

WELCOME TO THE WORKSHOP!

1. Please turn on your camera.



Hello!
My name is

2. Please introduce yourself at arrival in the **Chat** (Alt + H).

3. Please mute yourself while others speak.



4. Need technical assistance? Reach out to
REBECCA JULIE





CANAL STREET

VIRTUAL WORKSHOP

March 7, 2022

AGENDA & SPONSORS

- **Introductions**
- **Presentation**
- **Workshop**
 - Breakout Sessions
- **Closing Conversation**
 - Workshop Summaries
 - Next Steps
 - Q & A

Workshop Sponsors:

- Congressman Jerry Nadler
- Congresswoman Nydia Velázquez
- State Senator Brad Hoylman
- State Senator Brian Kavanaugh
- State Assembly Member Deborah J. Glick
- Council Member Erik Bottcher
- Council Member Christopher Marte

INTRODUCTIONS

Introductions:

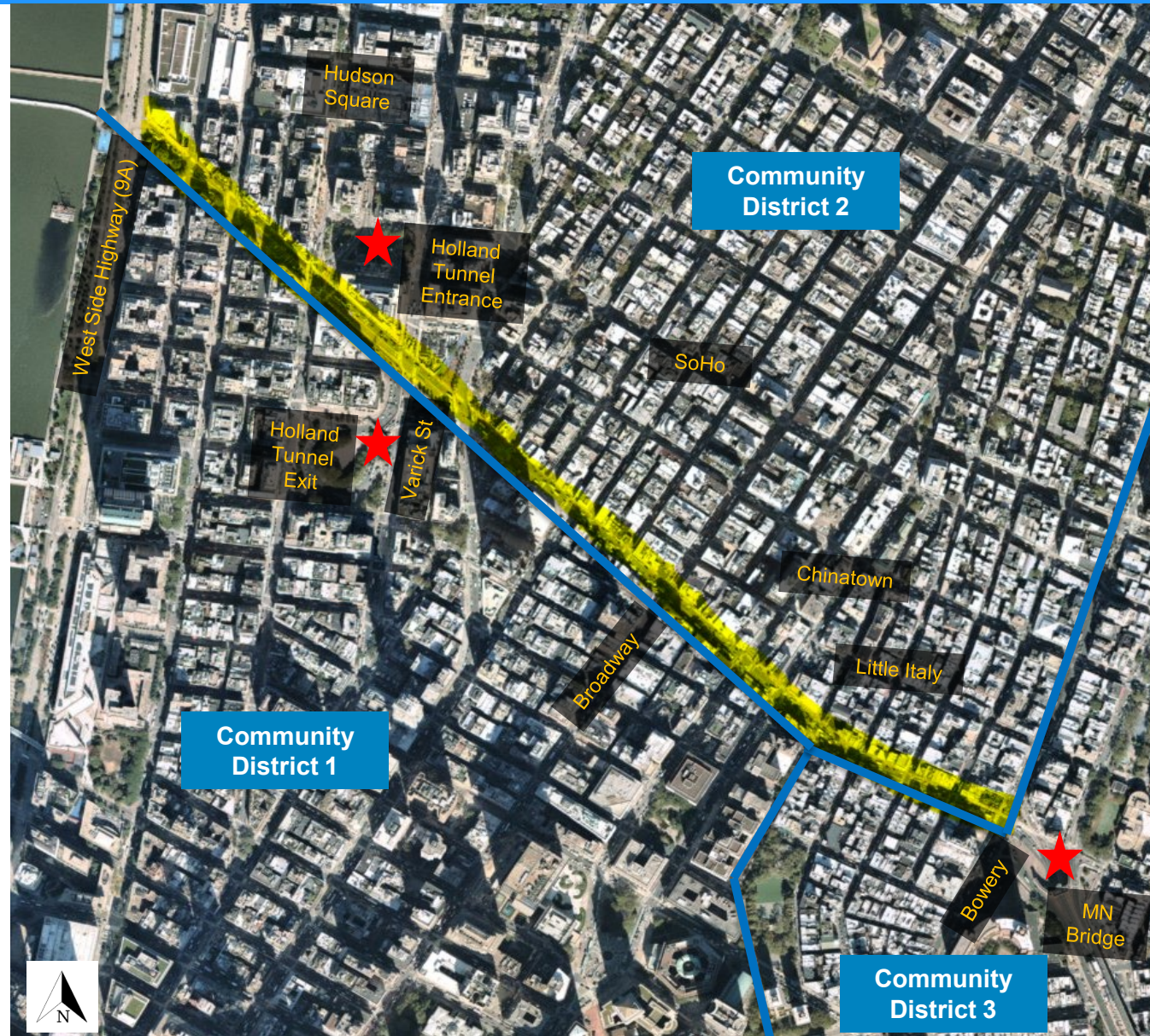
- **Ed Pincar**, Manhattan Borough Commissioner

Background

1

CANAL STREET PROJECT SCOPE

- Canal St and the surrounding neighborhoods are a top NYC tourism destination which see some of the highest pedestrian volumes in the city
- The street also acts as a connector for interstate vehicle travel between the Manhattan Bridge & the Holland Tunnel
- These activities are often at odds with each other, creating a frustrating environment for all users



CANAL STREET CALLS FOR IMPROVEMENT

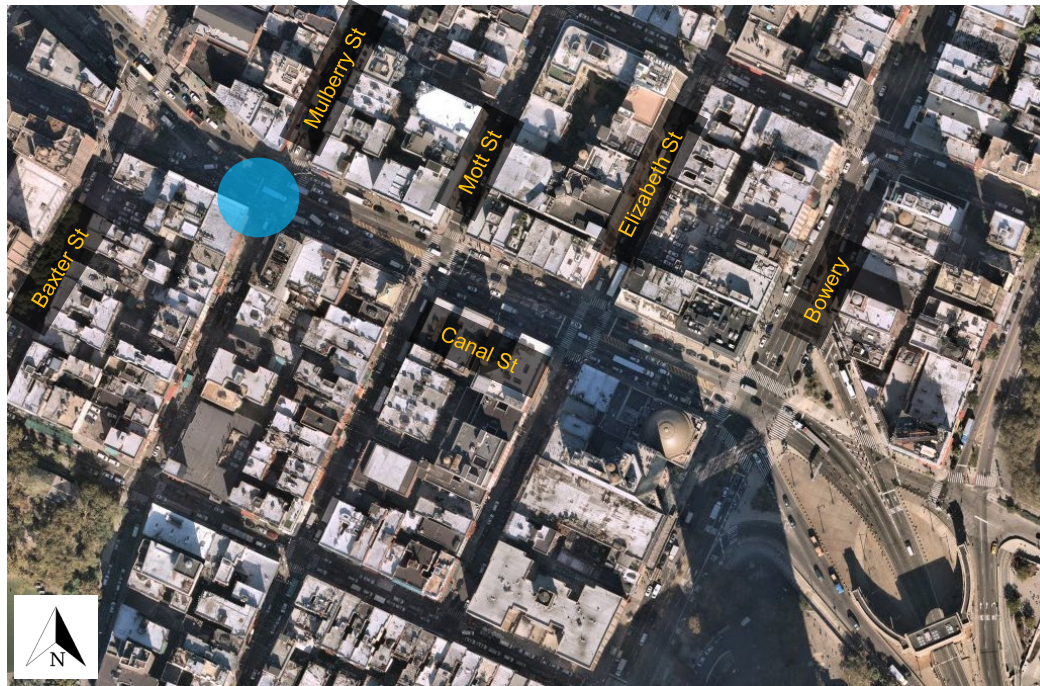
- Canal Area Transportation Study (CATS)
 - Multi-phase traffic engineering study 2002-2010
 - Recommendations
 - HOV lane on MN Bridge (implemented 2007)
 - Curb extensions along corridor (capital funding needed)
 - Restricted left turns between Elizabeth-Lafayette and W Broadway, Greene, Broadway (Greene implemented)
- CB1 voted unanimously to Fix Canal in 2020
 - Expanded pedestrian space
 - Improved loading zones
 - Bike facilities
- SoHo-NoHo Rezoning commits DOT to study Canal Street between Bowery and West Side Highway
 - Potential pedestrian safety improvements, upgraded public spaces, and improved freight strategies and parking regulations
- Transportation Alternatives #FixCanal Campaign
 - Calls for traffic calming, improved safety measures, congestion management



Previous DOT Work on Canal Street

2

PAST IN-HOUSE IMPROVEMENTS



- Painted sidewalk and corner curb extension at Mulberry/Canal
- Expanded sidewalk on Walker/Baxter triangle
- Enhanced crossing visibility
- Additional pedestrian space



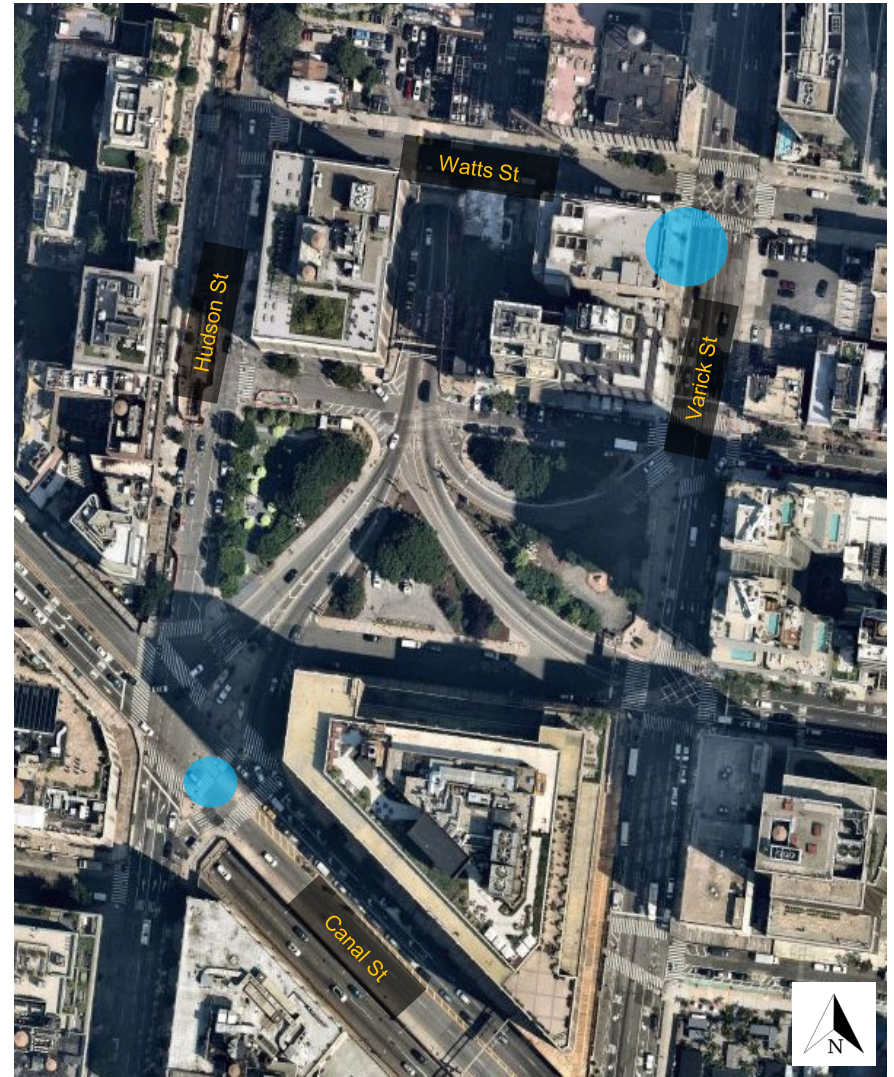
PAST IN-HOUSE IMPROVEMENTS



- Pedestrian improvements at Bowery/MN Bridge approach
- Curb extensions/increased pedestrian space
- Pedestrian islands in crossing
- New signalized crosswalk across Bowery slip

PAST IN-HOUSE IMPROVEMENTS

- Expanded pedestrian space on Varick Street
- New pedestrian islands for safer crossing near H Tunnel



PAST IN-HOUSE IMPROVEMENTS



- New bike lanes off of Canal Street:
 - Greenwich Street
 - Hudson Street
 - W Broadway
- Lack of bike facilities both on Canal and crosstown-MN generally



PAST DOT INVOLVEMENT: EASTERN CANAL ST

- Open Street initiated in 2020
- Orchard St-Essex St
- Managed by local restaurants
- Future in-person pop-up workshop dates to be announced



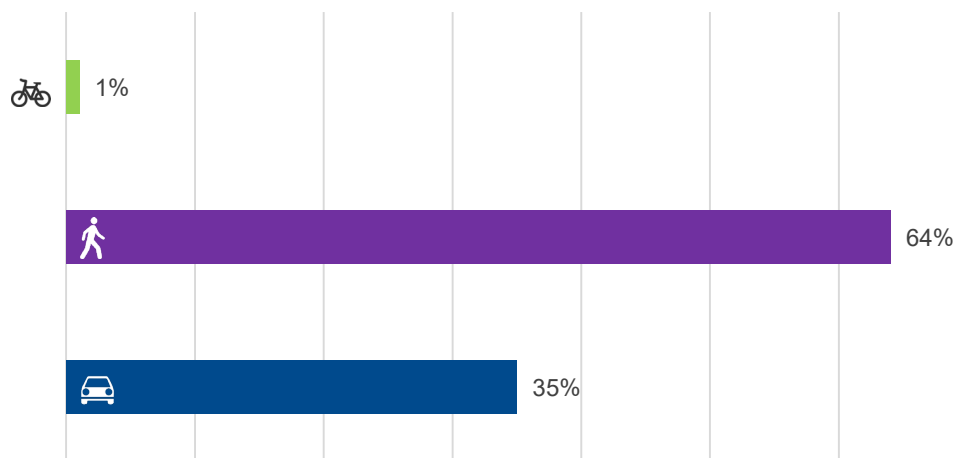
Existing Conditions & Safety

3

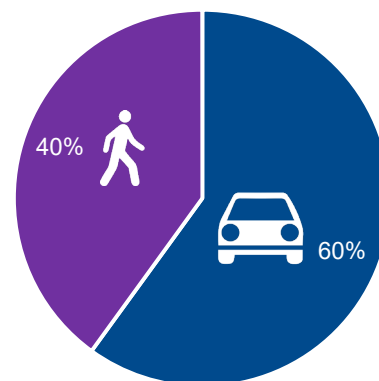
CANAL ST ROADSHARE/MODESHARE

- Pedestrians account for 64% of corridor users (data from PM peak hour)
 - 17,848 Pedestrians
 - 9,675 Vehicles
 - 513 Bicyclists
- Road: 60'
- Sidewalks: 12'-20'
- High pedestrian volumes result in crowding and people walking in curbside lanes
- Automotive uses are allocated more moving space despite lower mode share

Existing Canal Street Mode Share



Existing Canal Street Road Share
(No bike facilities)



CANAL STREET: PEDESTRIANS

Multiple subway lines provide easy pedestrian access to the major shopping, work, and nightlife destinations in SoHo, Chinatown, Little Italy and Hudson Square and along Canal Street



EXISTING CONDITIONS: PEDESTRIANS

- Sidewalks along Canal St are generally 12-20 feet wide
- Commercial activity and other structures on the Canal St sidewalks create pinch points impeding the flow of pedestrians



EXISTING CONDITIONS: PEDESTRIANS

- Heavy traffic congestion often spills back over crosswalks, resulting in conflicts with crossing pedestrians

**Canal St Pedestrian Injuries: Bowery-
West Side Highway**
2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	167	9	1	10



CANAL STREET: BICYCLES



- No bike infrastructure on Canal Street
- Citibike Station at Canal St/6th Ave
- No nearby Westbound crosstown connection

Canal St Bicyclist Injuries: Bowery-West Side Highway 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Bicyclist	73	7	1	8



EXISTING CONDITIONS: VEHICLES

- Frequently gridlocked traffic
- Through Truck Route with high truck volumes

**Canal St Truck & Car Injuries:
Bowery-West Side Highway**
2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Truck & Car	431	12	1	13



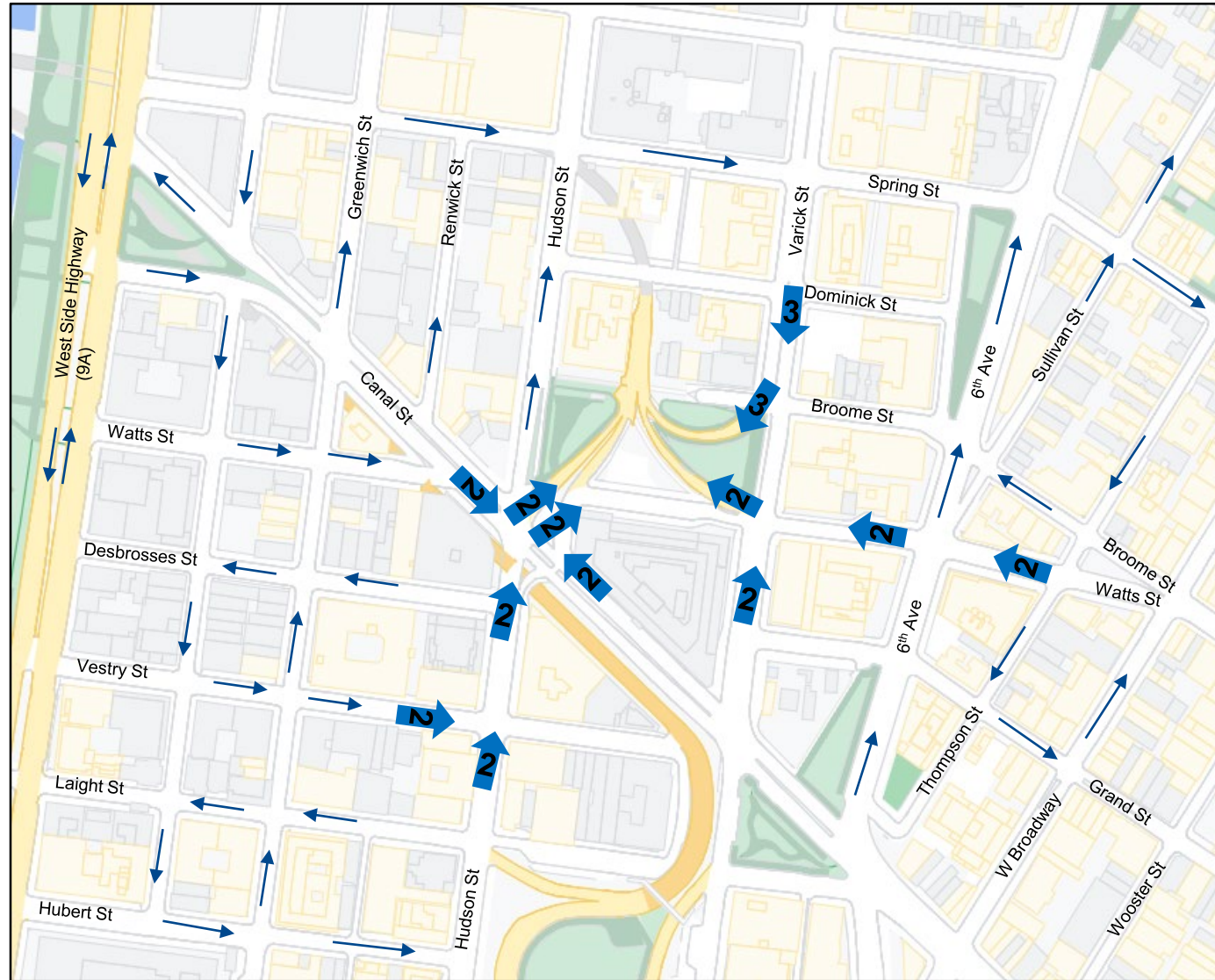
TOLLING CHANGES AND CANAL ST

- Verrazzano-Narrows Bridge (VNB) implemented two-way tolling on 12/1/2020 (split outbound toll between outbound and inbound lanes)
- However, no significant change in traffic volumes for outbound VNB following toll reduction
 - Average weekday VNB outbound volume (May-October 2019): 109,759
 - Average weekday VNB outbound volume (May-October 2021): 109,007
- Tolling change did not affect traffic volumes



HOLLAND TUNNEL APPROACH

- 15 travel lanes merge into 2 in the Holland Tunnel
- No amount of additional traffic capacity on Canal St would reduce traffic backups because the source of the backups is the tunnel

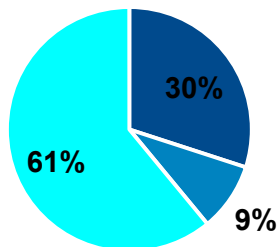


2 EB Canal + 2 WB Canal + 2 Vestry + 2 Hudson + 3 Varick + 2 6th + 2 Watts
= 15 lanes feeding into 2 Holland Tunnel travel lanes

CANAL STREET TRIP DATA

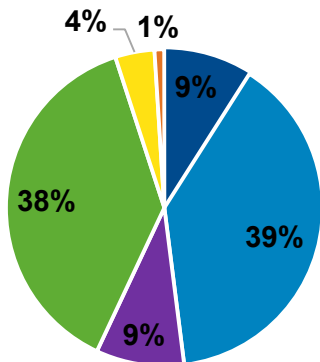
- GPS tracking data shows the origins of vehicles going to and coming from Canal St

Origin of Vehicles Heading to Canal St by Route



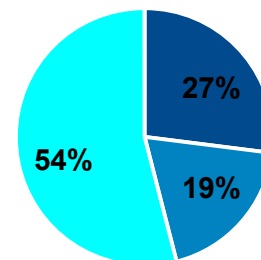
■ MN Bridge ■ Holland Tunnel ■ Other routes

Origin of Vehicles Heading to Canal St by Borough



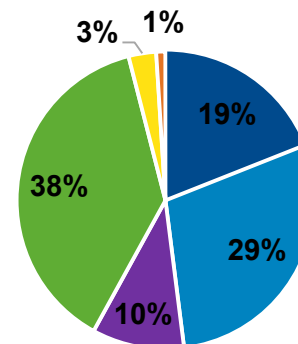
■ NJ ■ MN ■ Q ■ BK ■ BX ■ SI

Destination for Vehicles Coming From Canal St by Route



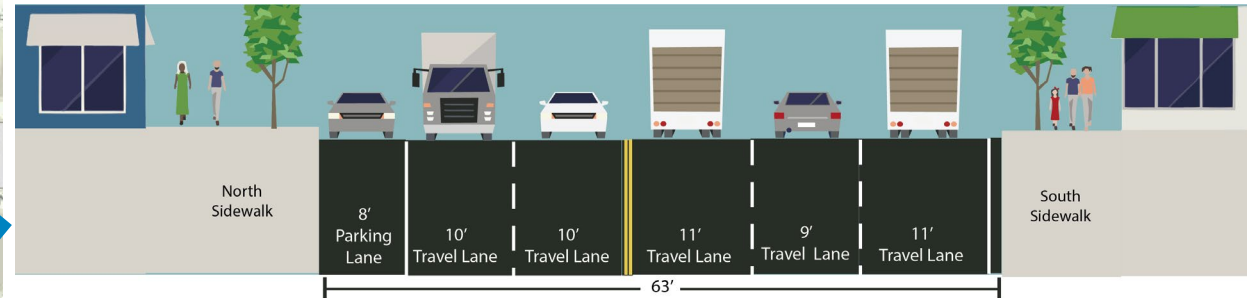
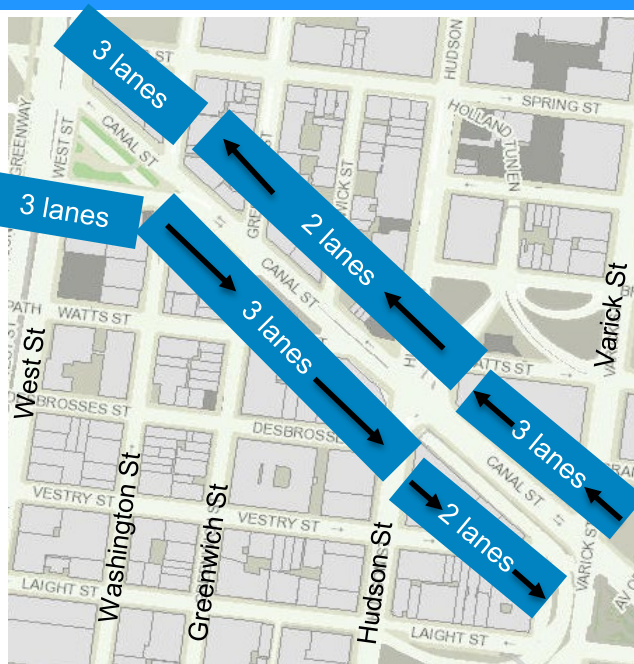
■ MN Bridge ■ Holland Tunnel ■ Other Routes

Destination for Vehicles Coming From Canal St by Borough

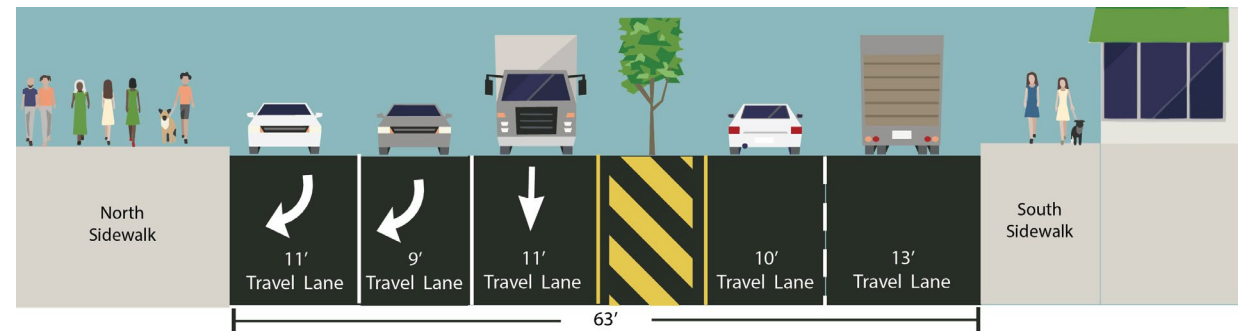


■ NJ ■ MN ■ Q ■ BK ■ BX ■ SI

CANAL STREET: WEST SIDE HIGHWAY – MERCER ST LANE CONFIGURATION



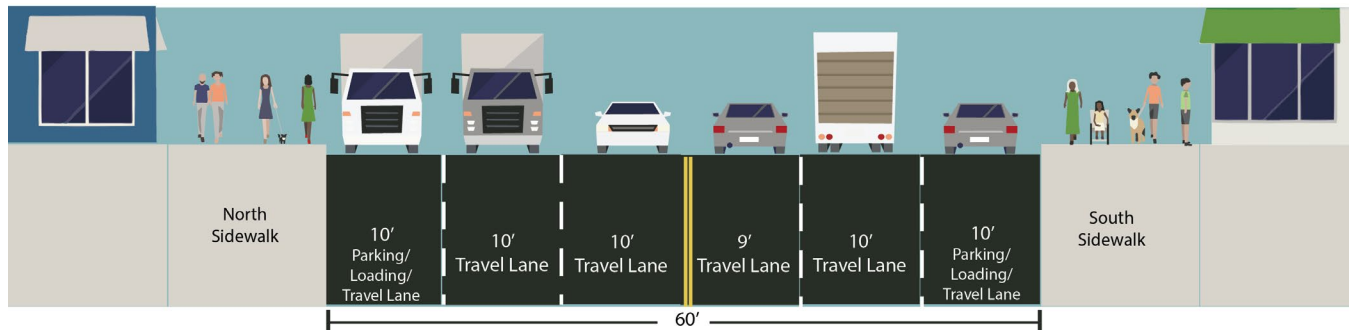
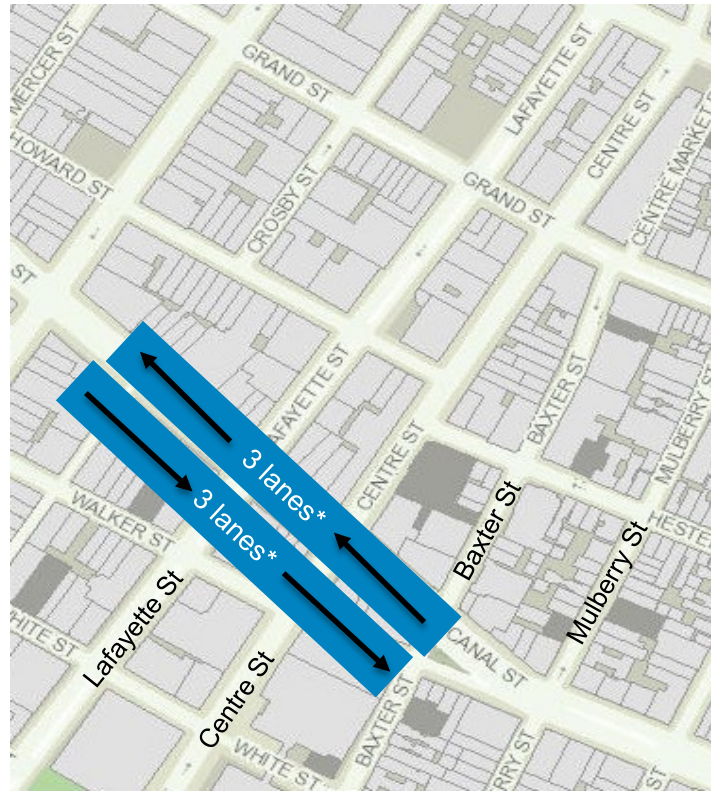
Washington St-Hudson St



Hudson St-Mercer St*

* = when cars are parked btwn Varick and Mercer it becomes 2 lanes

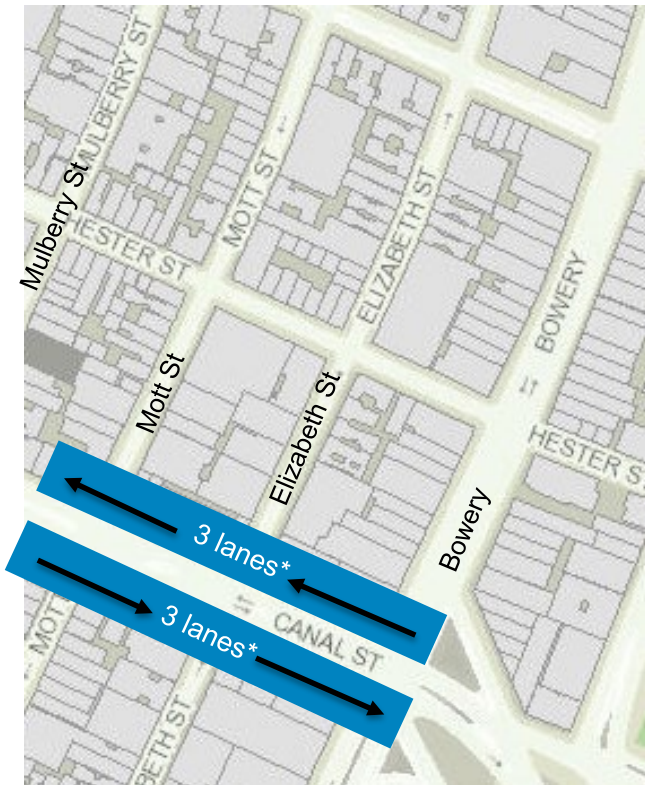
CANAL STREET: MERCER ST – MULBERRY ST LANE CONFIGURATION



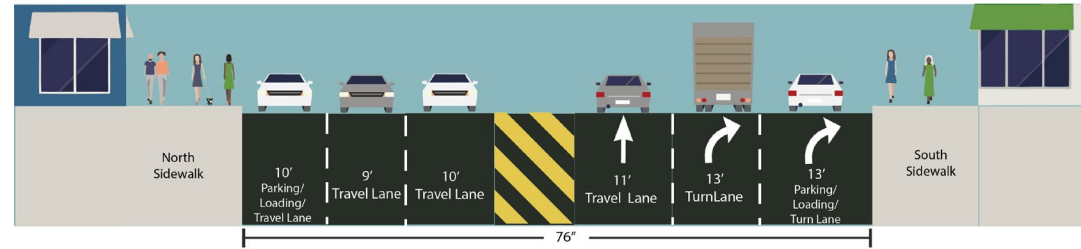
* = when vehicles are parked it becomes 2 lanes

CANAL STREET: MULBERRY ST – BOWERY

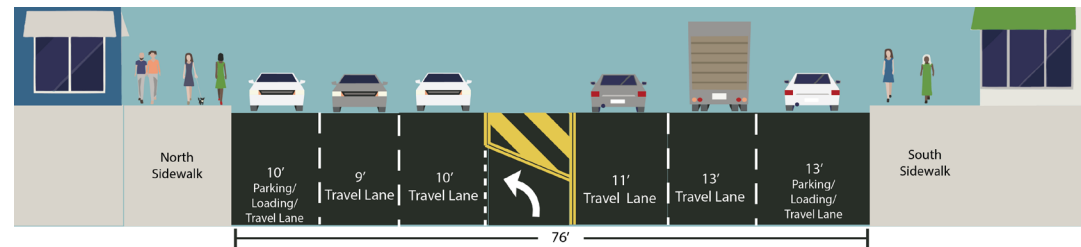
LANE CONFIGURATION



* = when cars are parked it becomes 2 lanes



Bowery-Elizabeth St



Elizabeth St-Mott St

Tool Kit

4

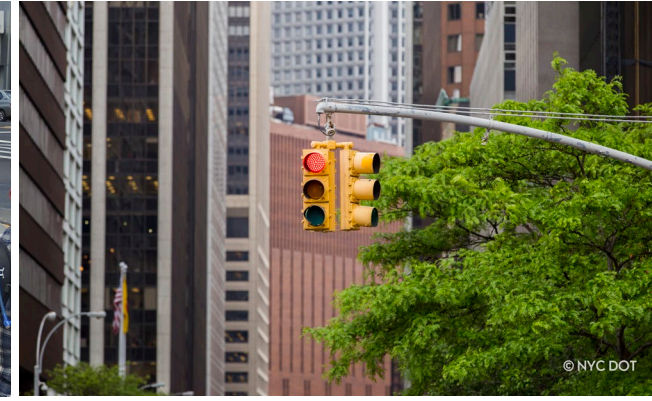
IN-HOUSE TOOLKIT



Painted Pedestrian Space with Flexible Delineators



Concrete Islands



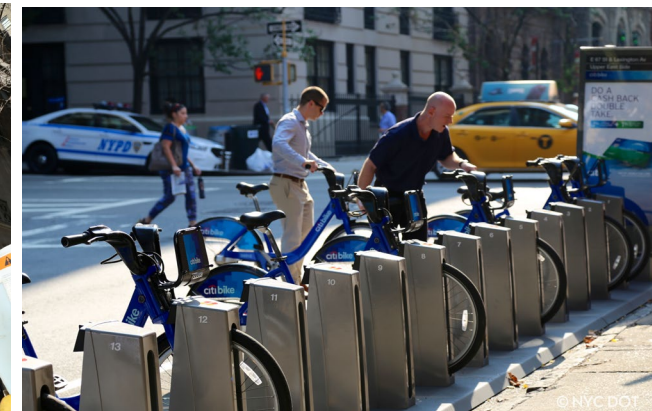
Signal Timing Changes



Bike facilities



Curb and loading regulations



Street Furniture and Amenities

- In-house projects can be done relatively quickly using existing contracts and staff, basic materials and construction
- These projects can set the stage for future capital work

CAPITAL TOOLKIT

- Capital projects take longer to obtain funding, procure a design and construction contract, and undertake major construction work

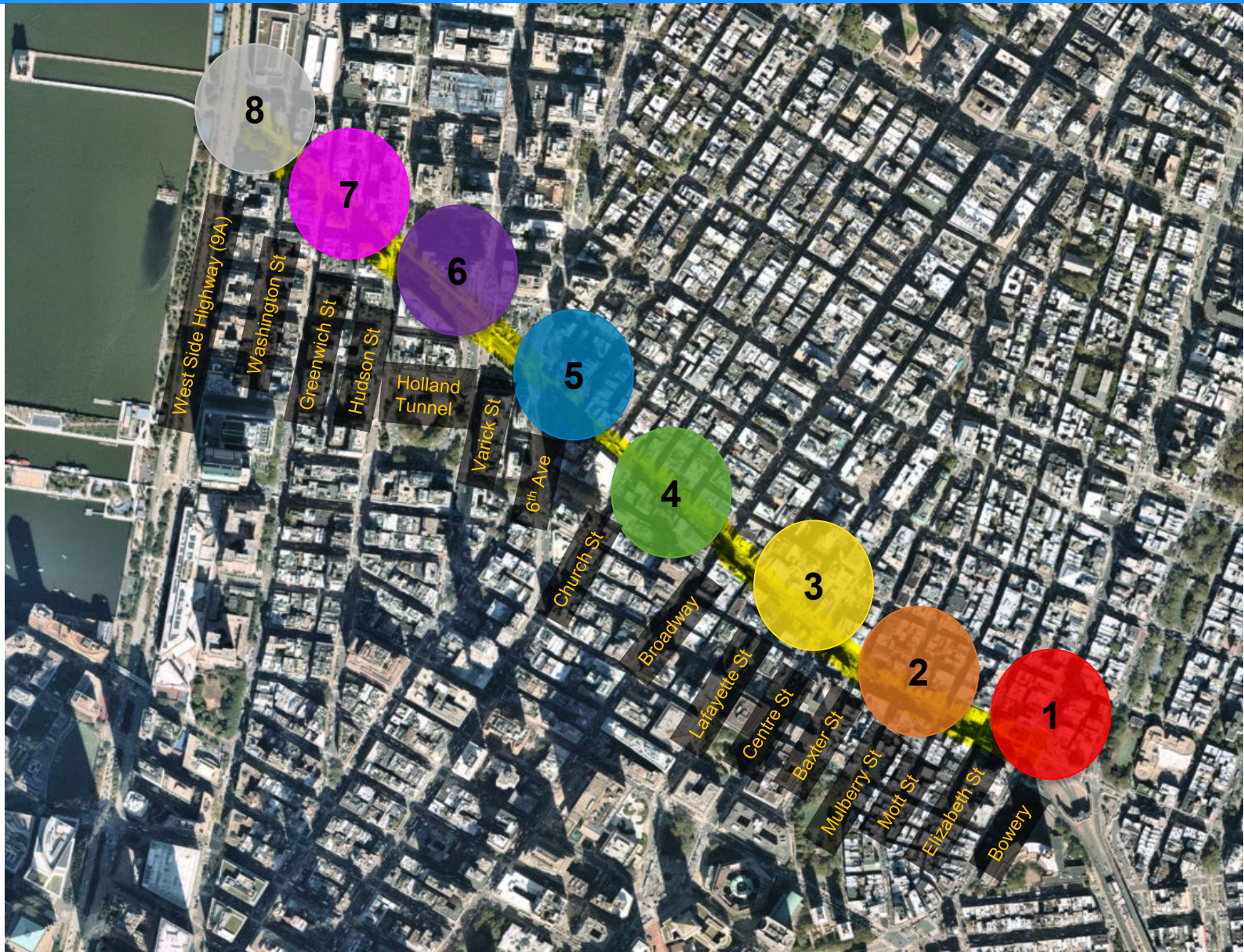


- Build out of slip lane closures (before and after above)
- Concrete sidewalk expansion with improved drainage

Breakout Sessions

5

BREAKOUT SESSIONS



WORKSHOP TOOLS

The image displays a web-based workshop tool interface for mapping. At the top, a navigation bar includes buttons for Unmute, Start Video, Security, Participants, Chat, New Share, and Pause Share. A green status bar indicates "You are screen sharing". Below this, a blue banner features the text "CANAL STREET" with a large orange circle containing the number "1" and another orange circle containing the number "2". The main map area shows an aerial view of a city street grid. A yellow highlighted path runs diagonally across the map, starting from the left and extending towards the right. Labels on the map include "West St (9A)", "Holland Tunnel", "Church St", "Broadway", "Lafayette St", "Centre St", and "Bowery". A north arrow is visible in the bottom left corner of the map. A toolbar at the bottom of the map contains various tools: Mouse, Select, Text, Draw, Stamp, Spotlight, Eraser, Format, Undo, Redo, Clear, and Save. A context menu is open in the top right corner, showing options like "Request Remote Control", "Annotate", and "Exit Full Screen". A large orange circle with the number "3" is positioned near the context menu.

1 CANAL STREET 2

3

Unmute Start Video Security Participants Chat New Share Pause Share

You are screen sharing

West St (9A) Holland Tunnel

Church St Broadway Lafayette St Centre St Bowery

Mouse Select Text Draw Stamp Spotlight Eraser Format Undo Redo Clear Save

Request Remote Control Annotate Exit Full Screen

WORKSHOP TOOLS

SHOW Unmute Start Video Security Participants Chat New Share Pause Share

You are screen sharing Stop Share

CANAL STREET

1 2 3

West St (9A) Holland Tunnel

Canal Workshop_F... x 1 / 2

You are viewing Dan Wagner's screen

View Options

- Zoom Ratio
- Fit to Window
- Request Remote control
- Annotate
- Exit Full Screen
- Side-by-side mode

is 2002 and Phase II was 2005-2010

Canal Street should remain two-way with s

and select left-turn restrictions, truck restrictions in the Holland Tunnel, and

ing AM peak hours on the Manhattan Bridge

Mouse Select Text Draw Stamp Spotlight Eraser Format Undo Redo Clear Save

Church St Broadway Lafayette St Centre St Bowery

N

WORKSHOP TOOLS

The image displays a screen-sharing interface for a workshop tool. The top bar includes controls for Unmute, Start Video, Security, Participants, Chat, New Share, and Pause Share. A green status bar indicates "You are screen sharing". The main area shows a map of Canal Street, with a yellow highlighted section and a red arrow pointing to a specific location. A blue box labeled "1" is positioned over the text "CANAL STREET". A blue box labeled "2" is positioned over the text "Holland Tunnel". A blue box labeled "3" is positioned over the text "Bowery". A toolbar at the bottom includes icons for Mouse, Select, Text, Draw, Stamp, Spotlight, Eraser, Format, Undo, Redo, Clear, and Save. A small inset window shows a "View Options" menu with "Request Remote Control", "Annotate", and "Exit Full Screen" options. A small inset window at the bottom left shows a compass and a set of icons: a white arrow, a white checkmark, an orange X, a white star, an orange heart, and an orange question mark.

1 CANAL STREET

2

3

Mouse Select Text Draw Stamp Spotlight Eraser Format Undo Redo Clear Save

View Options

- Zoom Ratio
- Fit to Window
- Request Remote Control
- Annotate
- Exit Full Screen
- Side-by-side mode

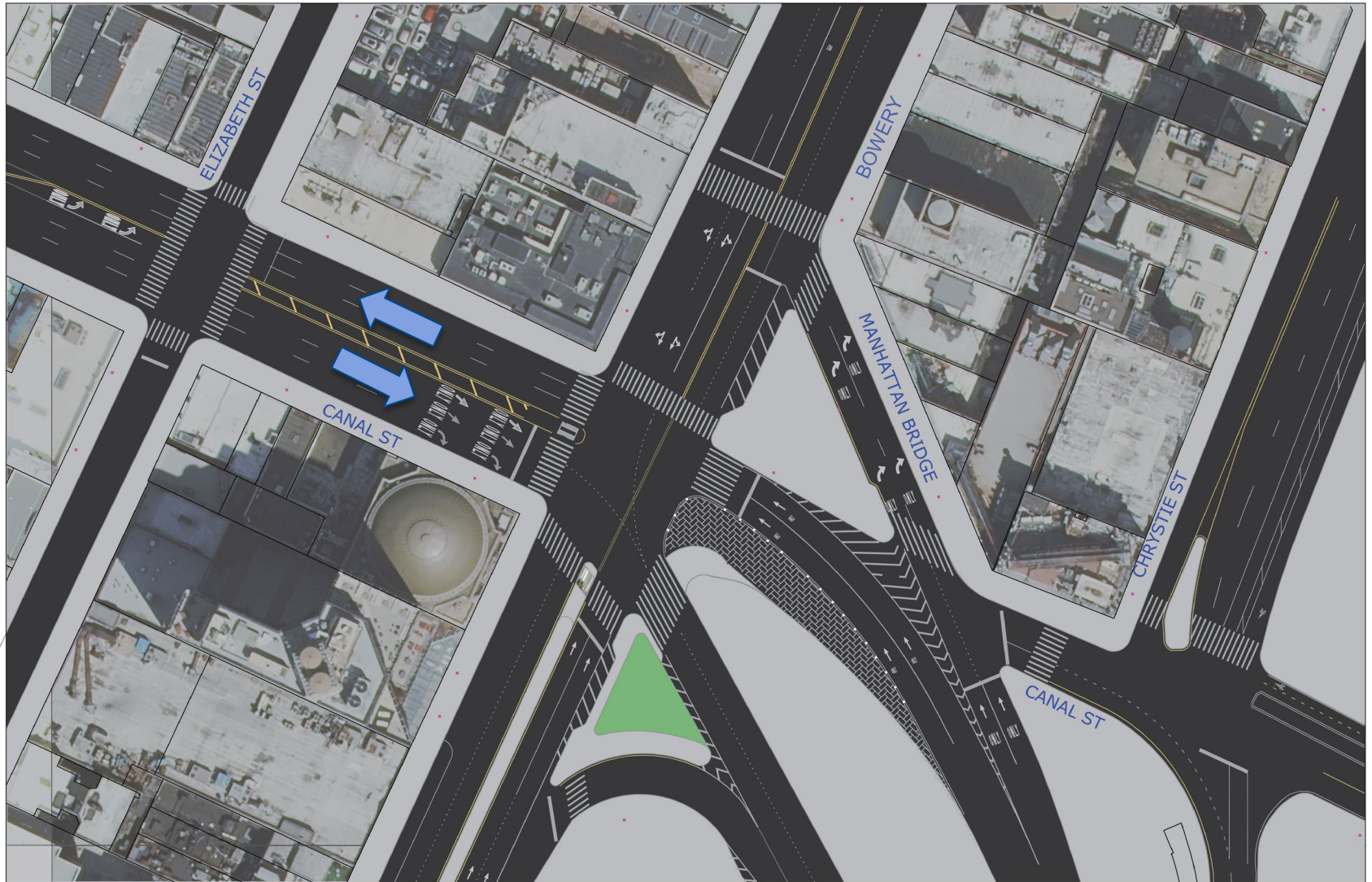
West St (9A) Holland Tunnel Broadway Lafayette St Centre St Bowery

BREAKOUT SESSIONS



- Are there any themes of concern across the corridor?
- In what ways does your view of the corridor change, moving East to West?
- How do you interact with these locations?
- What do you like about these locations?
- What are challenges at these locations?

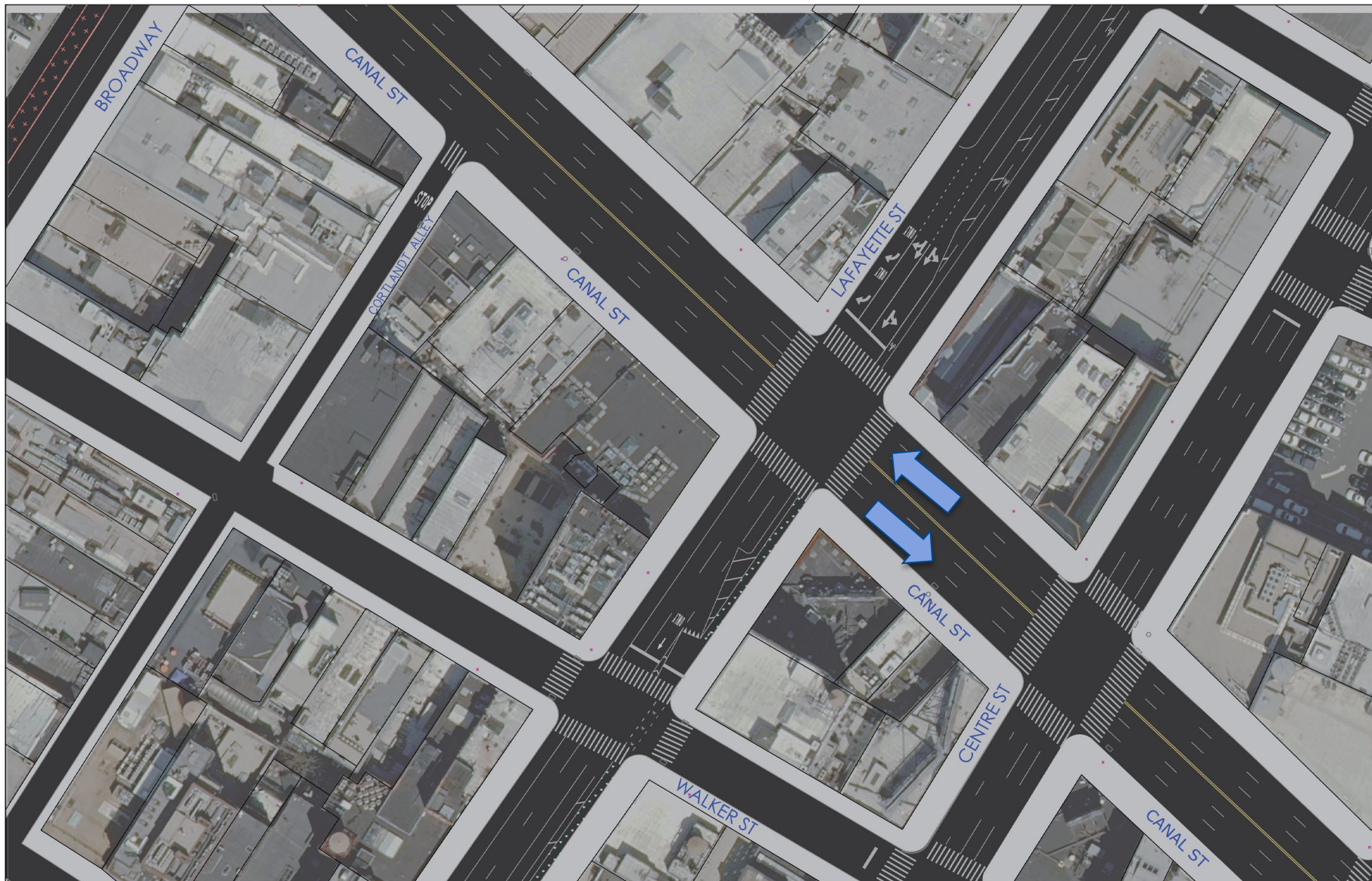
REGION 1: CHRYSTIE ST - ELIZABETH ST



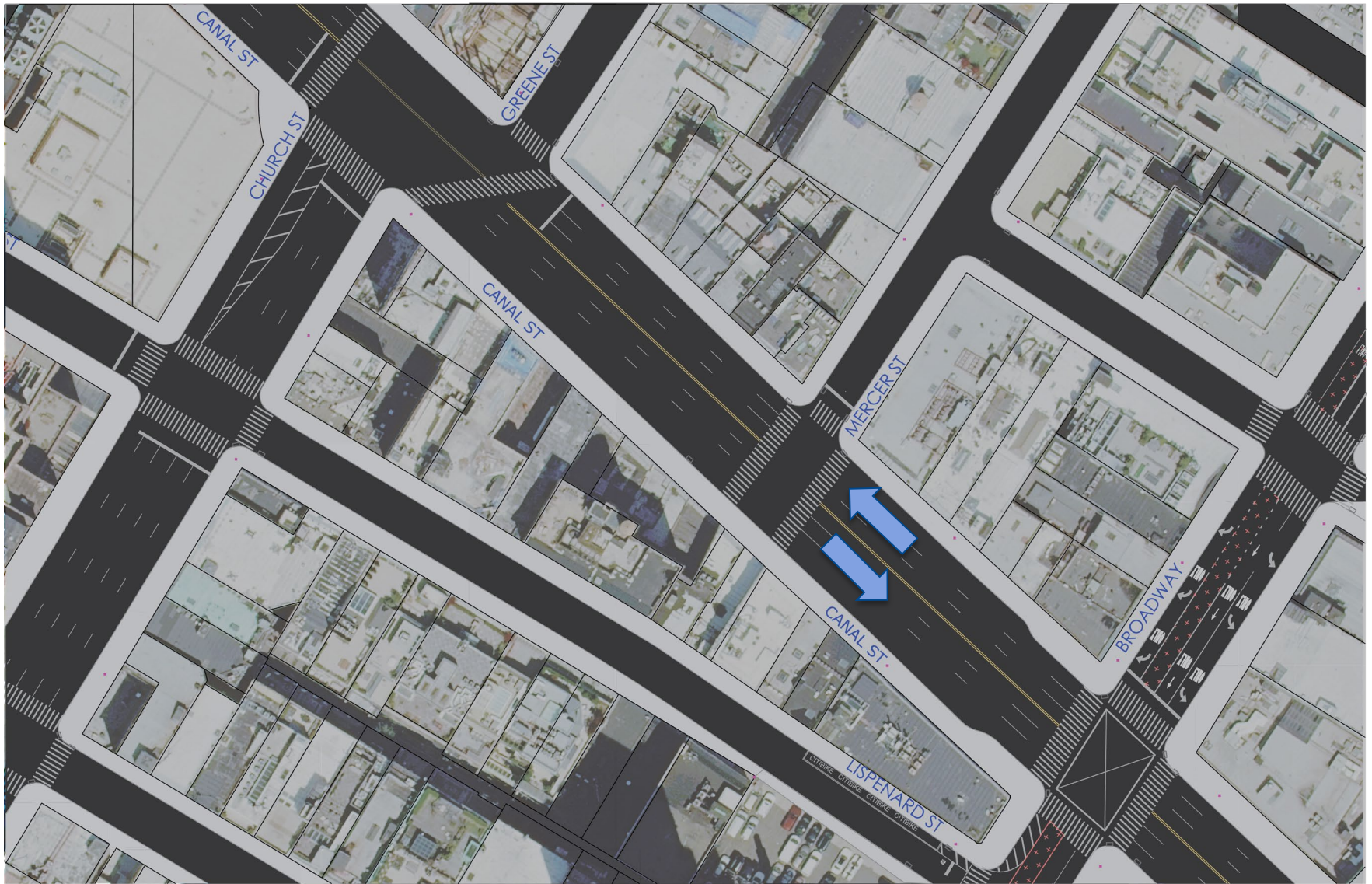
REGION 2: MOTT ST – BAXTER ST



REGION 3: CENTRE ST – LAFAYETTE ST



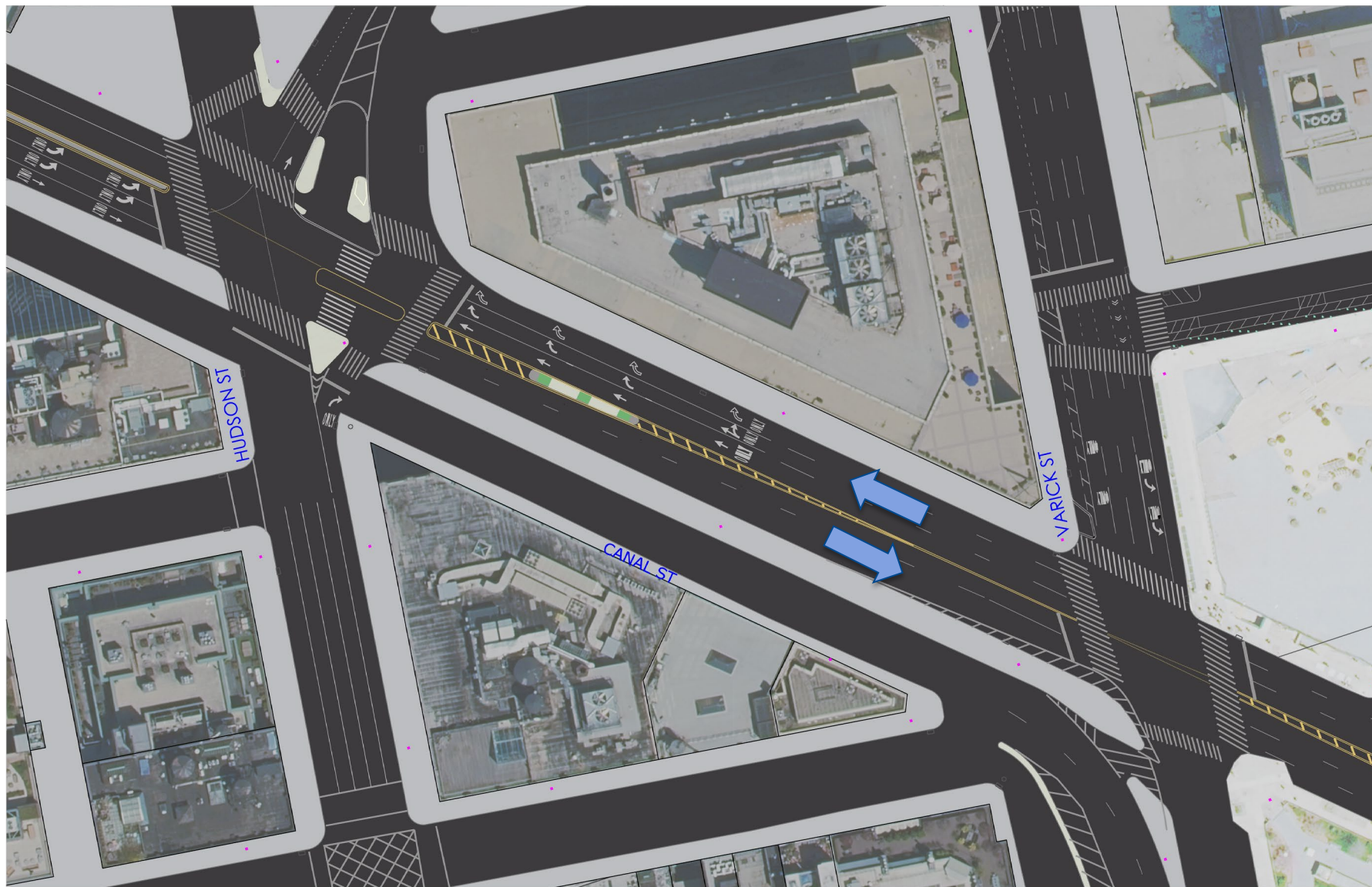
REGION 4: BROADWAY – CHURCH ST



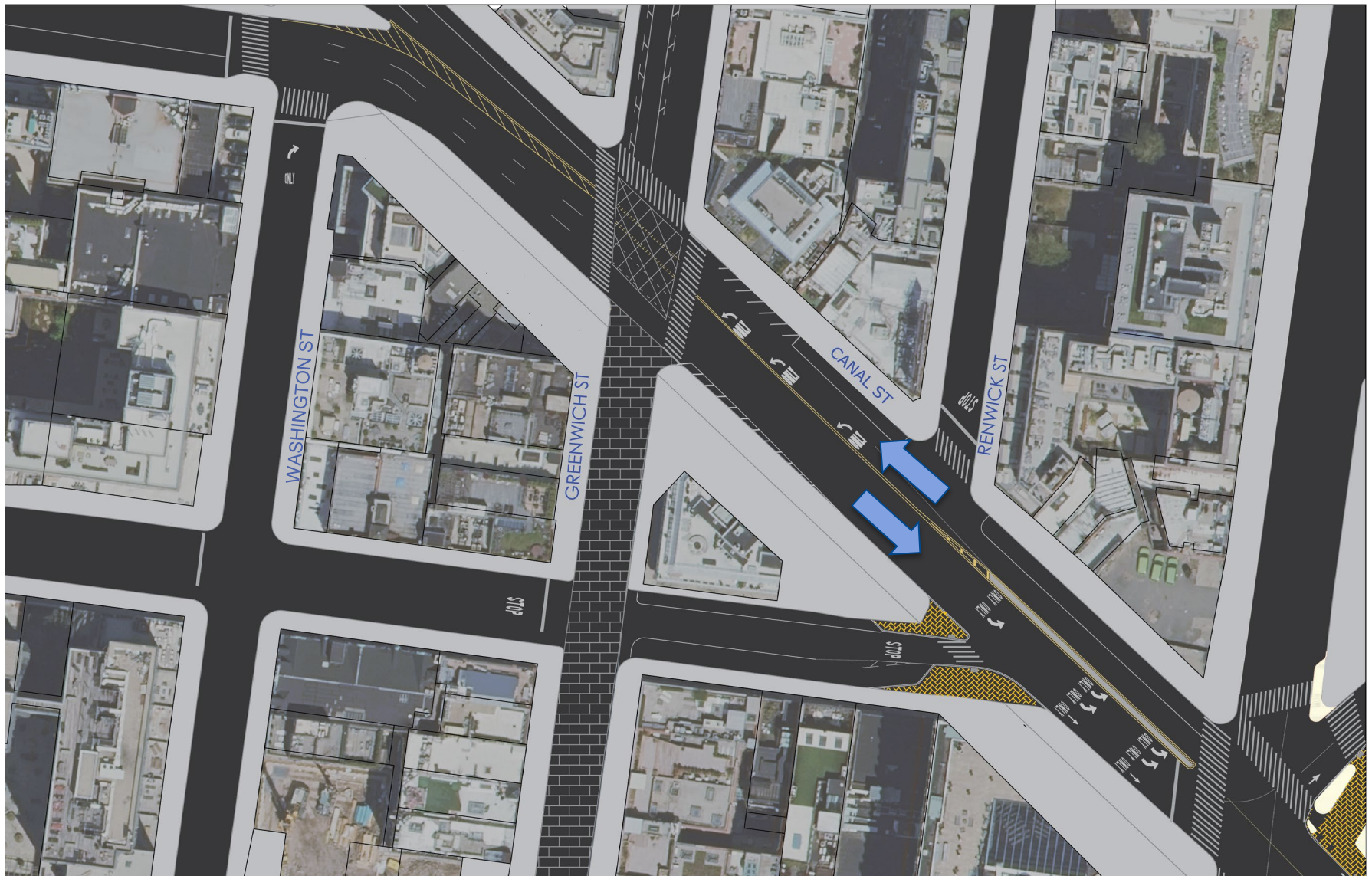
REGION 5: W BROADWAY – AVE OF THE AMERICAS



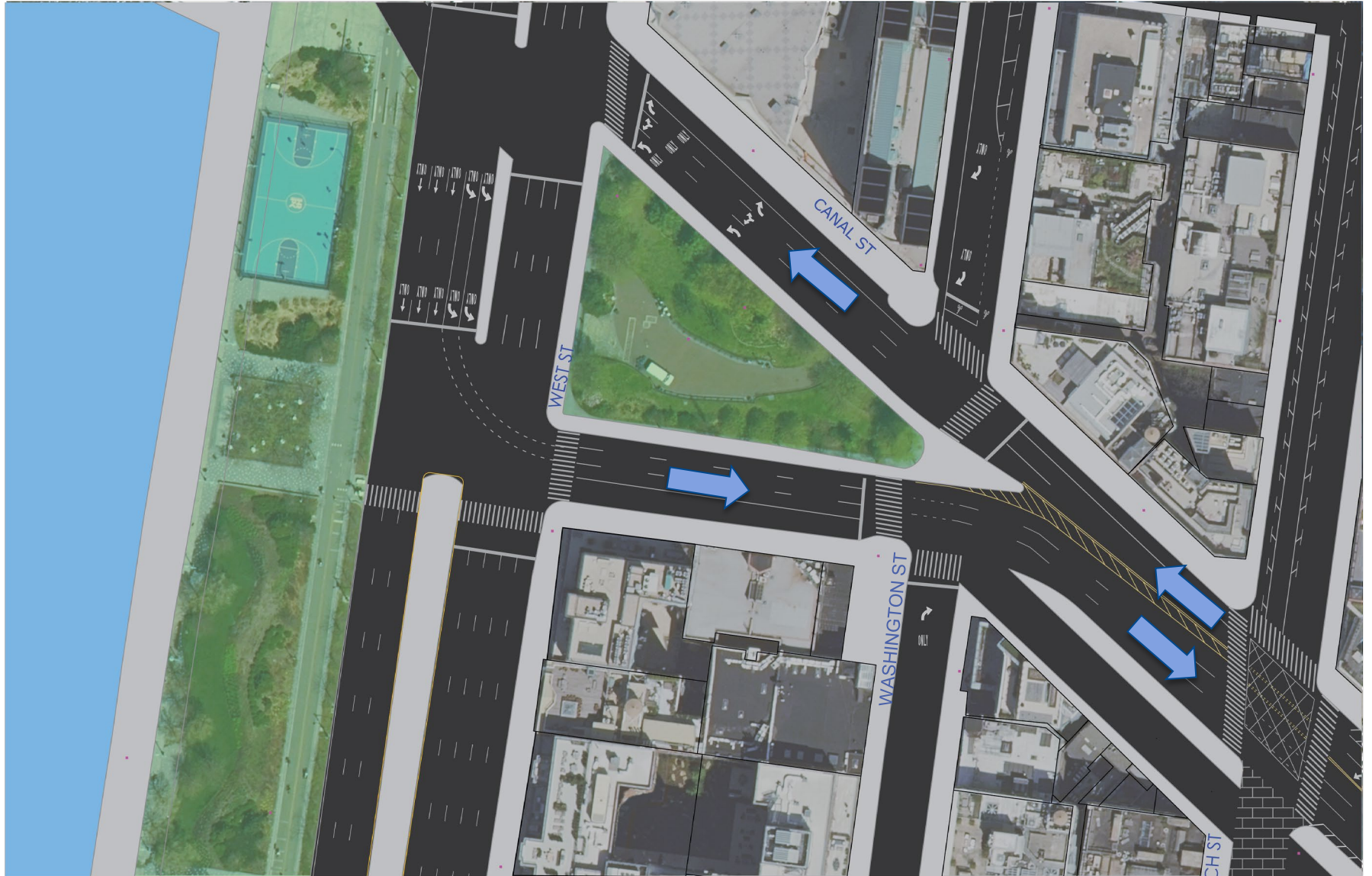
REGION 6: VARICK ST – HUDSON ST



REGION 7: RENWICK ST – GREENWICH ST



REGION 8: WASHINGTON ST- WEST SIDE HIGHWAY



Closing Conversation

6

OUTREACH PLAN

1. Conduct Virtual Workshop (March '22)
2. Engage businesses in merchant survey (March '22)
3. Open online portal for public participation (March '22)
-Portal link: <https://nycdotprojects.info/project-feedback-map/canal-street-feedback-map>
4. Make QR code available for easier portal and survey access (March-April '22)
5. Street ambassadors speak with public across corridor (May '22)



DOT Staff speaking with a participant at Schermerhorn St and Hoyt St outreach station.

NEXT STEPS

1. Conclude outreach (Spring '22)
2. Analyze outreach data (Summer-Fall '22)
3. Draft design proposal for in-house project (2023)*
4. Present proposal (Approx. 2024)*

*pending results of outreach data



THANK YOU!



NYC DOT



NYC DOT



nyc_dot



NYC DOT

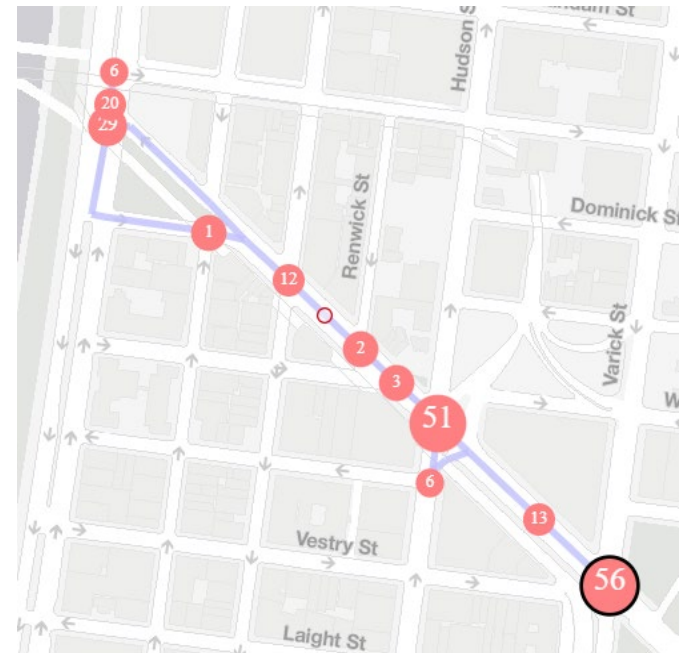
SAFETY DATA I: WEST SIDE HIGHWAY-VARICK ST

Canal St: West Side Highway-Varick St Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	14	1	0	1
Bicyclists	12	0	0	0
Motor Vehicle Occupant	173	8	0	8
Total	199	9	0	9



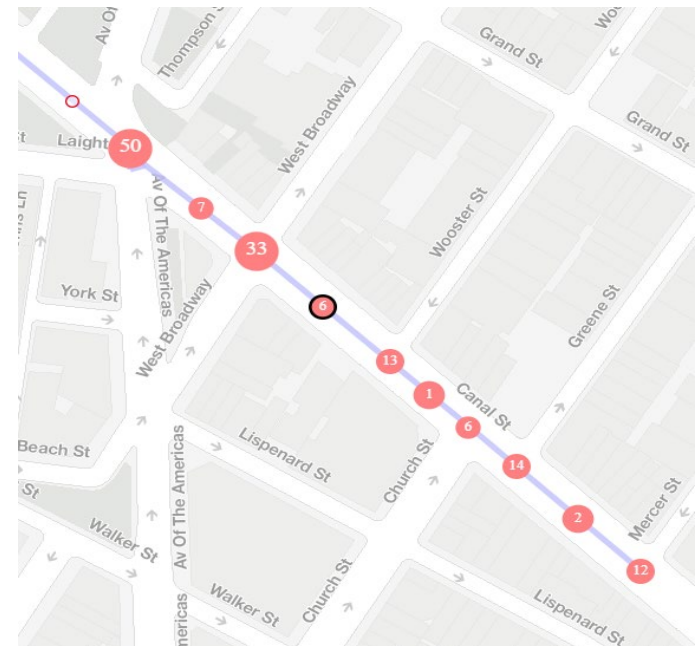
CANAL ST & VARICK ST



SAFETY DATA II: 6TH AVE-MERCER ST

Canal St: 6th Ave-Mercer St Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	34	3	0	3
Bicyclists	20	3	0	3
Motor Vehicle Occupant	90	2	0	2
Total	144	8	0	8

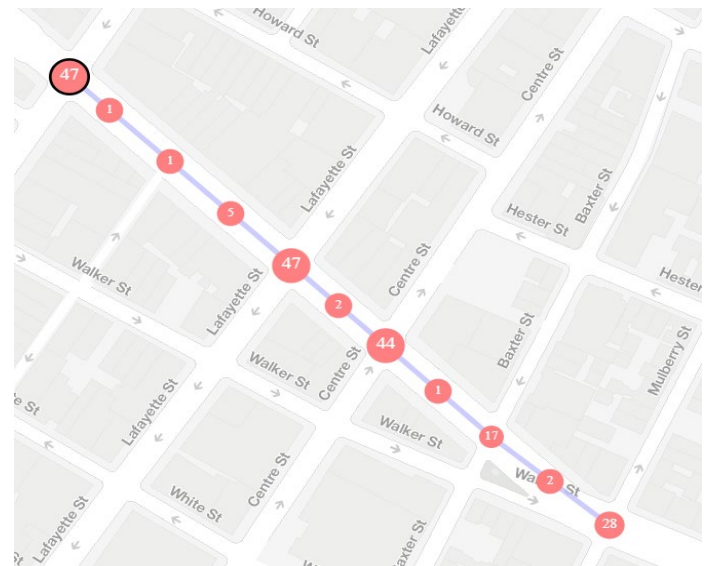


SAFETY DATA III: BROADWAY – MULBERRY ST

Canal St: Broadway-Mulberry St

Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	61	4	0	4
Bicyclists	20	1	0	1
Motor Vehicle Occupant	114	4	0	4
Total	195	9	0	9

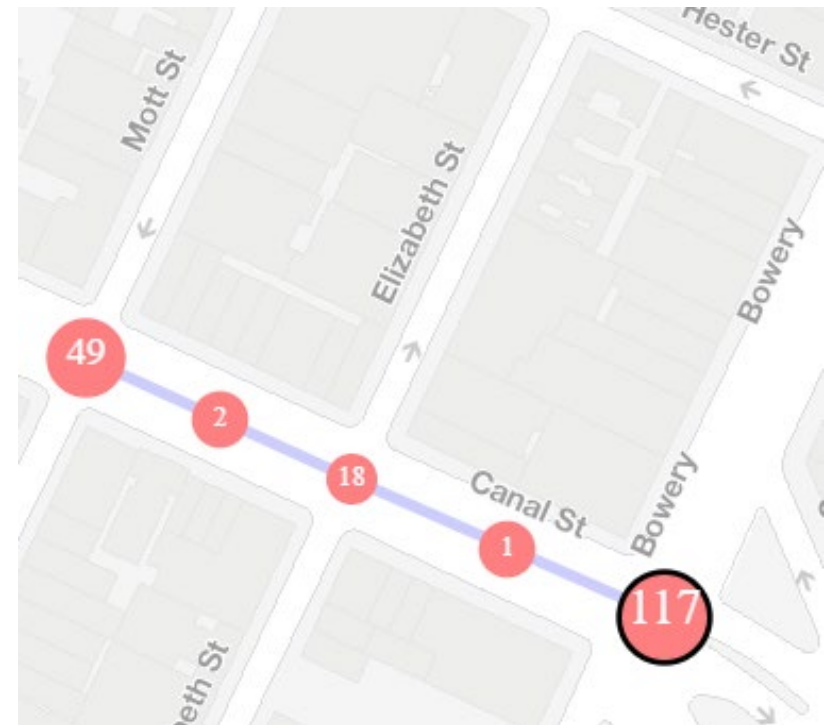


SAFETY DATA IV: MOTT ST – BOWERY

Canal St: Mott St-Bowery

Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	60	2	0	2
Bicyclists	20	3	1	4
Motor Vehicle Occupant	107	2	1	3
Total	187	7	2	9

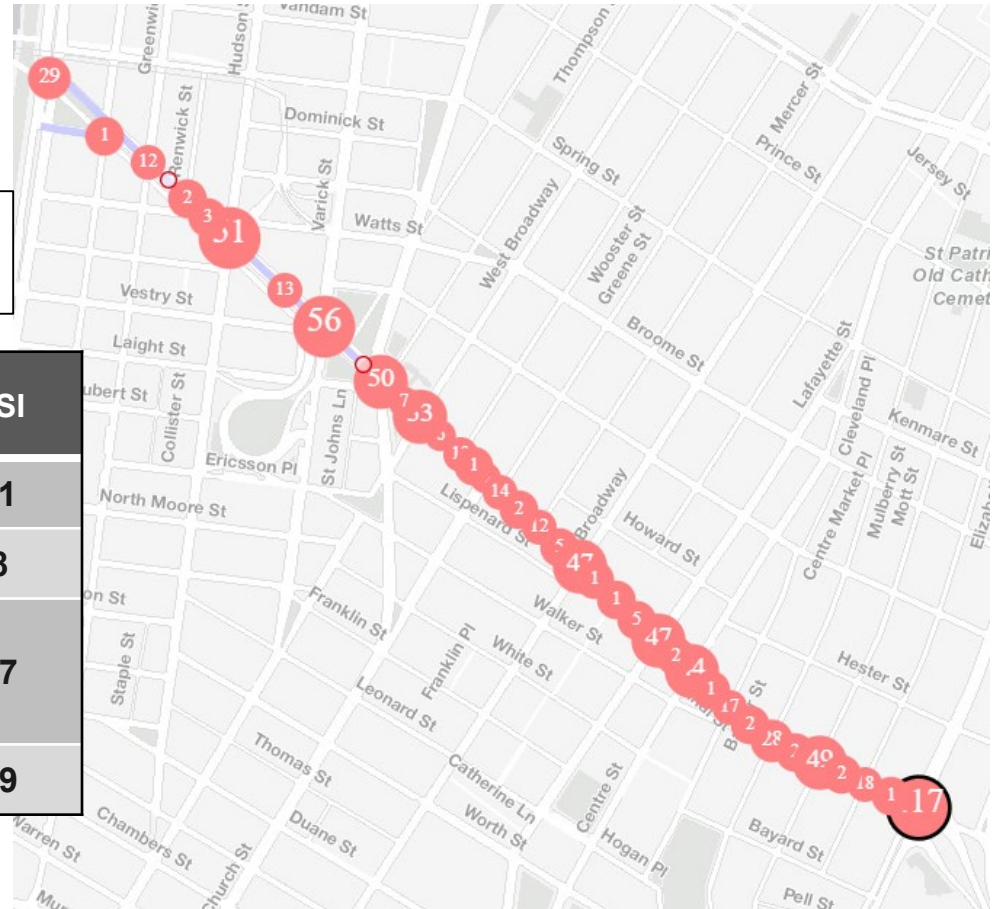


SAFETY DATA: ENTIRE CORRIDOR

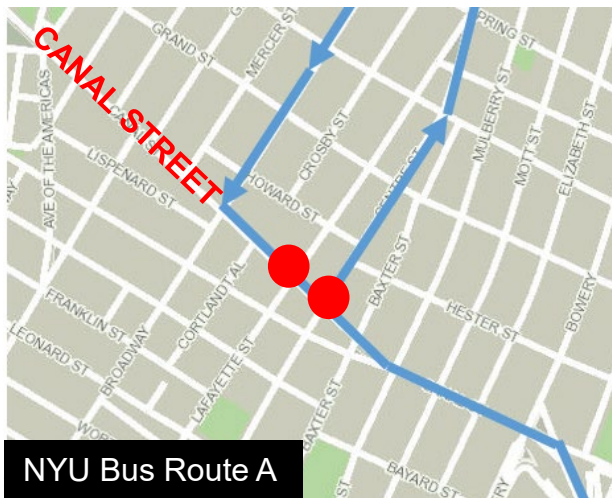
Canal St: West Side Highway-Bowery

Injury Summary, 2015-2019 (5 years)

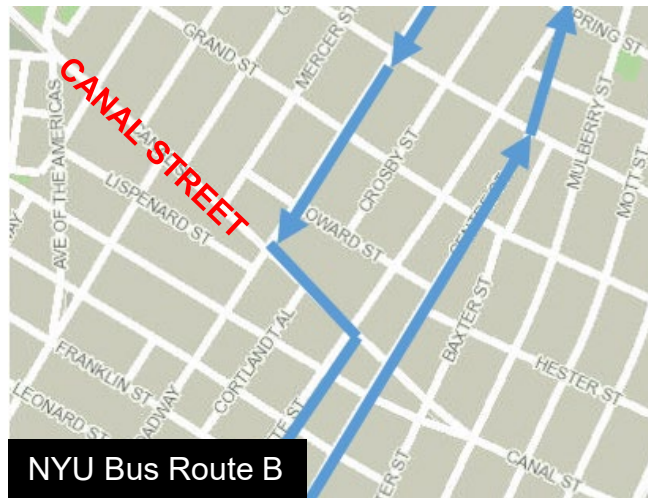
	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	170	10	1	11
Bicyclists	73	7	1	8
Motor Vehicle Occupant	457	16	1	17
Total	700	33	3	39



CANAL STREET: BUSES



Every 30-40 min



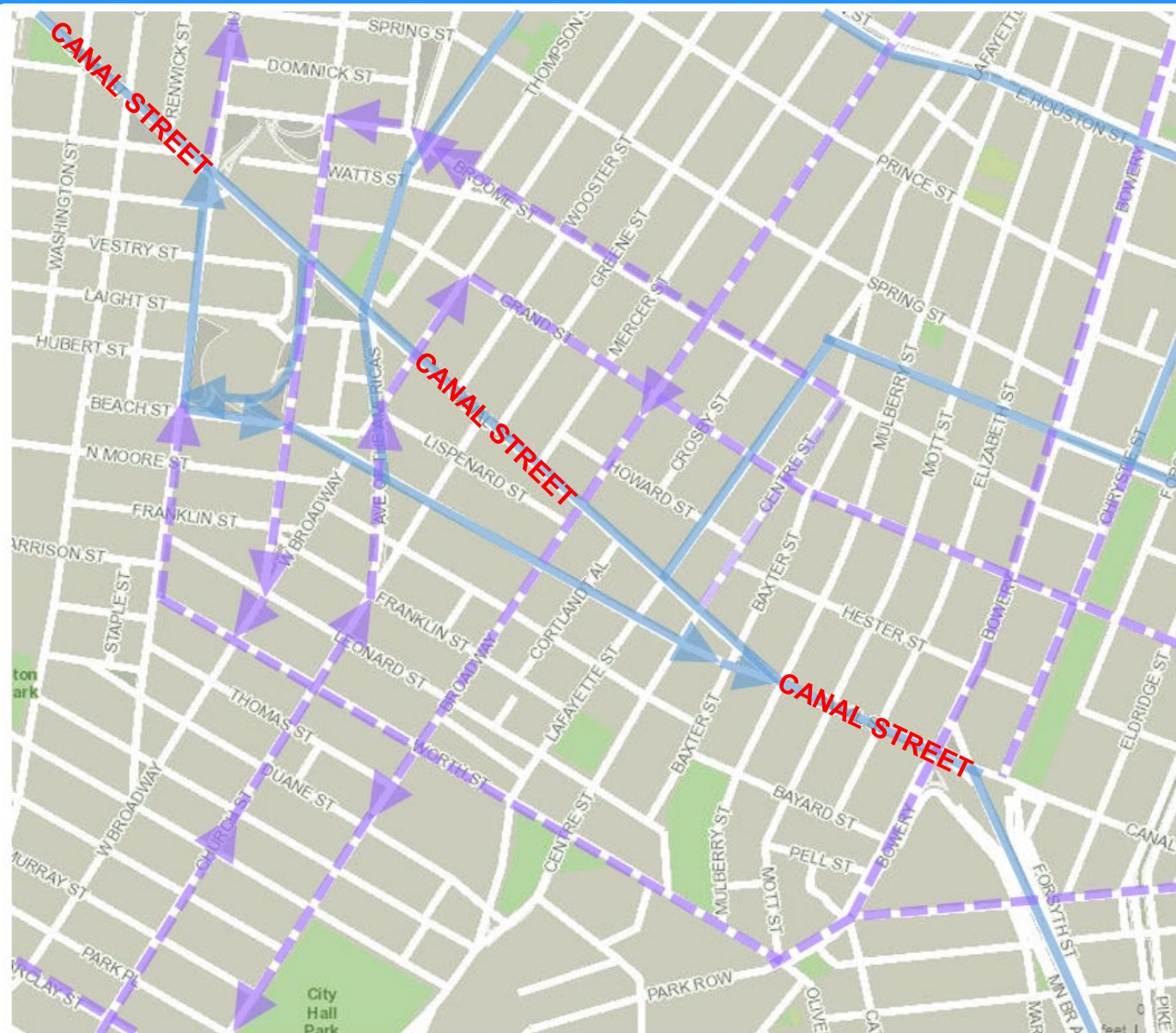
Every 20 min



(Weekend only)
Every 30-75 min

● = stop

CANAL STREET: TRUCKS



	Local Truck Route
	Through Truck Route

Note: No arrow = two-way street

SAFETY DATA: WEST SIDE HIGHWAY-BOWERY

Canal St: West Side Highway-Varick St
Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	14	1	0	1
Bicyclists	12	0	0	0
Motor Vehicle Occupant	173	8	0	8
Total	199	9	0	9

Canal St: Broadway-Mulberry St
Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	61	4	0	4
Bicyclists	20	1	0	1
Motor Vehicle Occupant	114	4	0	4
Total	195	9	0	9

Canal St: 6th Ave-Mercer St
Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	34	3	0	3
Bicyclists	20	3	0	3
Motor Vehicle Occupant	90	2	0	2
Total	144	8	0	8

Canal St: Mott St-Bowery
Injury Summary, 2015-2019 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	60	2	0	2
Bicyclists	20	3	1	4
Motor Vehicle Occupant	107	2	1	3
Total	187	7	2	9