# **Jay Street Busway Pilot**

Community Advisory Board Meeting #2

July 23, 2020







#### **Outline**

- Busway Pilot Review
- Busway Hours
- Traffic Diversions
- Monitoring and Evaluation
- Johnson Street
- Public Engagement
- Future Enhancements





# **Busway Pilot Review**





## **Busway Pilot Review**

## 1. Limit north-south through travel to buses and trucks

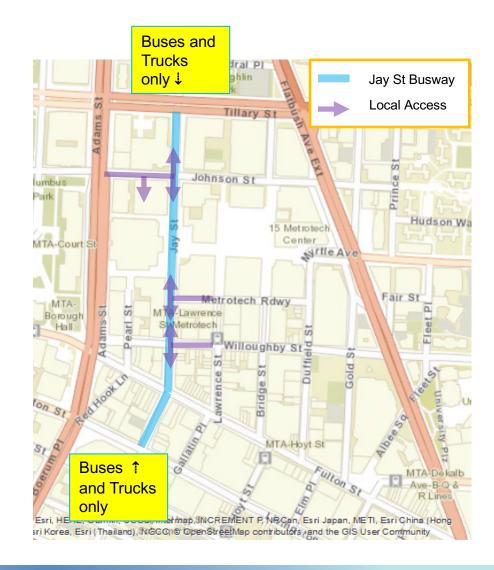
 Clear cut rules enforced at Tillary/Jay and Smith/ Livingston throughs signs and TEAs

#### 2. Allow local access from east and west

- East = Willoughby St & Metrotech Rdwy
- West = Johnson St (Requires oneway reversal)
- Local vehicles can leave corridor in multiple ways

#### 3. Reduce illegal permit parking

- Update curb regulations where appropriate
- Enhanced enforcement
- 4. Maintain and improve protected bicycle lane











**Bus Frequencies** 

Jay Street Busway corridor buses per hour - both directions

Weekday						Sat	Sun
6-7 AM	7-8 AM	8-9 AM	12-1 PM	5-6 PM	6-7 PM	4-5 PM	4-5 PM
36	46	57	36	53	46	45	37



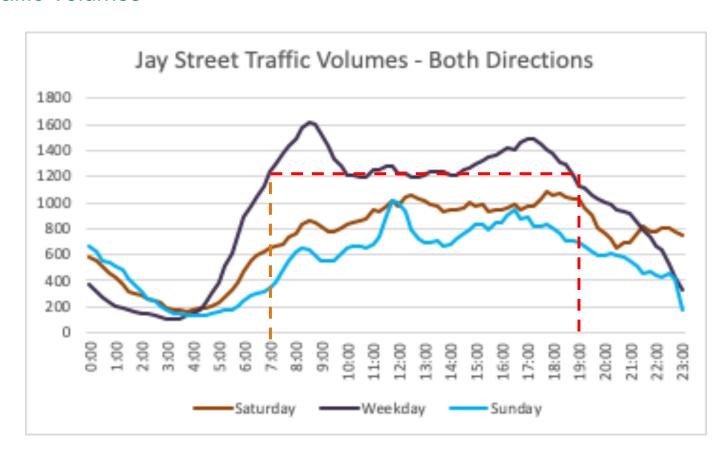
#### **Bus Speeds**







#### **Traffic Volumes**







Recommendation

#### 7AM to 7PM, Monday through Friday

- Coincides with greatest bus and traffic volumes, and lowest bus speeds
- Common bus lane hours in NYC and easy to remember: same as Livingston St bus lanes



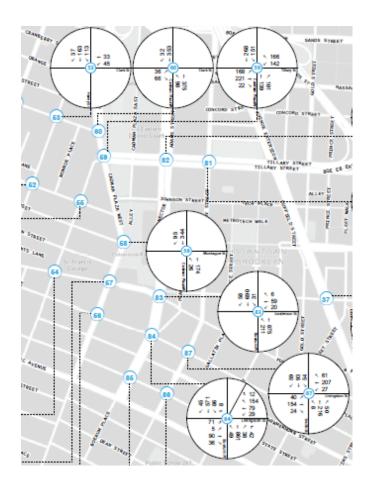






#### Approach

- Used available existing pre-COVID intersection traffic counts to establish baseline volumes
- Used smartphone data to estimate current travel patterns
- Manually assigned traffic to diversion routes for through and local traffic
  - Left turn ban at NB Smith/Livingston to encourage use of Atlantic Ave and Schermerhorn Street







## **Origins and Destinations**

# Northbound Destinations AM peak hour

- Smartphone data used to estimate destinations of traffic entering project corridor
- 65% of traffic headed northbound travels through corridor
- 2% to Johnson St.
- 8% to MetroTech Roadway
- 25% have other local destinations

Cathedral P Busway start/end Vehicle path 65% (263 vehicles) through to 2% Jay/Tillary (7 vehicles) Johnson St to Johnson St. WB Hudson W 15 Metrotech 25% (103 vehicles) Other local 8% (34 vehicles) Fair St Borough MetroTech letrotech Hall **Rdwy** Willoughby St MTA-Hoyt St AM Peak Hour Northbound Esri, HERE, Garmin, USGS/Inter Esri Japan, METI, Esri China (Hong 407 Vehicles sri Korea, Esri (Thailand), NGGC and the GIS User Community

Sources: Streetlight Data, Inc, NYCDOT turning movement counts





## **Origins and Destinations**

# Southbound Destinations PM Peak Hour

- Smartphone data used to estimate destinations of traffic entering project corridor
- 66% of traffic headed southbound travels through corridor
- 2% to Johnson St.
- 1% to MetroTech Roadway
- 31% have other local destinations

Busway start/end Vehicle path PM 2% Southbound (5 vehicles) 288 Vehicles to Johnson St. WB Hudson W 15 Metrotech 31% (90 vehicles) Other local 1% (4 vehicles) Fair St Borough MetroTech Metrotech Hall Rdwy Willoughby St 66% (189 vehicles) through to **Smith St** Esri, HERE, Garmin, USGS/Intermap/INCREMENT P, NR Can, Esri Japan, METI, Esri China (Hong sri Korea, Esri (Thailand), NGGONE OpenStreetMap contributors, and the GIS User Community

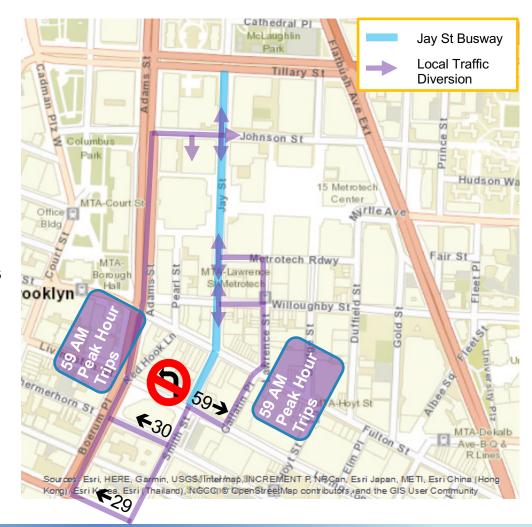
Sources: Streetlight Data, Inc, NYCDOT turning movement counts





# **Local** Traffic Diversions – Northbound AM Peak Hour

- 1 Boerum PI/ Adams St to Johnson St
- Left turn ban at Smith/Livingston Street during busway hours
- Atlantic to Boerum 29 vehicles
- Schermerhorn to Boerum 30 vehicles
- Adams Street Total 59 vehicles
- 2 Gallatin PI / Lawrence St to Willoughby St or MetroTech Rd
- 59 vehicles







# Through Traffic Diversions – Northbound AM peak hour

#### 1 - Boerum PI/Adams St

- Left turn ban at Smith/Livingston Street during busway hours
- Atlantic to Boerum 87 vehicles
- Schermerhorn to Boerum 87 vehicles
- Other diversions to Boerum 30 vehicles
- Boerum/Adams Total 204 vehicles
- 2 Livingston St to Flatbush via Elm Pl/Gold St or Hanover Pl
- Elm St 11 vehicles
- Hanover PI 11 vehicles
- Flatbush Total 22 vehicles







# **Local** Traffic Diversions – Southbound PM peak hour

#### 1 - Adams St to Johnson St

- Vehicles staying on Adams St–
   33
- Vehicles turning left onto Adams St– 15
- 2 Flatbush Ave Ext to MetroTech Roadway or Willoughby St
- Vehicles staying on Flatbush Ave Ext – 37
- Vehicles turning right onto Flatbush Ave Ext– 4







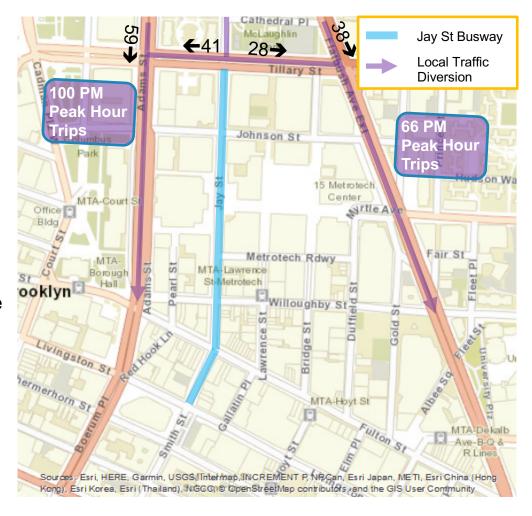
# **Through** Traffic Diversions – Southbound PM peak hour

#### 1 - Adams St to Johnson St

- Vehicles staying on Adams St–59
- Vehicles turning left onto Adams St– 41

#### 2 – Flatbush Ave to MetroTech Roadway or Willoughby St

- Vehicles staying on Flatbush Ave Ext – 38
- Vehicles turning right onto Flatbush Ave Ext– 28







# Monitoring and Evaluation





## **Monitoring and Evaluation**

#### **Process**

- Traffic diversion estimates help determine key locations for observations
  - Automated traffic counts on key segments
  - Use of smartphone data to estimate travel times on key diversion routes
  - Staff observations of key intersections
- Continuous monitoring and adjustments as part of one-year pilot
  - DOT
  - CAB
  - Public through Online Portal





# Johnson Street



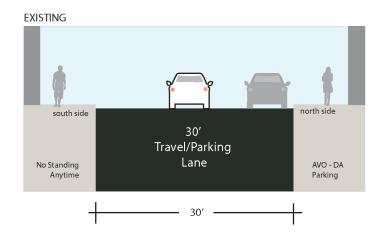


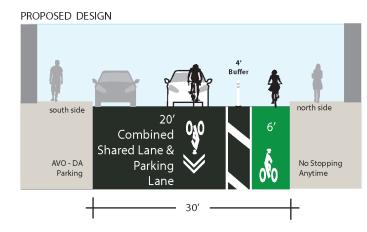
#### **Johnson Street**

#### One-way Reversal and Bicycle Facility

- One-way reversal important for local access associated with Busway pilot
- Important bicycle connection to Adams St median bicycle path/Brooklyn Bridge
- Bi-directional bike demand

- 1. Reverse Johnson St from one-way WB to one Way EB
- 2. Relocate authorized parking from north to south curb
- 3. Install WB contraflow bike lane
- 4. Install EB sharrows









# Public Engagement

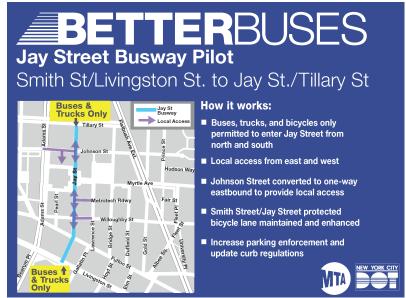




## **Public Engagement**

#### **Project Fact Sheets**

- Distribution
  - Website
  - Social Media
  - CAB





Jay Street Busway Pilot Smith St./Livingston St. to Jay St./Tillary St.

Local Acce

#### The project will:

- Increase bus speeds and bus reliability along the corridor
- Serve seven routes that carry 46,000 passengers per weekday
- Help improve travel times for vulnerable communities and essential workers
- Create a complete street that improves bicycle and pedestrian safety
- Ease congestion on designated truck route
- · Reduce the impact of illegal parking

**Trucks Only** 



#### How it works:

- Buses, trucks, and bicycles only permitted to enter Jay Street from north and south
- · Local access from east and west
- Johnson Street converted to one-way eastbound to provide local access
- Smith Street/Jay Street protected bicycle lane maintained and enhanced
- Increase parking enforcement and update curb regulations

The Jay Street Busway Pilot is part of **Better Buses Restart**. NYC is speeding up implementation on bus projects citywide to provide faster and more reliable bus service for essential workers and communities impacted by



VITA

**BETTER**BUSES



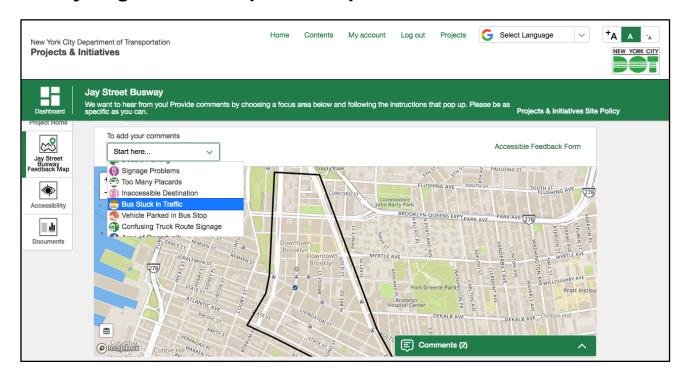




## **Public Engagement**

#### **Online Portal**

- Interactive tool under development that allows members of the public to provide input into pilot
- Will be ready to go live when pilot is implemented











#### **Bus Islands**

- Eliminates bus/bike conflicts at bus stops
- Dedicated waiting space for bus passengers
- Can be implemented with concrete or plastic



Bus Island Gerritson Ave & Cyrus Ave (BK)



Bus Boarder 7th Ave & 37th St (MN)





Bus Islands - Potential Locations



Potential Bus Island Application Jay Street north of Fulton Street







#### Median Bike Lane and Bus Bulbs

- Eliminates bus/bike conflicts at bus stops
- Bus passengers do not cross bike lane
- Potential for capital or non-capital project



Sands St Median Bike Lane (BK)

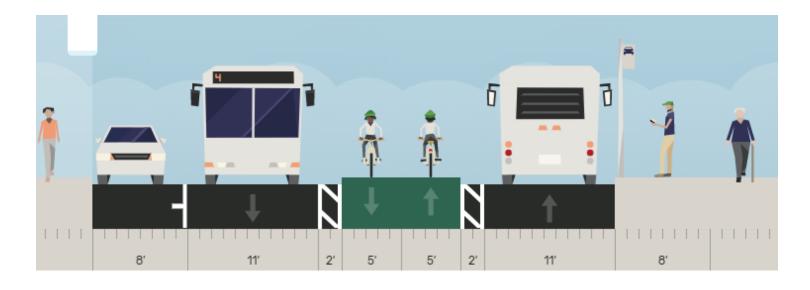


Bus Bulb 1 Ave and 1 St (MN)





Median Bike Lane and Bus Bulbs



Conceptual median bike lane with bus bulbs





## **Thank You!**

Questions?

