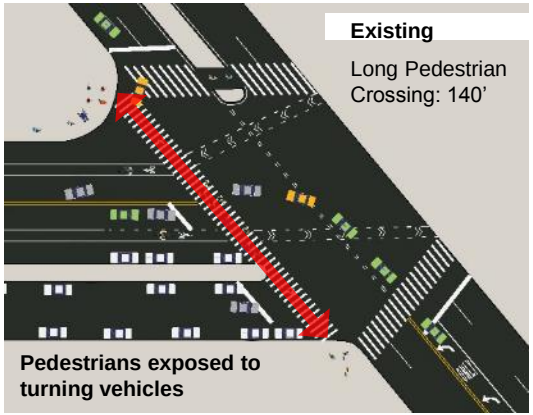


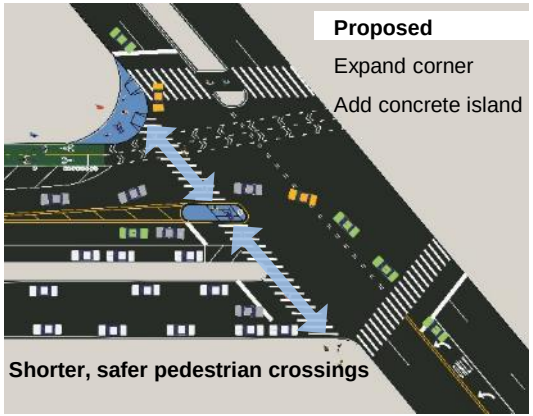
- Person-Hours of Delay accounts for the passengers on buses and in cars within the corridor
- Significantly more passengers will be carried on buses on 14th St than in cars on side streets
- Busway Plan offers the least overall delay to all street users

13TH STREET BIKE PATH



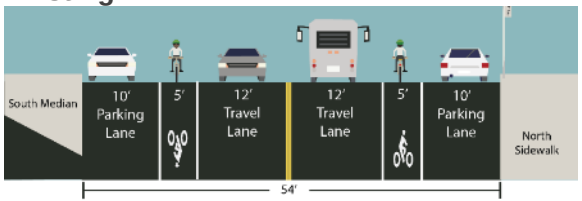
20th STREET BIKE PATH



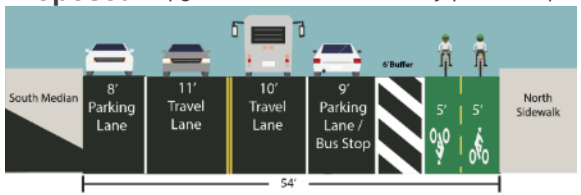


E 20th St, Facing West

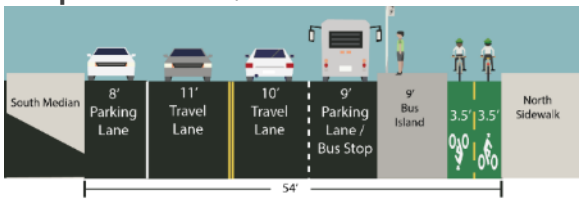
Existing: Standard bike lanes



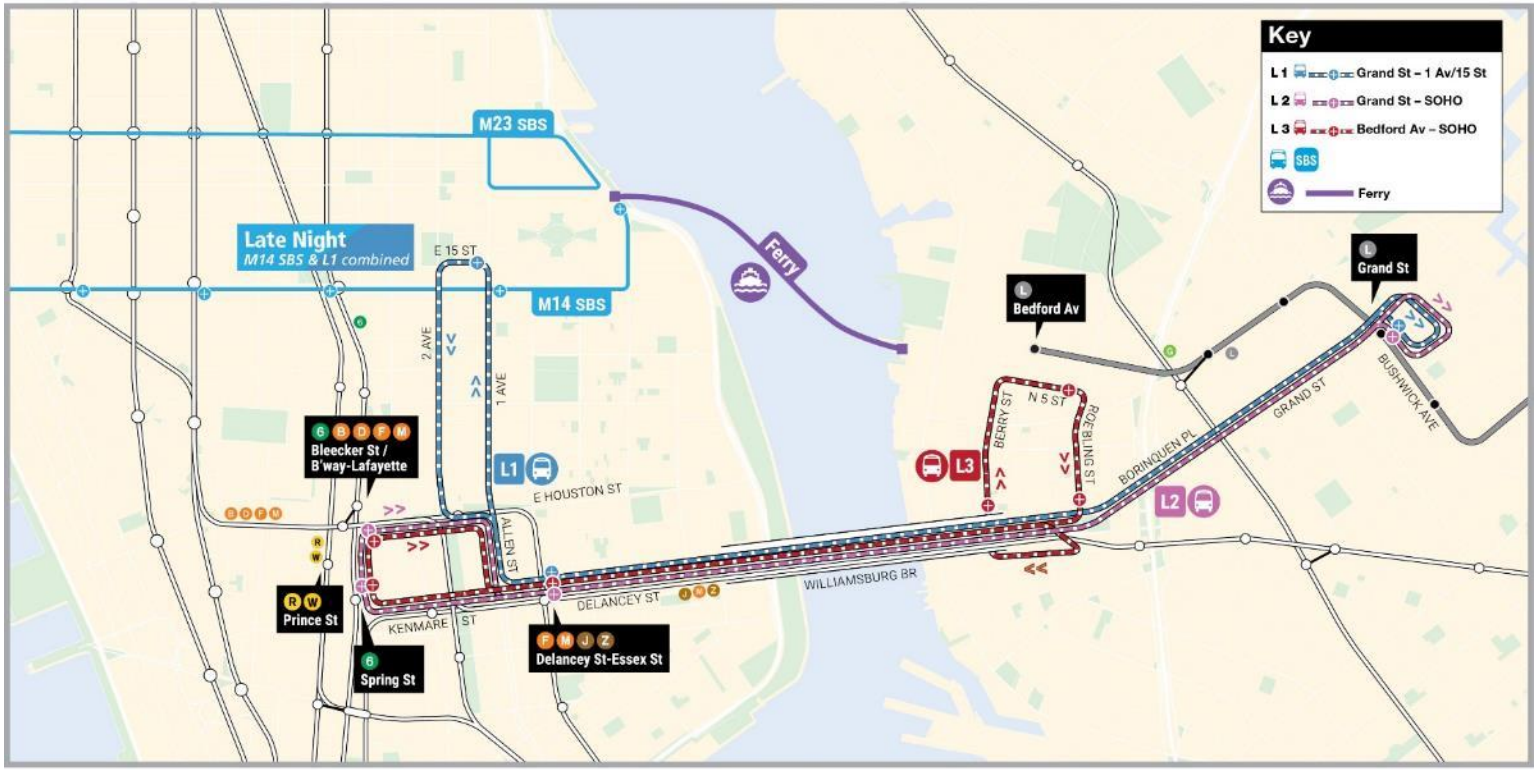
Proposed: Upgrade bike lanes to two-way protected path



Proposed: Bus Stop Treatment



INTER-BOROUGH BUS ROUTING



HOW TO MAKE L TRAIN CROSS-RIVER BUSES WORK

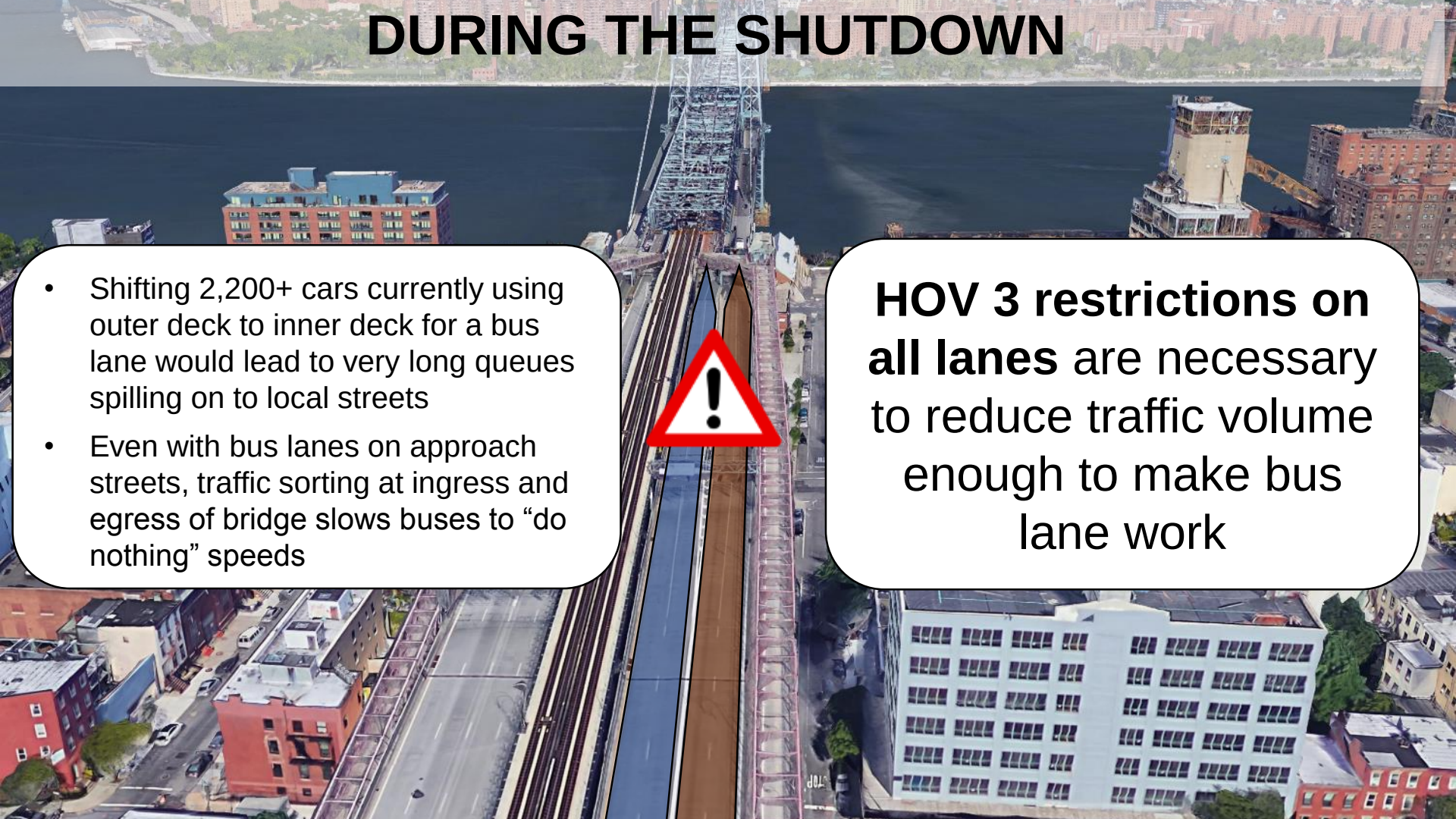
- Combined frequency of about 70 buses per hour in peak
- Target: end-to-end bus run times of about 25 minutes
- Near free-flowing speeds across the bridge

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

<u>Doing nothing is not acceptable</u>

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:

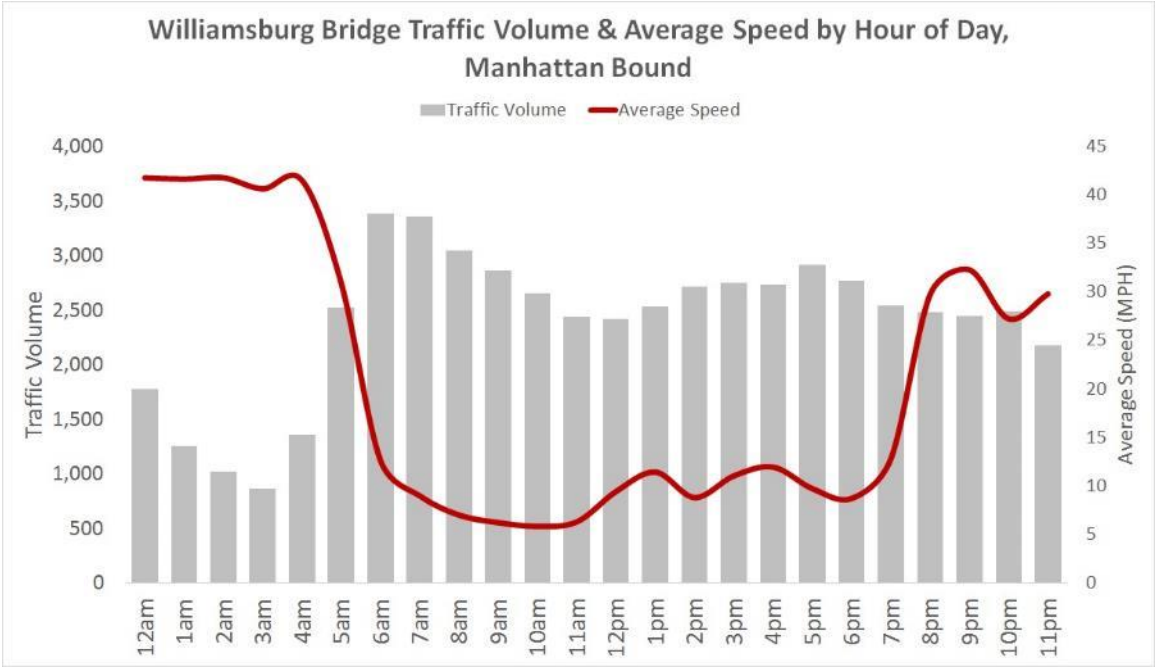
• Standard NYPD enforcement

• Automated enforcement under consideration

Travel Information:

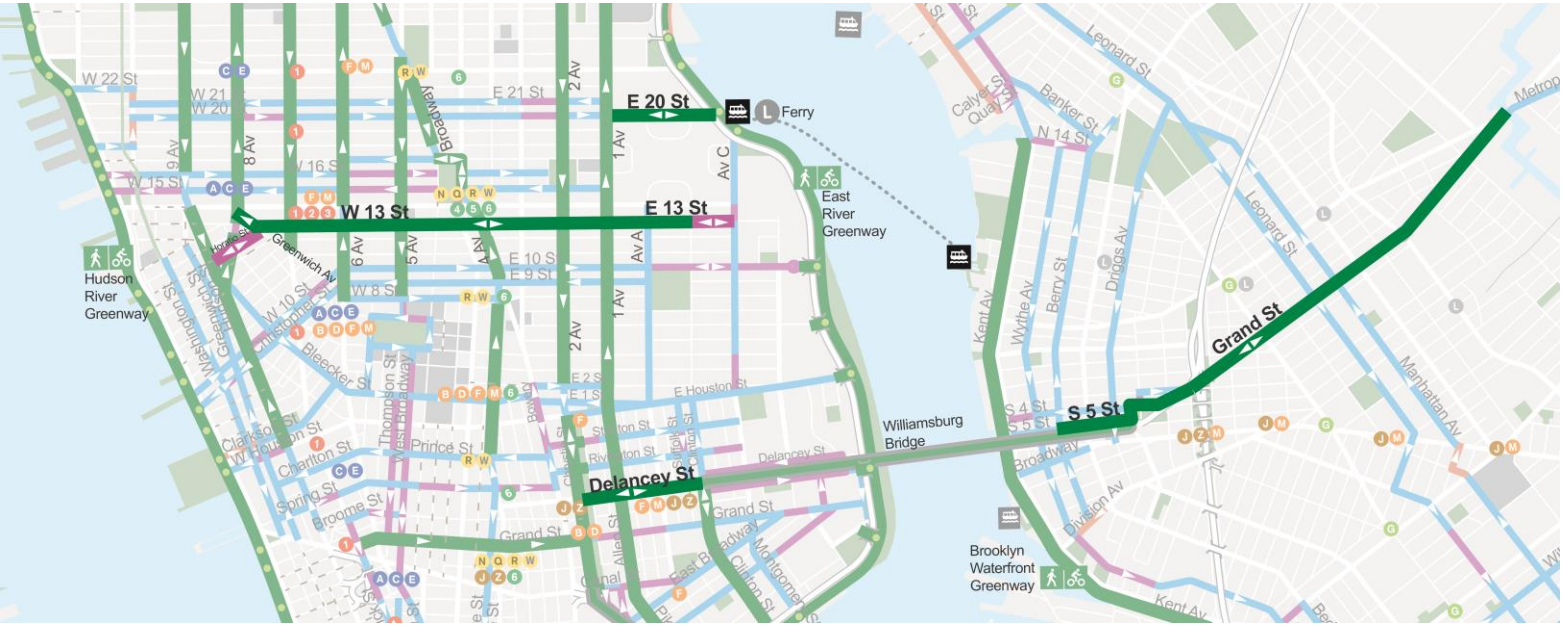
• City/MTA will facilitate carpool & other alternatives

• Go Smart program to communicate travel options to affected commuters



PROPOSED STREET TREATMENTS

ADDITIONAL BIKE AND PEDESTRIAN MITIGATIONS

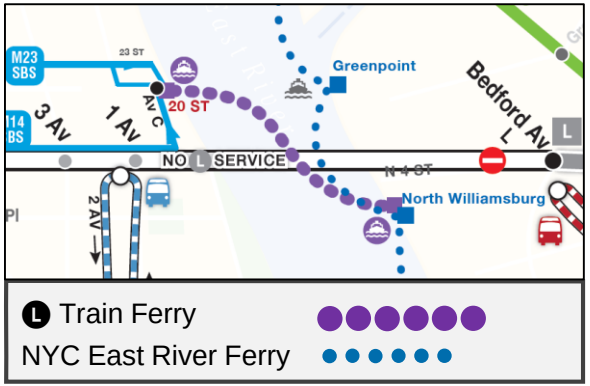


- Additional conventional bike parking and high capacity bike parking
- Potential CitiBike expansion, valet service
- Targeted pedestrian safety improvements, including at **Vision Zero** priorities and subway entrances

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 20th St and Avenue C)
- Temporary landing modifications at N Williamsburg
- Ongoing coordination with NYCEDC, NYCDOT, and NYCDPR



ALTERNATE SERVICE