

# 42<sup>nd</sup> Street Transit Improvements

Community Board 5 | June 24, 2019



# PRESENTATION OVERVIEW

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1. Project Background
2. Existing Conditions & Analysis
3. Proposal
4. Summary / Next Steps

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# Project Background

# 1

# BETTER BUSES ACTION PLAN

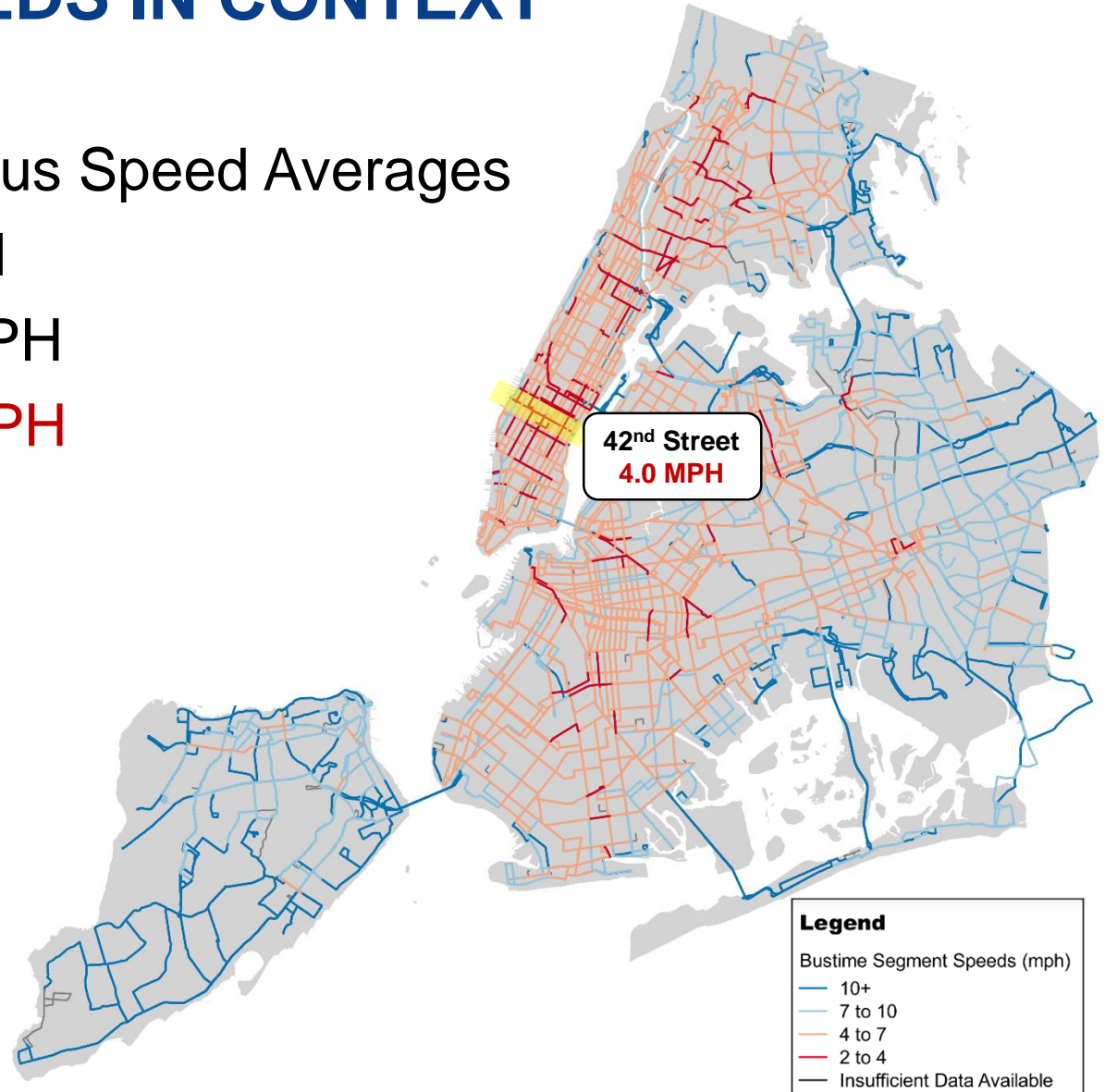
- Mayor's 2019 State of the City
  - Improve bus speeds 25% by 2020
- Better Buses Action Plan released April 2019
  - 24 priority projects announced for 2019 to increase bus speeds across all 5 boroughs

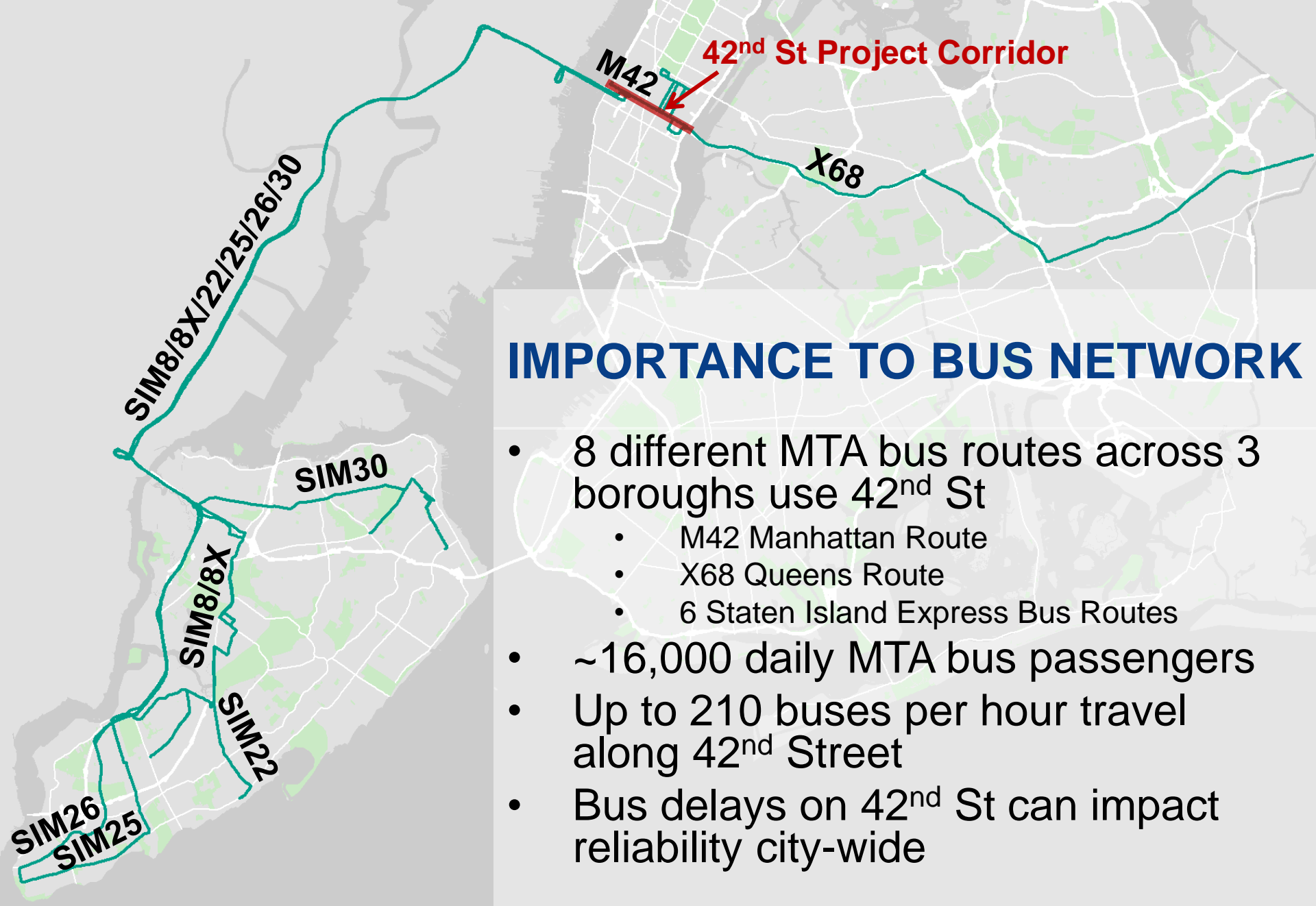


# AREA BUS SPEEDS IN CONTEXT

## AM/PM Peak Hour Bus Speed Averages

- Citywide: 7.7 MPH
- Manhattan: 5.6 MPH
- 42<sup>nd</sup> Street: **4.0 MPH**

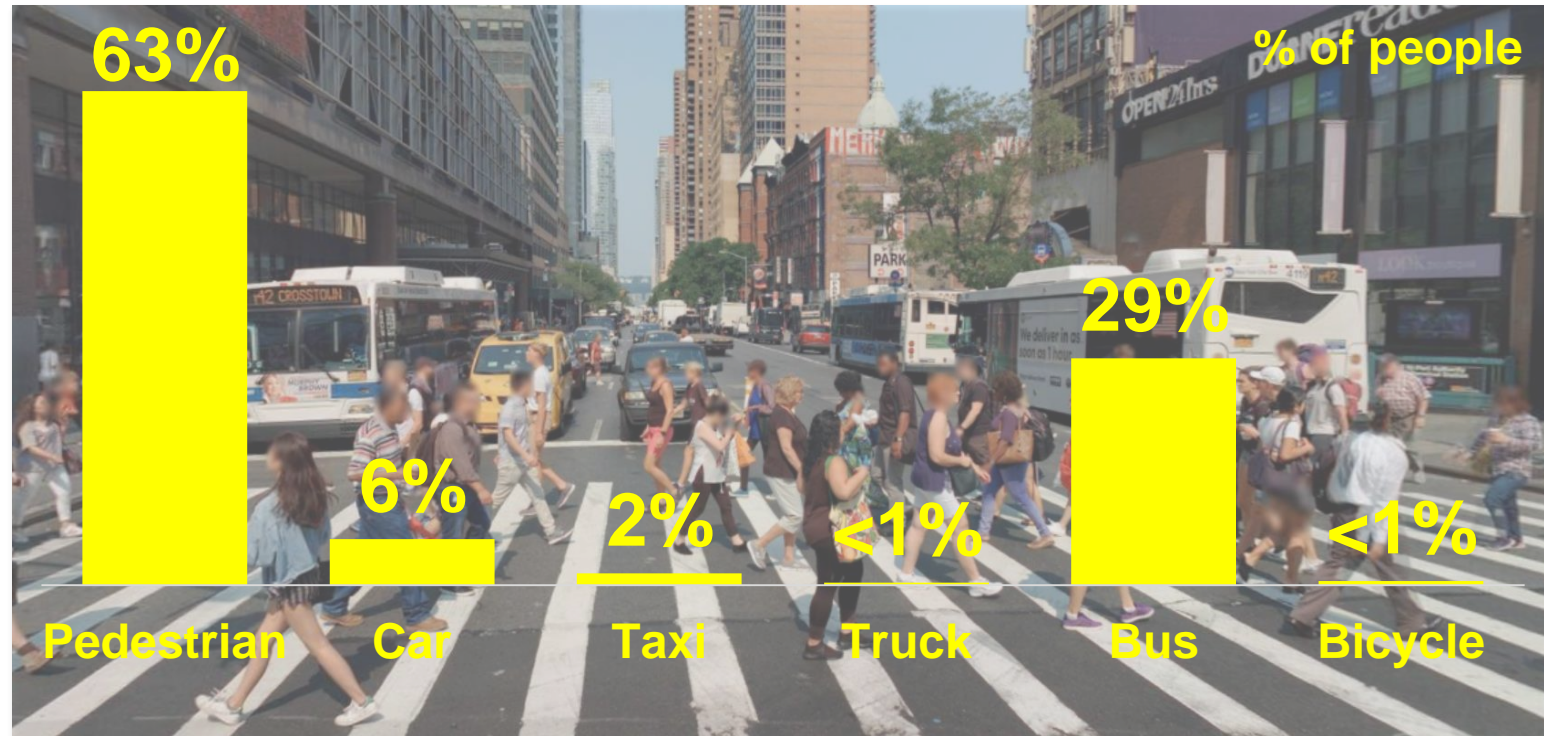




# IMPORTANCE TO BUS NETWORK

- 8 different MTA bus routes across 3 boroughs use 42<sup>nd</sup> St
  - M42 Manhattan Route
  - X68 Queens Route
  - 6 Staten Island Express Bus Routes
- ~16,000 daily MTA bus passengers
- Up to 210 buses per hour travel along 42<sup>nd</sup> Street
- Bus delays on 42<sup>nd</sup> St can impact reliability city-wide

# 42<sup>ND</sup> ST IS MULTI-MODAL

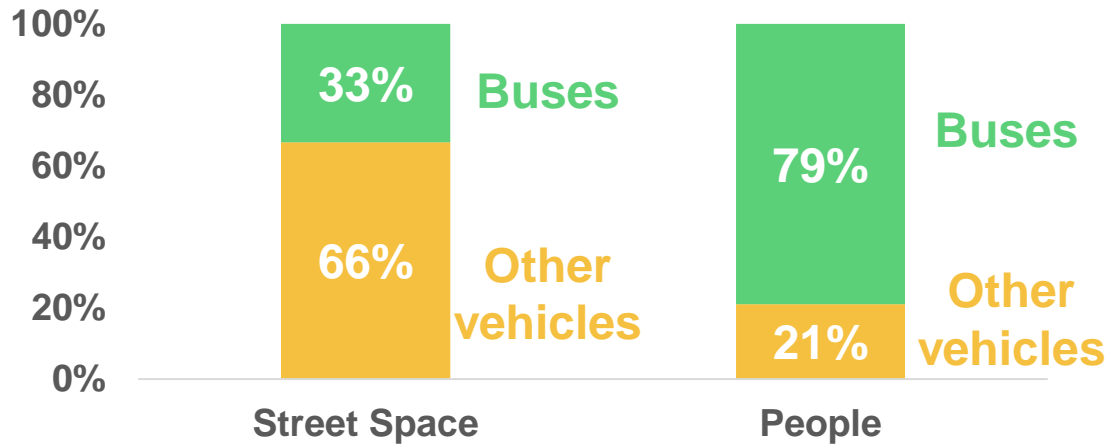


PM Peak Hour Screen-line on 42<sup>nd</sup> Street @ 8<sup>th</sup> Ave\*

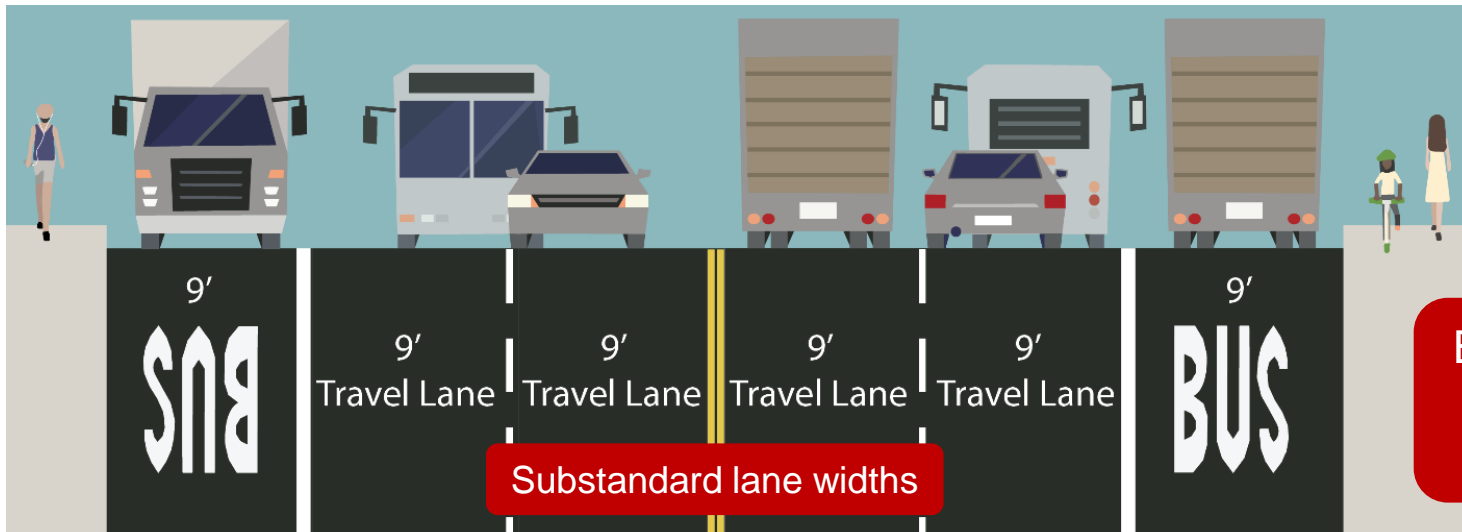
- 42<sup>nd</sup> Street travelers use a variety of modes, with nearly one-third traveling by bus during the PM peak

\*Source: Feb 2019 traffic & sidewalk screen-line counts. Occupancy factors: 30 persons/bus, 1.3 persons/other vehicles

# ALLOCATING STREET SPACE



**Buses operate on the margins of 42<sup>nd</sup> St, but carry the majority of the people.**



**Bus lanes in effect 7-10 AM, 4-7 PM except Sunday**



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# Existing Conditions & Analysis

# 2

# BUS TRAVEL TIMES

## M42 Running Time (Min, end to end)

Direction	Day	Time of Day				
		12-6am	6-10am	10am-3pm	3-7pm	7pm-12am
EB	Weekday	18.8	33.1	34.4	29.4	24.3
	Weekend	18.7	20.7	29.1	30.8	25.2
WB	Weekday	15.8	26.4	32.1	35.2	22.6
	Weekend	16.4	19.1	27.8	29.3	23.2

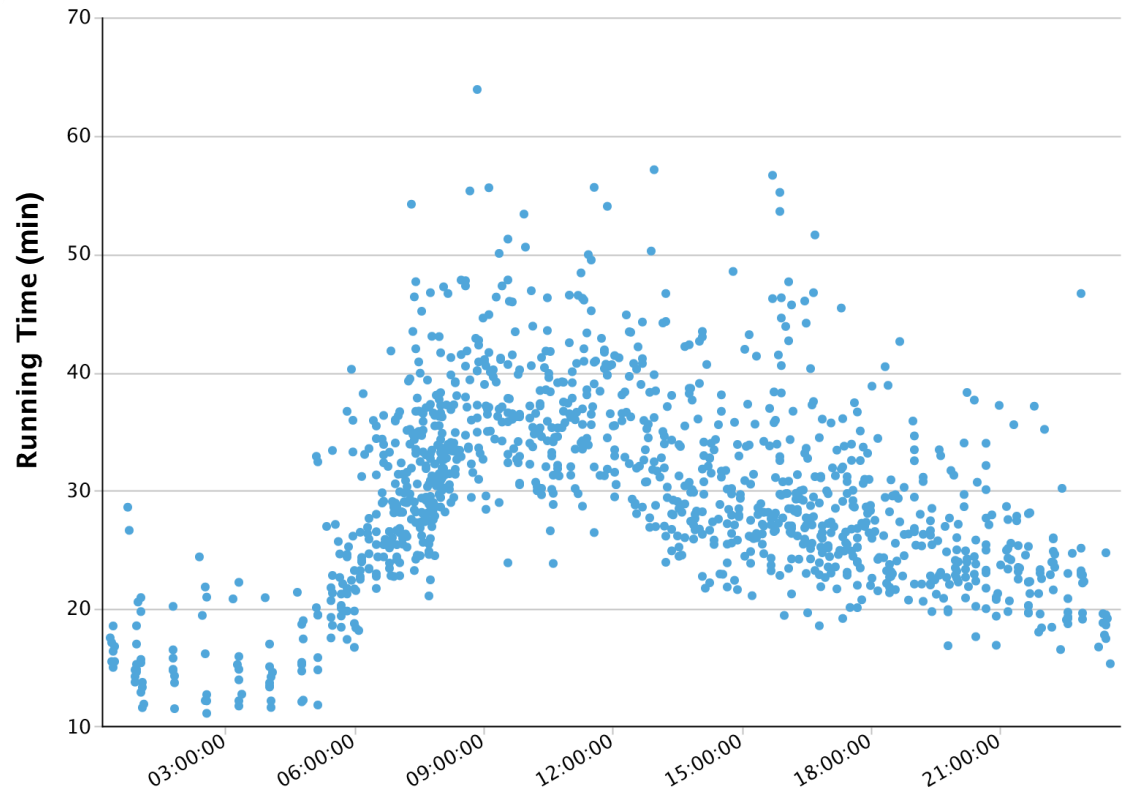
Source: MTA NYCT

- Bus travel times are nearly double their overnight times throughout the day
- Trips are consistently long starting with the AM peak hour and through the PM peak
- On average, M42 buses spend more than 40% of their time stalled in traffic, at red lights, or crawling

# BUS RELIABILITY ISSUES

- Bus running time is unreliable even within the same time period due to varying traffic conditions day to day
- Runs can vary by 20-40 minutes, leading to bus bunching, long/unpredictable waits at the bus stop, and crowding on the bus

M42 Running Times, Weekdays EB



Source: MTA NYCT

# CURB ACTIVITY

- Fieldwork and video analysis
  - Bus lanes are underused due to very narrow width (9') and blockages by other vehicles
  - Quick pick-up/drop-off activity common along corridor
  - Commercial loading activity is high and durations are short (<1 hr)
  - Turns off 42 St street are difficult due to pedestrian volumes, causing congestion



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Proposal

3

# TRANSIT STREET DESIGN TOOLKIT



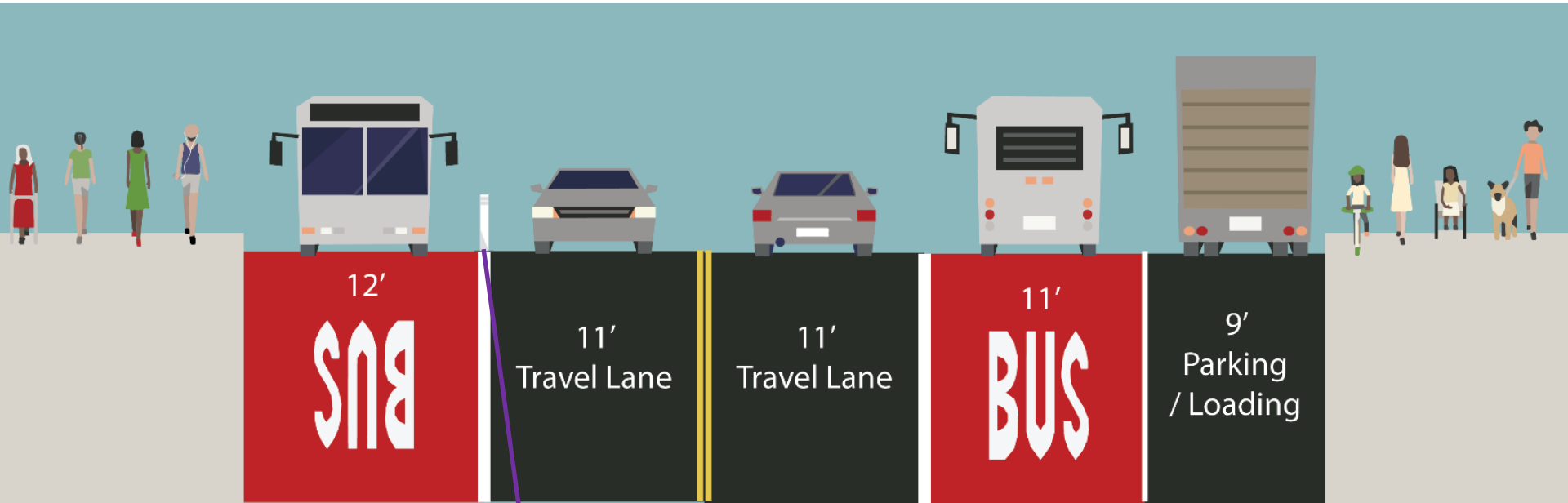
# PROPOSED CROSS SECTION (MIDBLOCK & INTERSECTIONS WITH NO TURNS)

Curbside bus lane

Thru travel lanes

Offset bus lane

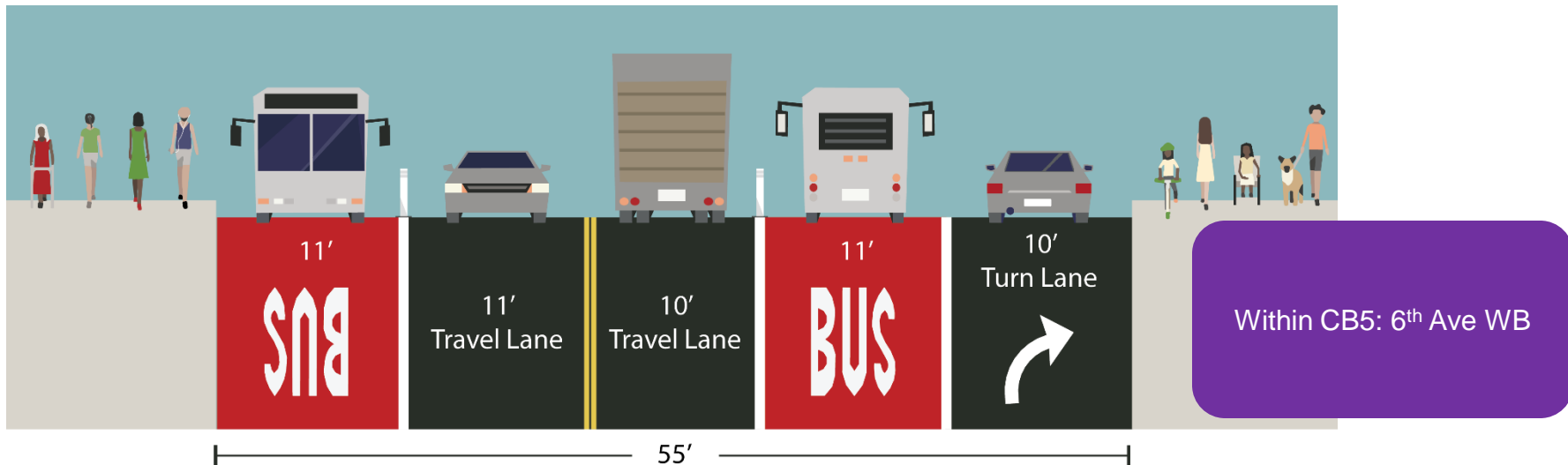
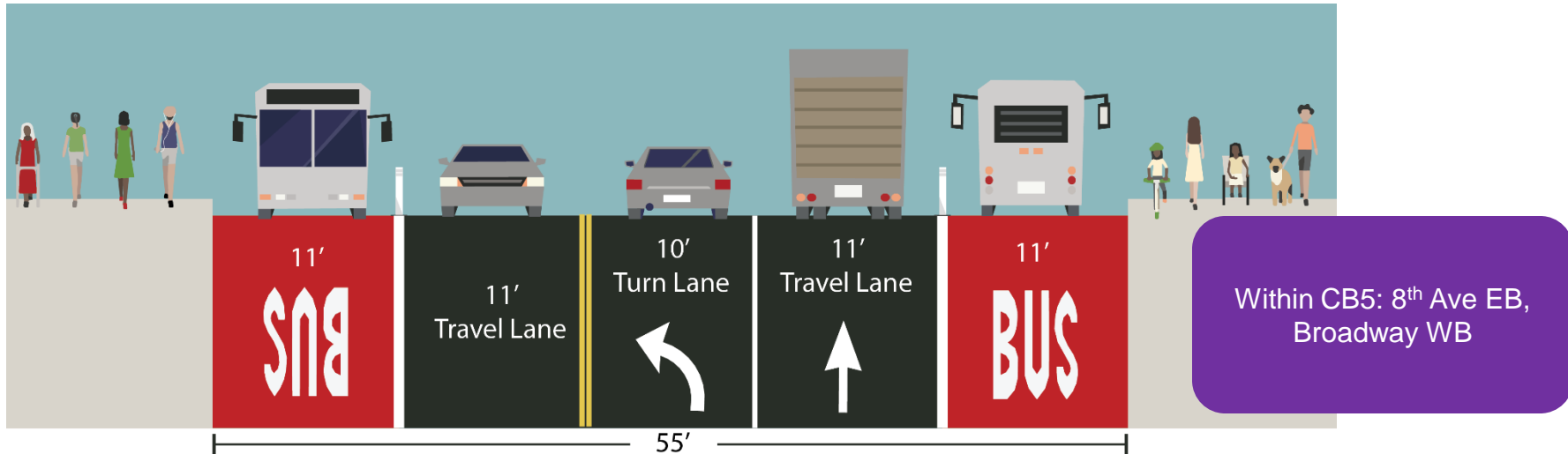
Commercial Metered Parking/Loading



Investigating physical protection in certain segments where feasible

55'

# PROPOSED CROSS SECTION (AT INTERSECTION WITH PERMITTED TURNS)

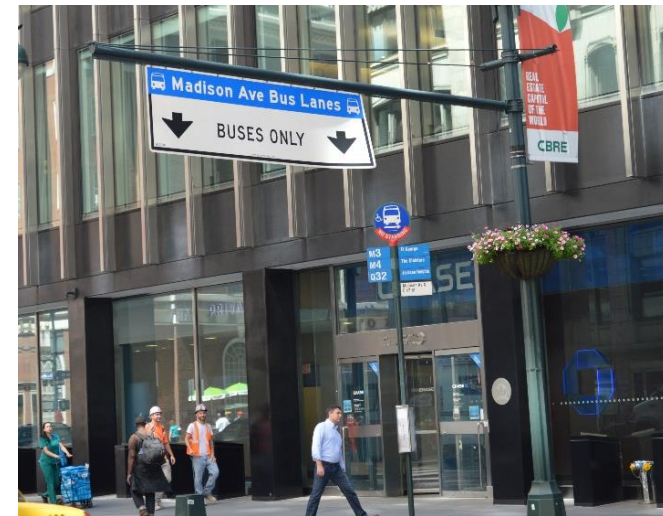




# BUS LANE HOURS & CURB REGULATIONS

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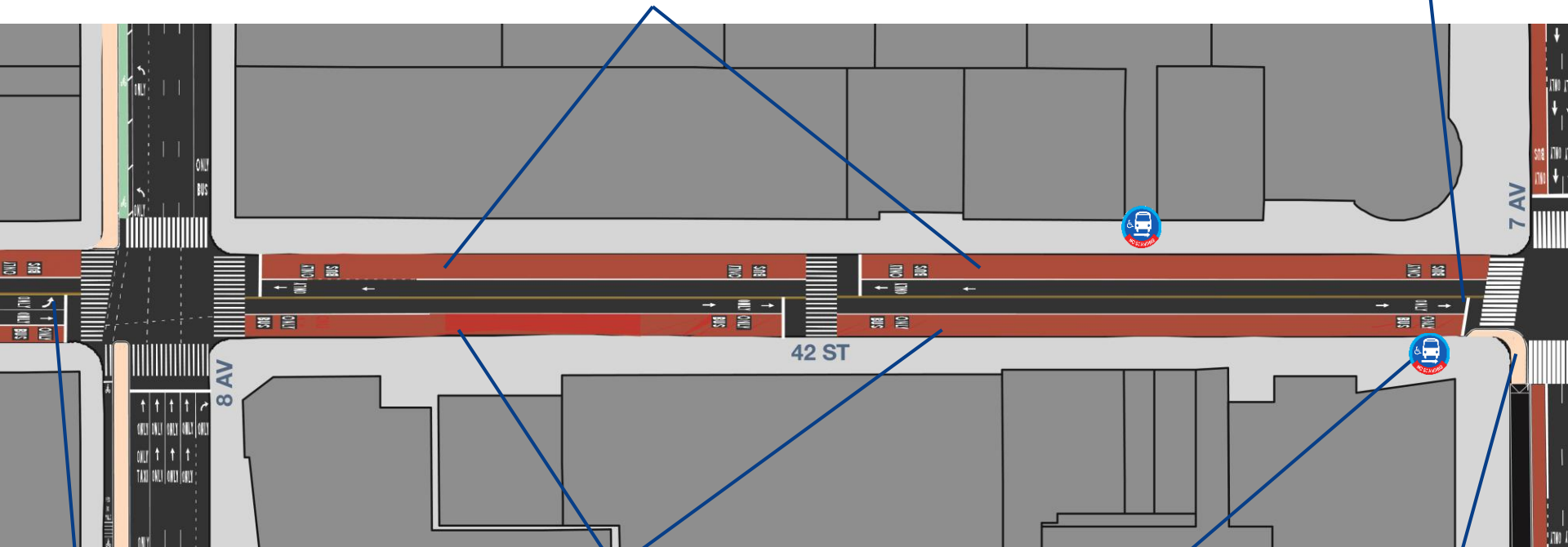
- Offset bus lanes (lanes not against the curb) in effect 24/7
- Curbside bus lanes in effect 7 AM – 7 PM all days, except at bus stops or other existing No Standing Anytime
  - 7 PM – 7 AM hours allocated to metered commercial/truck loading
- Other curb space allocated to metered commercial/truck loading, hotel loading zones, authorized parking



# PROPOSED DESIGN 8<sup>TH</sup> AVE – 7<sup>TH</sup> AVE

Wide curbside bus lane 7A-7P (allows for passenger pickup/drop-off + buses to pass)  
 1 hr comm'l metered parking 7P-12A, truck loading 12A-7A

No turns onto  
 7<sup>th</sup> Ave



EB left turn  
 split-phase  
 signal  
 (under inv.)

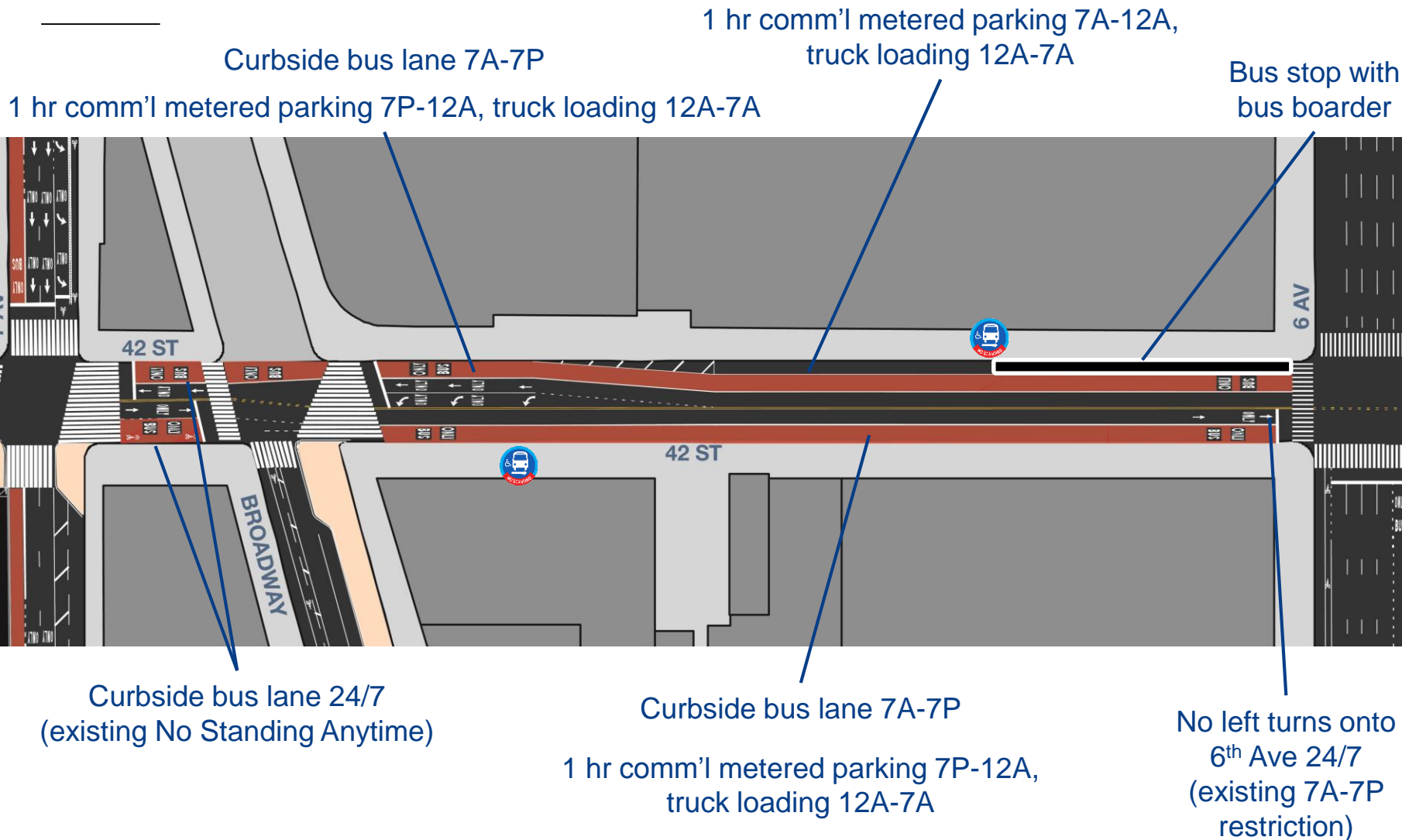
Wide curbside bus lane 7A-7P  
 (allows for passenger pickup/drop-off + buses to pass)

1 hr comm'l metered parking 7P-12A,  
 truck loading 12A-7A

Move EB bus  
 stop closer to  
 intersection

Painted curb  
 extension

# PROPOSED DESIGN 7<sup>TH</sup> AVE – 6<sup>TH</sup> AVE

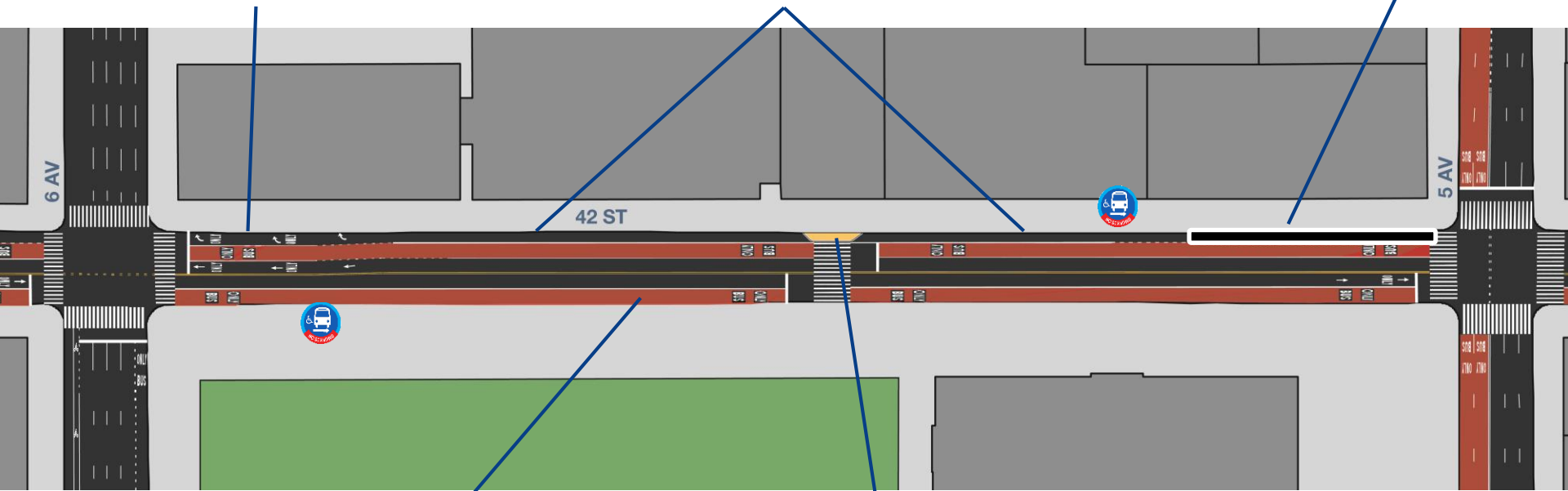


# PROPOSED DESIGN 6<sup>TH</sup> AVE – 5<sup>TH</sup> AVE

Right turn bay for turns onto 6<sup>th</sup> Ave

1 hr comm'l metered parking 7A-12A,  
truck loading 12A-7A

Bus stop with  
bus boarder



Curbside bus lane 7A-7P

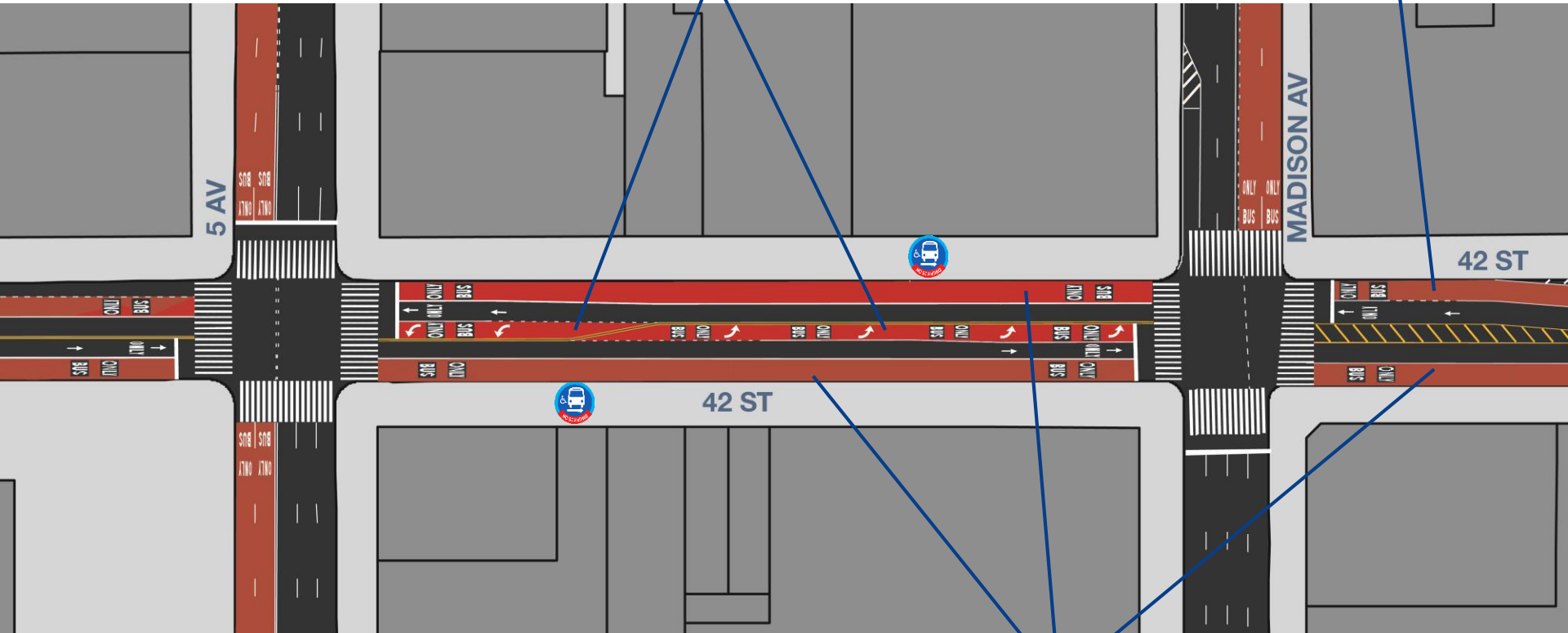
Painted curb  
extension

1 hr comm'l metered parking 7P-12A,  
truck loading 12A-7A

# 5<sup>TH</sup> AVE – MADISON AVE

Bus only left turn lanes

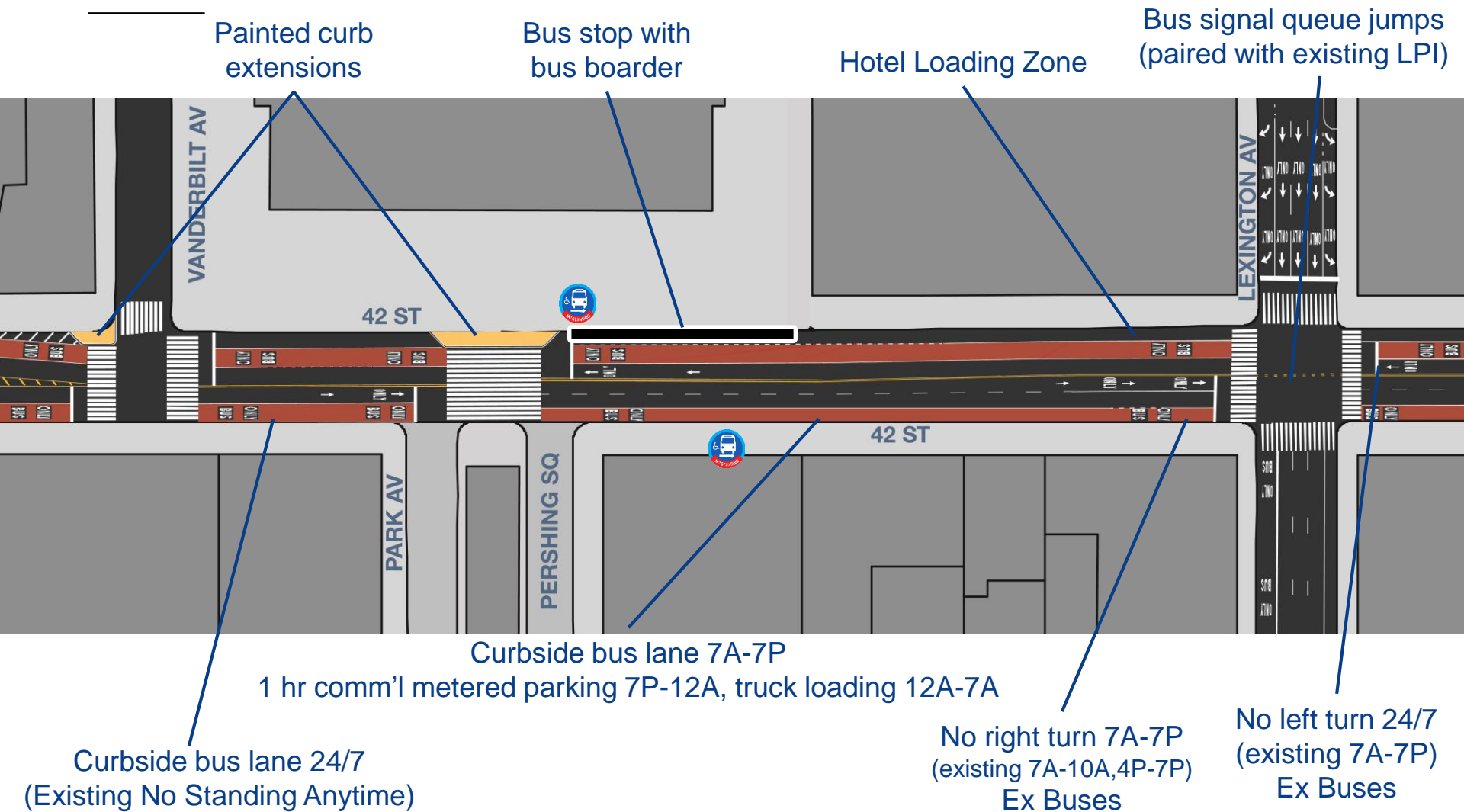
Curbside bus lane  
No Standing Anytime



Curbside bus lane 7A-7P

1 hr comm'l metered parking 7P-12A, truck loading 12A-7A

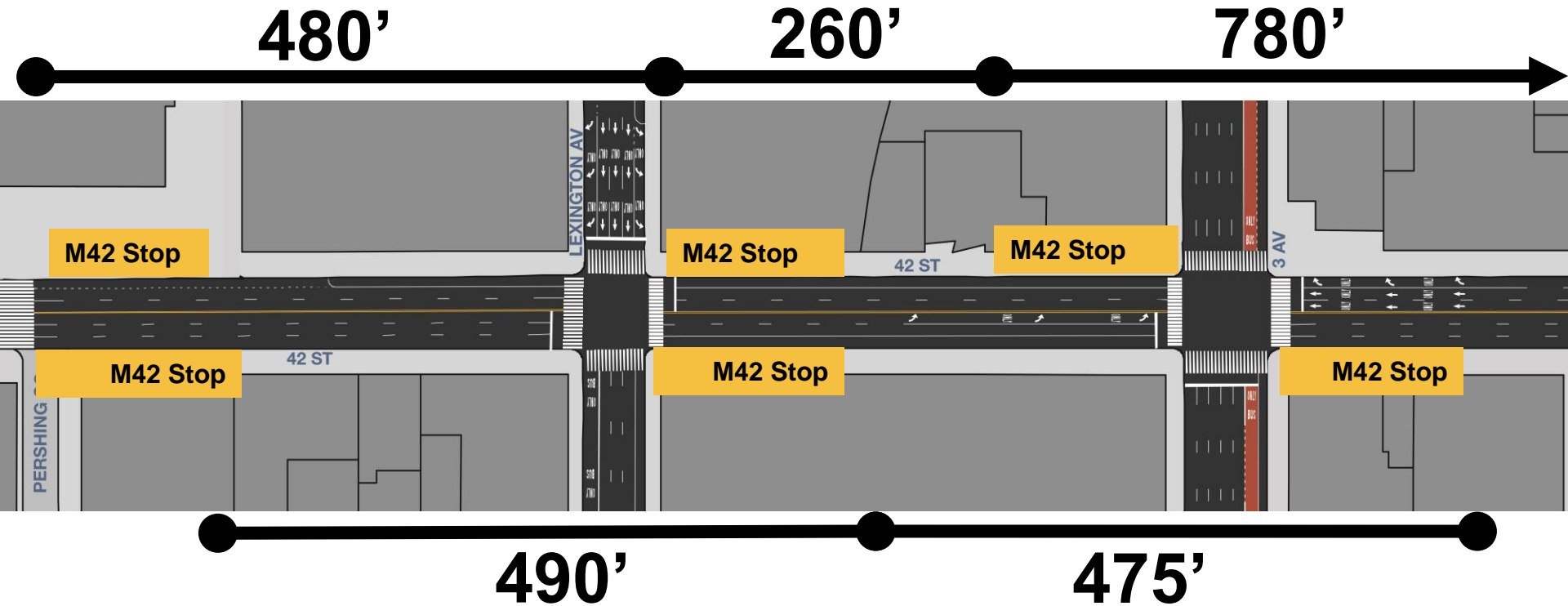
# MADISON AVE – LEXINGTON AVE



# CHANGES TO TURN RESTRICTIONS

Location	Turn Direction	Current Regulation	New Regulation	Max. Impacted Hrly Turning Volume
7 Av	Right turn EB to SB	Permitted All Times for All Vehicles	<b>Restricted All Times for All Vehicles</b>	135 (Midday Peak)
	Left turn WB to SB	Restricted All Times Except Buses	<b>Restricted All Times for All Vehicles</b>	3 buses (Midday & PM Peaks)
6 Av	Left turn EB to NB	No Turns 7am-7pm Except Sunday	<b>Restricted All Times for All Vehicles</b>	125 (Weekend Peak)
Lexington Av	Left turn WB to SB	No Turns 7am-7pm Except Sunday	<b>Restricted All Times Except Buses</b>	50 (Weekend Peak)
	Right turn EB to SB	No Turns 7-10am, 4-7pm Mon-Fri Except Buses	<b>No Turns 7am-7pm Except Buses</b>	115 (Midday Peak)

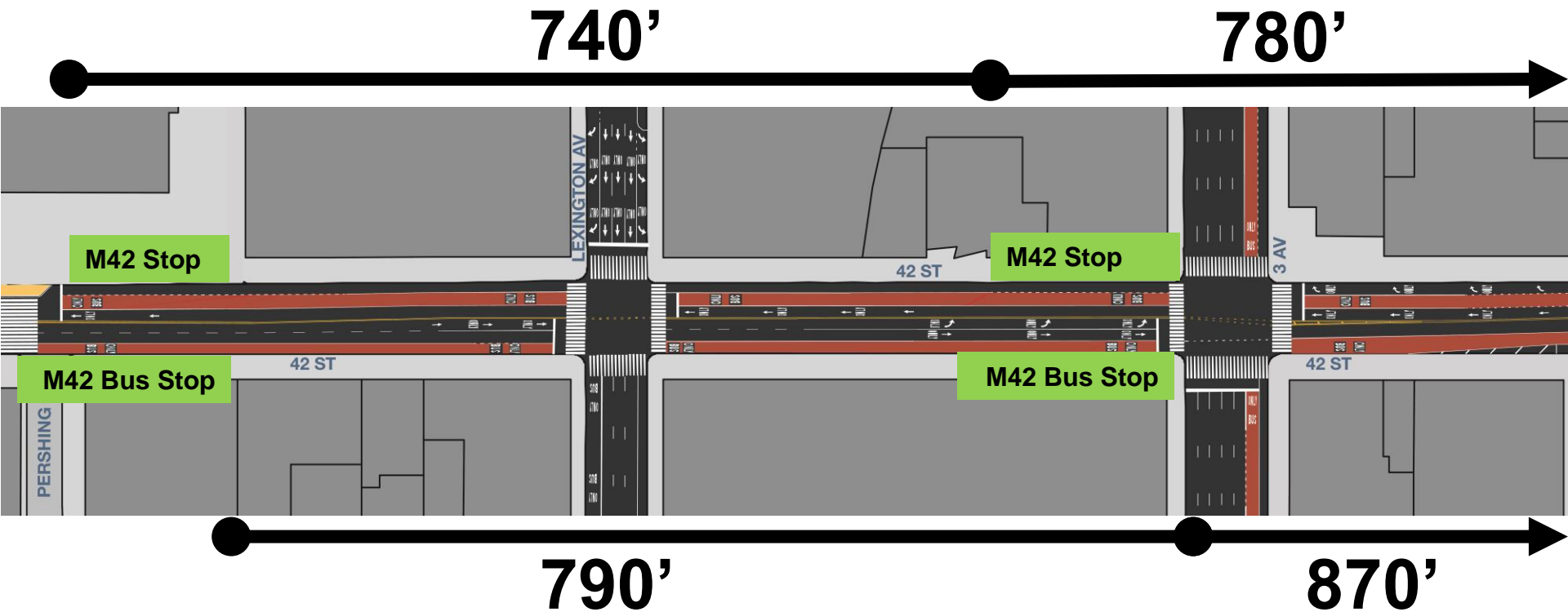
# BUS STOP CHANGES



- Park Ave – 3<sup>rd</sup> Ave: 3 stops within 2 short blocks in each direction



# BUS STOP CHANGES



- Consolidate Lex Ave and 3<sup>rd</sup> Ave stops to single stop in each direction to improve stop spacing, more closely matching standard spacing along rest of 42<sup>nd</sup>

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## Summary / Next Steps

# 4

# SUMMARY

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- Current design of 42<sup>nd</sup> St does not meet the demands of most street users
- Street design changes will
  - Improve bus speeds and reliability
  - Make commercial metered parking/loading space available throughout the day and overnight to reduce illegal standing and daytime congestion
  - Improve turns off of 42<sup>nd</sup> Street at key intersections
  - Restrict some turns to improve safety and traffic flow

# IMPLEMENTATION SCHEDULE

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- **June 2019:** Corridor design presentation to Community Boards 4, 5, & 6
- **Summer 2019:** Adjustments to plan as needed, street design implementation
- **Fall 2019:** Post-implementation data collection & monitoring

# THANK YOU!

Questions?



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