



H Street NW Bus Priority

Fall 2021



Today's Meeting

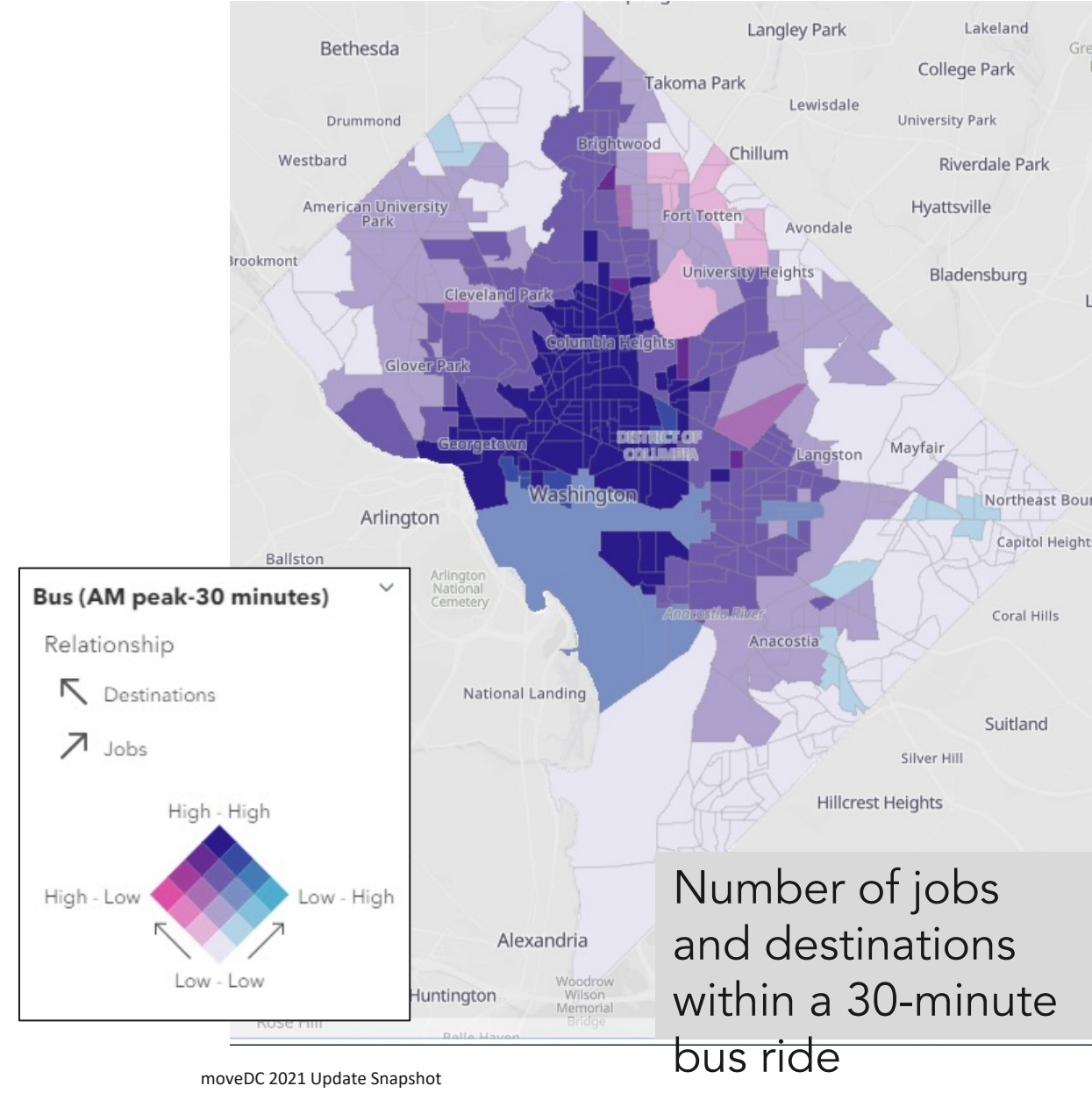
- Purpose
 - Provide an overview of the Bus Priority Program and the H Street NW project
 - Solicit feedback on the H St. NW Selected Build Option
- Agenda
 - Background
 - H Street NW Bus Priority Project
 - Discussion



BACKGROUND

Transportation Equity

- DDOT is committed to elevating and advancing transportation equity to ensure public investments in transportation justly benefit all residents, visitors and commuters.
- Investing in transit facilities will improve equity in accessibility of where residents need to go.



moveDC and SustainableDC

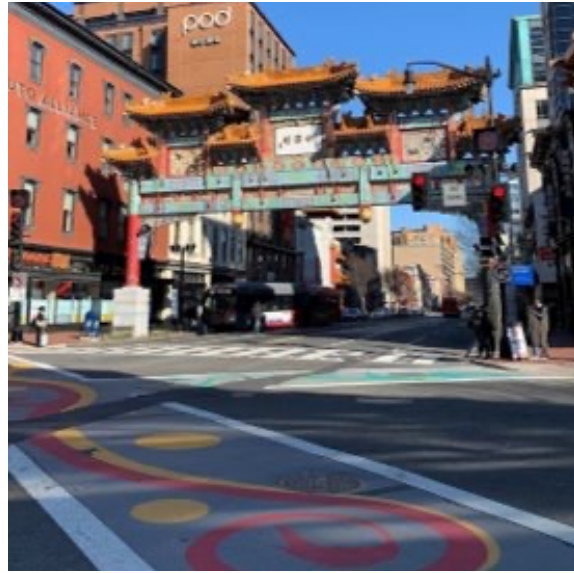
The District will achieve 75% of all commute trips by non-auto modes by 2032

BUS



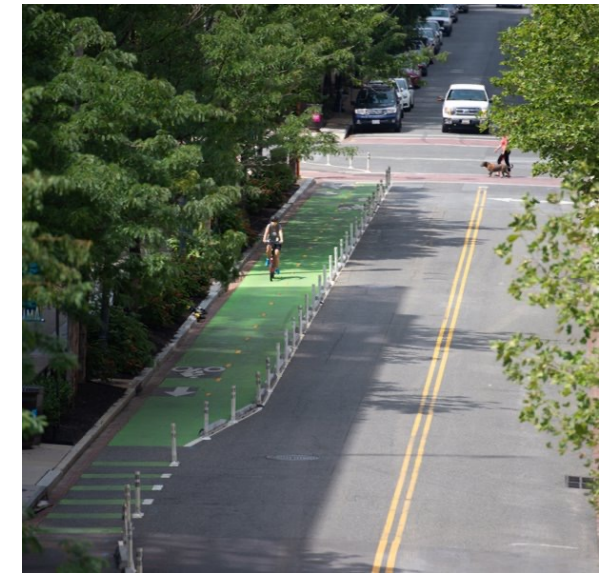
DDOT is committed to improving bus speeds and reliability

WALK



DDOT is committed improving economic equity and accessibility through safe, efficient, integrated transit options

& BIKE



DDOT is committed to integrating and expanding the bicycle and pedestrian network

Bus Priority Vision

- Improve bus speeds and reliability for riders across all eight wards of the District
- Faster and more reliable transit provides better access to more jobs and opportunity
 - During the COVID-19 pandemic, Metrobus ridership has consistently been two to three times higher than Metrorail ridership*
- Almost half of District Metrobus riders make under \$30,000 per year and two thirds live in zero-car households**
- Improve the **entire rider experience**, including:
 - Pedestrian improvements to ensure bus stop accessibility
 - Bus lanes to reduce congestion delay

*<https://www.wmata.com/service/covid19/Covid-19-Public-Information.cfm>

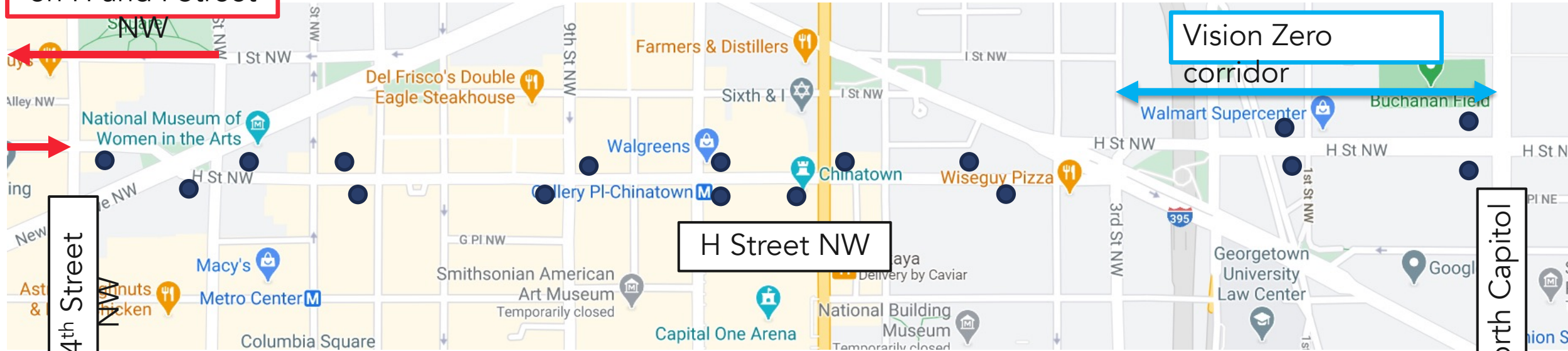
**2018 WMATA Metrobus rider survey



H STREET NW BUS PRIORITY PROJECT

Project Area

Existing bus lanes
on H and I Street



● Bus stop

- 1.25 miles long
- Truck and bus through route
- On-street loading and pick-up drop-off demand

Goals

Transit

- Improve bus speeds and reliability
- Improve pedestrian access to transit

Safety

- Improve safety for all users

Access

- Address curbside access needs

Bus Service on H Street NW



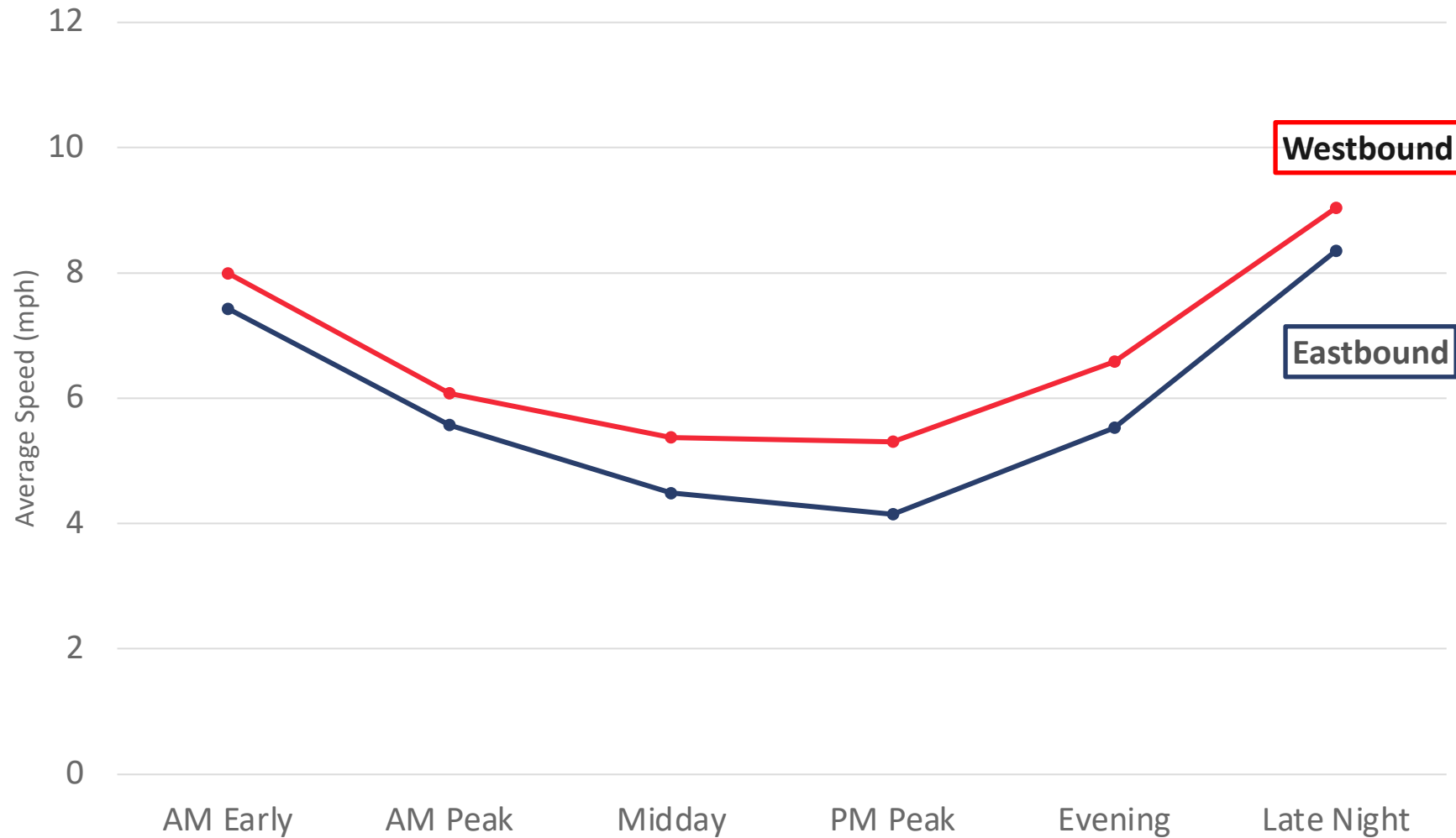
Ridership

- 80, X2, X9, 42, 43, G8, S2, 63, P6 = 35,000 average daily riders along entire route (2019)
- X2, X9 are third highest ridership during COVID-19 pandemic (Sept. 2019)

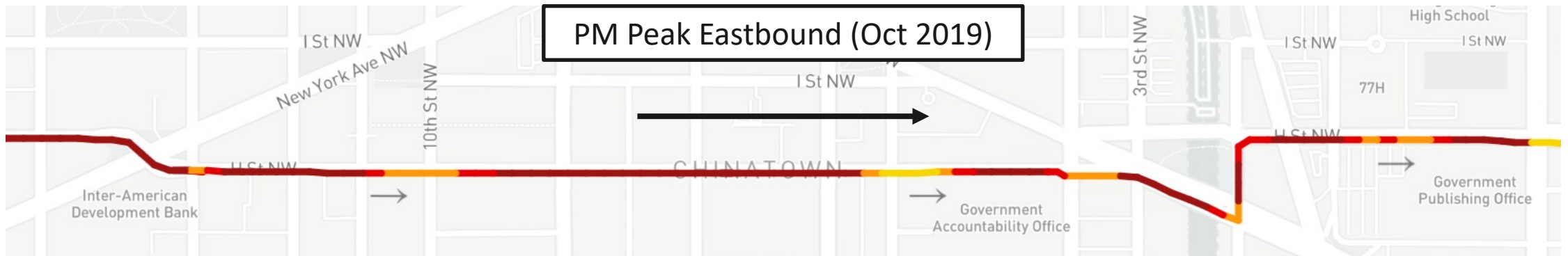
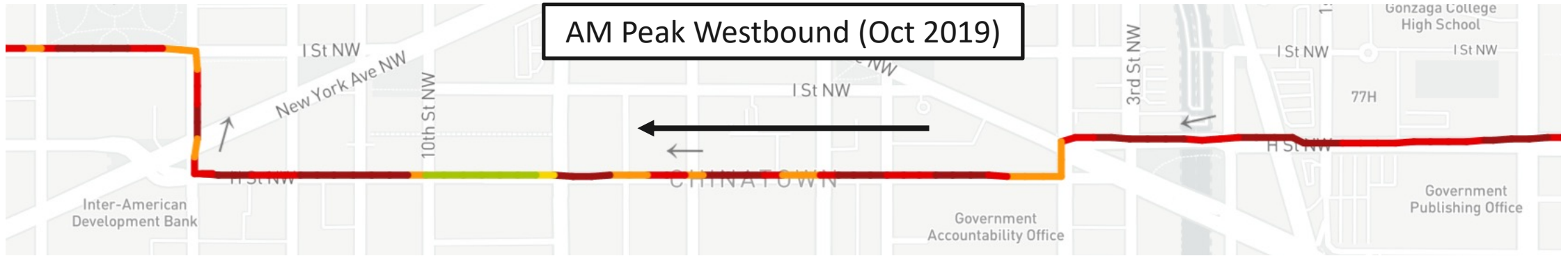
Slow bus speeds in the AM peak, midday, and PM peak (2019)

X2 Bus Speeds

X2 October 2019 Weekday Average Speeds
between North Capitol and 13th/14th Streets NW



X2 Bus Speeds



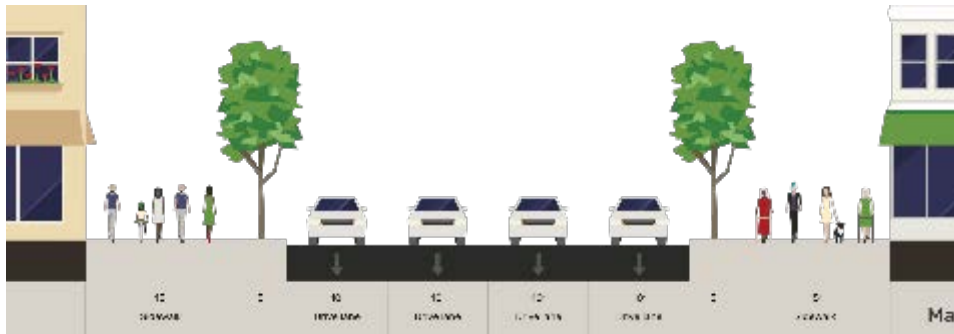
Anticipated Timeline



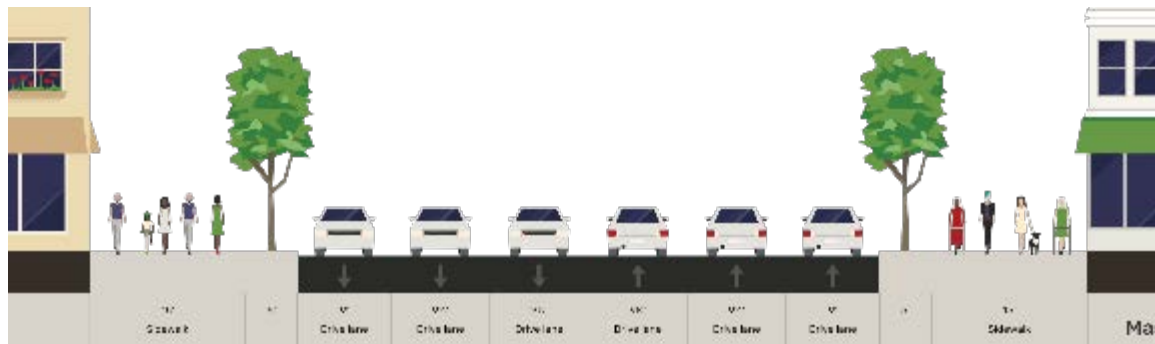
H STREET NW DESIGN CONCEPTS

Existing Conditions

- H Street has four (4) distinct segments as it shifts through New York Avenue and Massachusetts Avenue along the proposed alignment
 - Segment 1: 14th Street NW to 13th St NW: 4 lanes



- Segment 2: 13th Street NW to 4th Street NW: 6 lanes - 3 EB, 3 WB

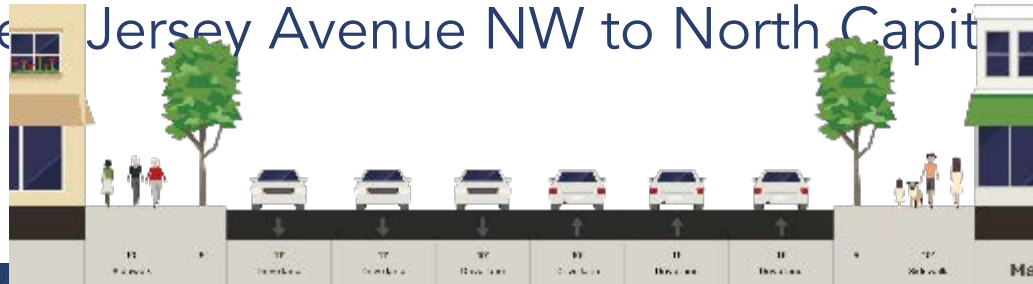


Existing Conditions

- H Street has four (4) distinct segments as it shifts through New York Avenue and Massachusetts Avenue along the proposed alignment
 - Segment 3: Discontinuous segment from 4th Street NW to New Jersey Avenue NW:



- Segment 4: New Jersey Avenue NW to North Capitol Street, 6 lanes - 3 EB, 3 WB



Option 1: No Build

- Make minimal/no changes to H Street NW
- Bus Stop Rebalancing
- Does not meet project goals

Option 2: Selected Build Option

Segment 1:



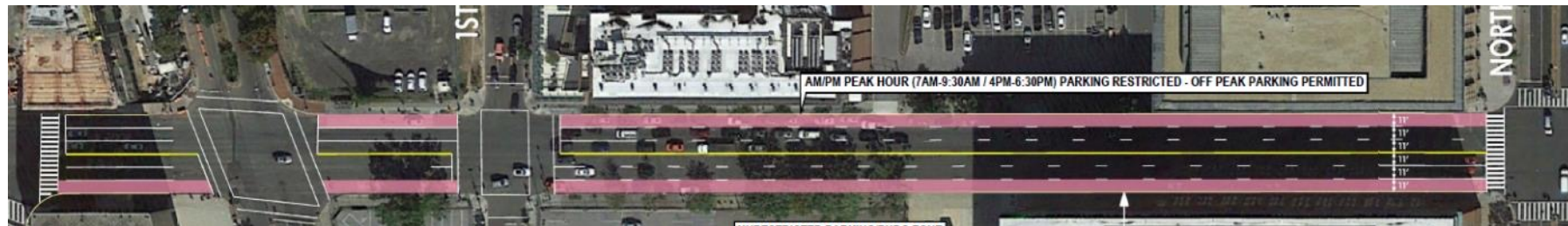
Features:

- Reduces existing 6-lanes (3 travel lanes per direction) to 5-lanes (2 travel lanes, 2 Bus-Only lanes, Left-turn lane)
- Continuous Bus-Only Lanes during AM & PM peak-hour
- Maintain existing Peak-Hour Parking Restrictions
- ~15% reduction in bus travel times in peak directions
- Improved transit reliability along H Street NW Corridor
- 6-lanes would be retained at two (2) “**Pinch-Point**” locations due to operational and safety constraints

Segment 2:



Segment 4:



Other Proposed Improvements

- Bus stop rebalancing
- Queue jump WB H St. NW & New Jersey Avenue
- Midblock pedestrian improvements (H St. NW: 4th and 5th)

Other Options Considered

- Not recommended for advancement due to safety and operational concerns

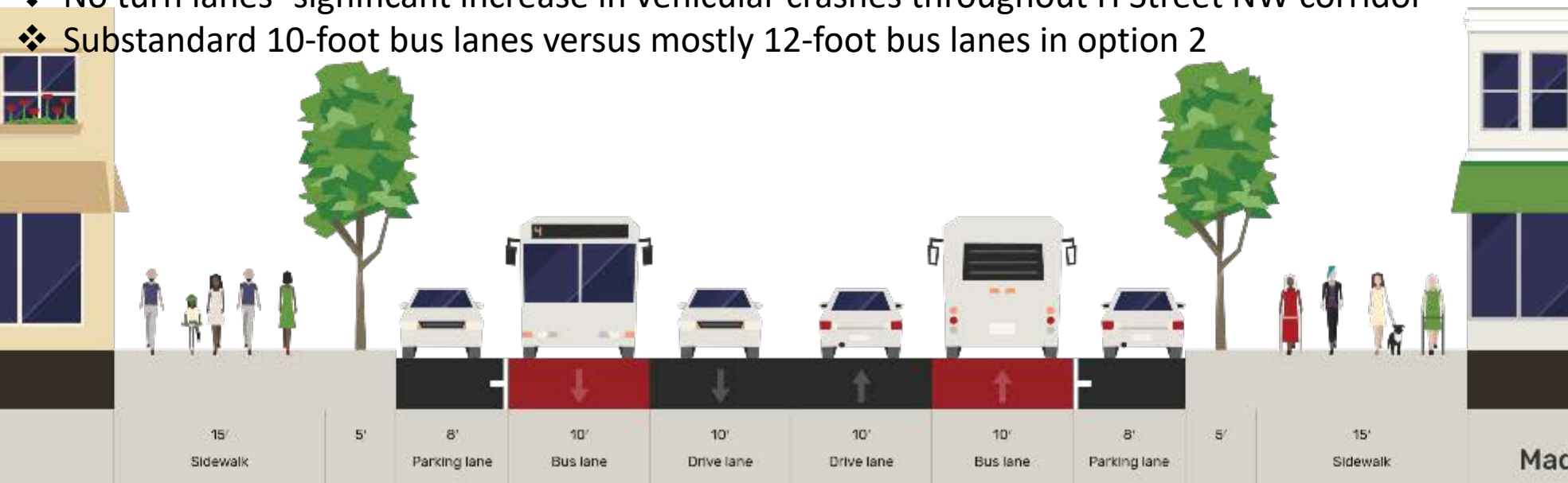
Option 3: Full-Time Offset

Pros:

- ❖ Full-time bus lanes are provided (7AM-7PM, Monday-Saturday)
- ❖ Full-time parking provided

Cons:

- ❖ 1 EB and 1 WB travel lane, no left turn lanes = significant queuing
 - More than 1-mile of queuing in EB direction that extends through 7th St and beyond 16th St NW
 - More than 2-miles of queuing in WB direction that extends beyond Anacostia River
- ❖ No turn lanes- significant increase in vehicular crashes throughout H Street NW corridor
- ❖ Substandard 10-foot bus lanes versus mostly 12-foot bus lanes in option 2



Option 3: Queuing and Impacts

Intersection	No-Build			Build Option <input type="checkbox"/>		
	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS	v/c Ratio
13 th Street and H Street, NW	11.8	B	0.58	11.8	B	0.70
12 th Street and H Street, NW	16.1	B	0.45	25.5	C	0.77
11 th Street and H Street, NW	27.0	C	0.82	64.6	E	1.05
10 th Street and H Street, NW	21.6	C	0.71	30.0	C	0.95
9 th Street and H Street, NW	19.0	B	0.80	22.0	C	0.79
8 th Street and H Street, NW	9.2	A	0.36	10.2	B	0.53
7 th Street and H Street, NW	23.4	C	0.44	86.0	F	0.70
6 th Street and H Street, NW	17.8	B	0.55	96.3	F	0.85
5 th Street and H Street, NW	20.1	C	0.61	31.2	C	0.88
Total:	166.0	-	-	377.6	-	-
	% Change from No-Build:			127%	-	-

- Under Option 2 without left turn bays, many of the intersections would be at or over capacity and intersections would have substantial queuing .
- To remove left turn blockages, significant numbers of left turns would have to be restricted:
 - Over 350 per hour during the AM
 - Over 300 per hour during the Midday
 - Over 375 per hour during the PM
- A two-lane road with turn lanes is expected to have approximately 26% fewer crashes than a two-lane road without turn lanes (i.e. Option 2) based on CMF ID: 2346

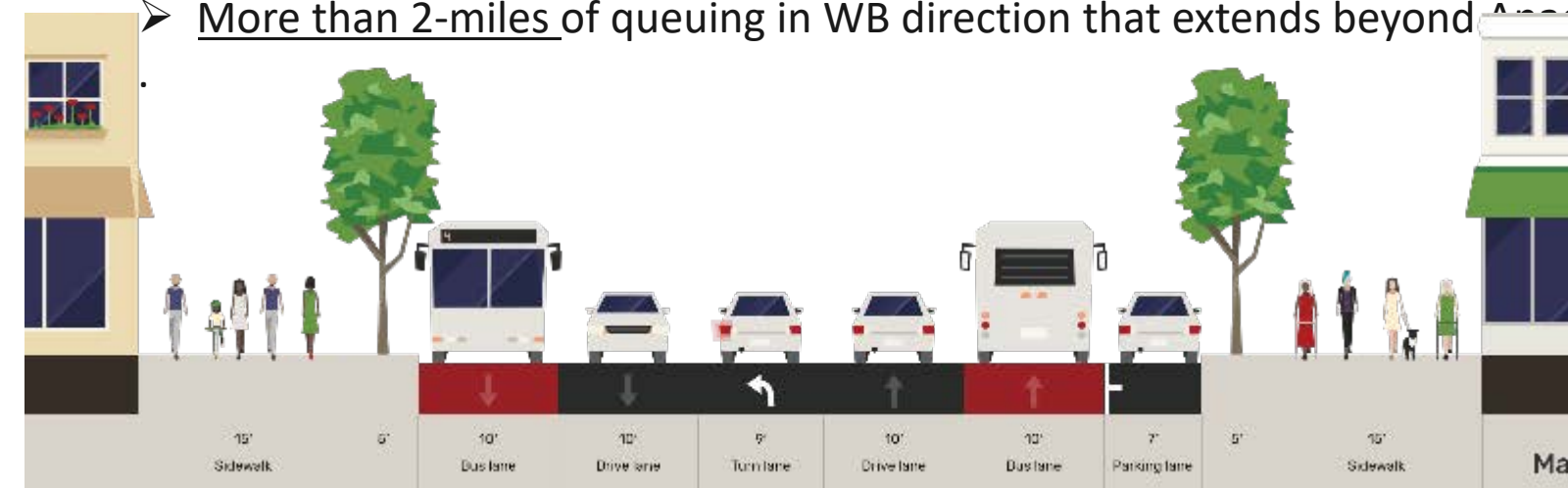
Option 4: Full-Time Parking on One Side

Pros:

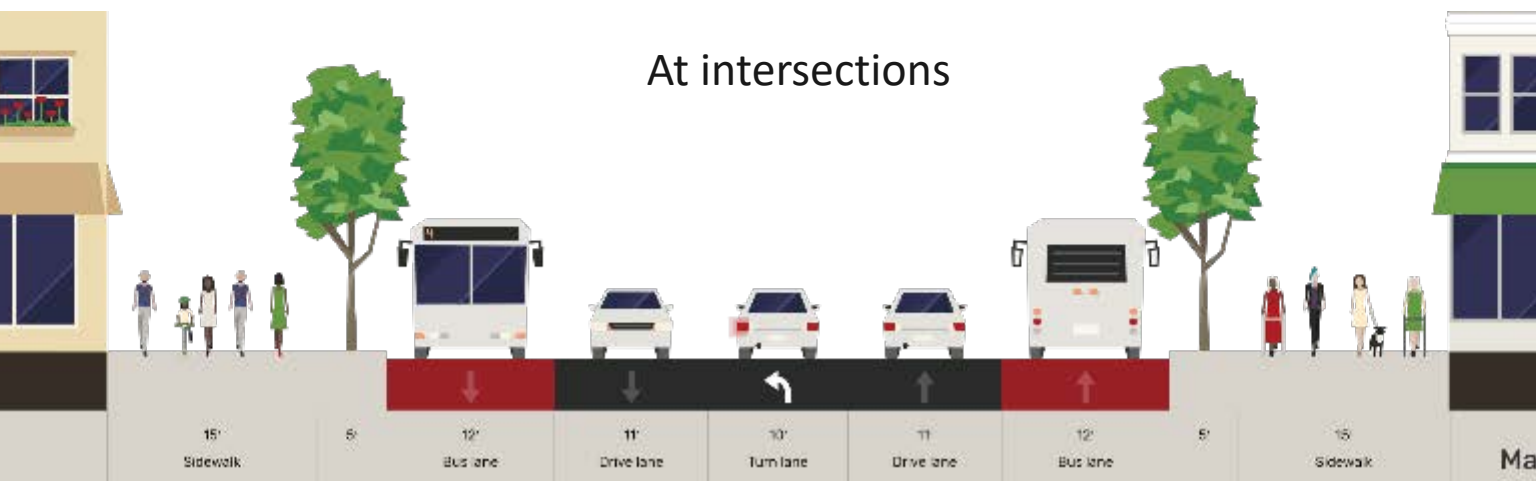
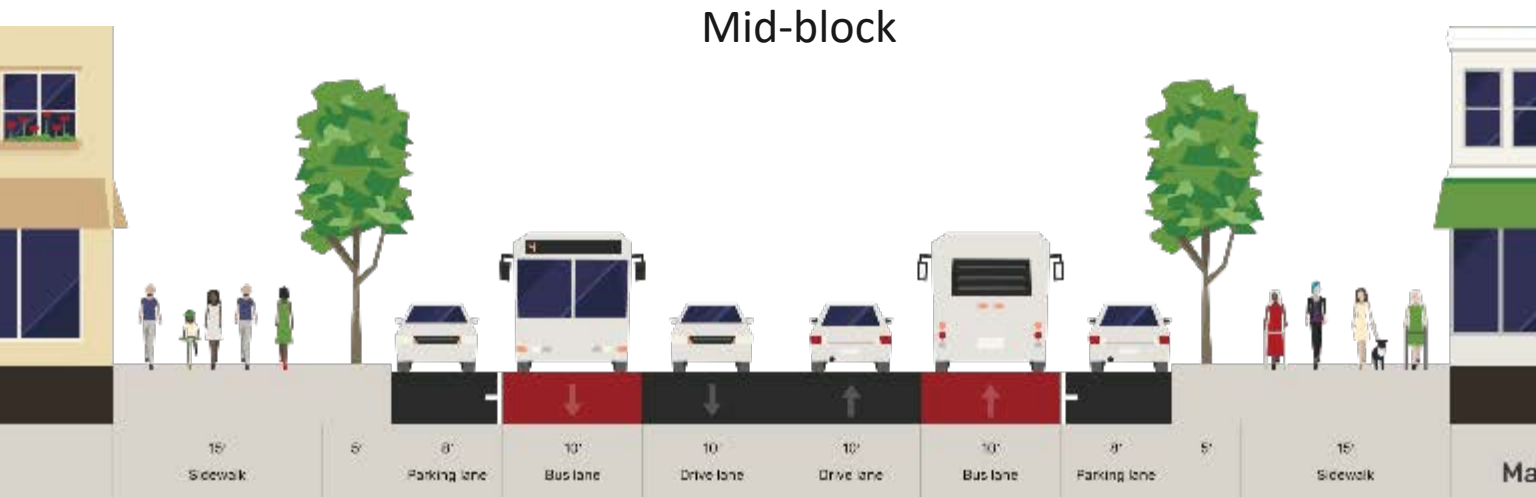
- ❖ Full-time bus lanes are provided (7AM-7PM, Monday-Saturday)
- ❖ Full-time parking on one side of the street
- ❖ Left turn bays are provided at each intersection

Cons:

- ❖ Bus lanes are only 10-feet wide compared to 12-feet wide in Options 2 and 5
- ❖ Parking lane adjacent to bus lane is only 7-feet wide
 - High potential for side swipes between buses and parked cars/delivery trucks
- ❖ 1 EB, 1 WB travel lane = substantial queuing
 - More than 1-mile of queuing in EB direction that extends through 7th St and beyond 16th St NW
 - More than 2-miles of queuing in WB direction that extends beyond Anacostia River



Option 5: The Weave



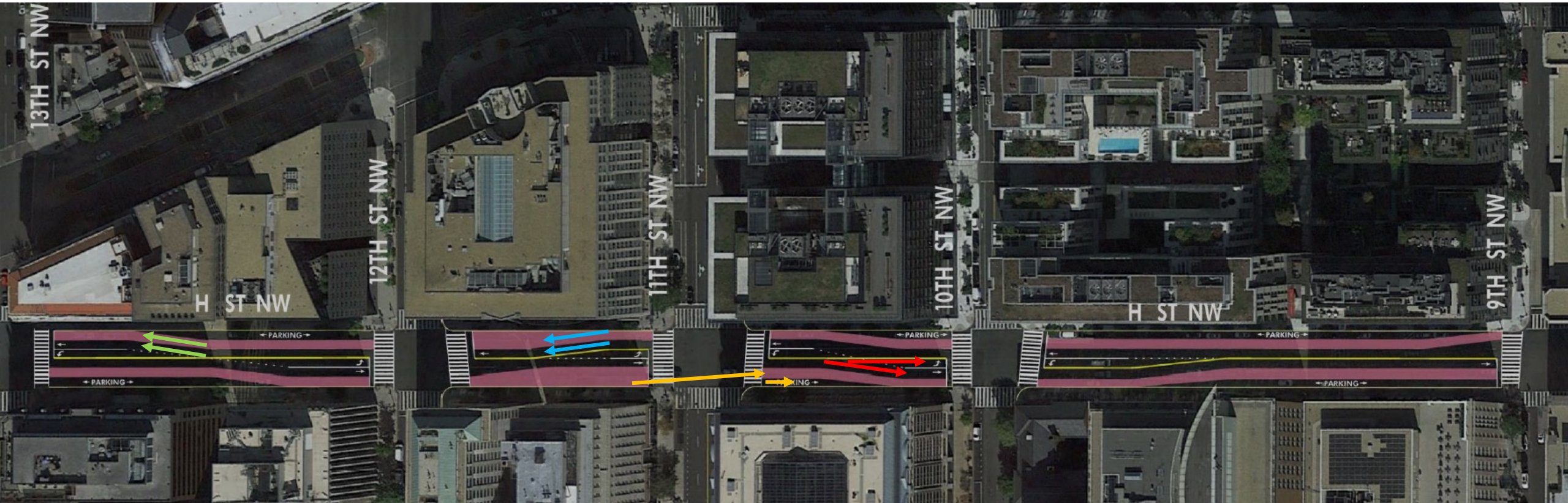
Pros:

- ❖ Full-time bus lanes are provided (7AM-7PM, Monday-Saturday)
- ❖ Full-time parking at selected locations
- ❖ Retain left-turn lanes at most locations

Cons:

- ❖ Results in loss of >120 parking spaces
- ❖ Non-uniform section resulting in substantial weaving to accommodate full-time parking & left-turn lanes
 - Likely cause significant increase in vehicular crashes, particularly sideswipe & rear-end crashes throughout H St NW corridor

Option 5 – Safety and Operational Impacts



Potential Weaving Concerns:

- Bus / truck shift conflicts
- Bus / car shift conflicts
- Bus / parked car shift conflicts
- Car / car shift conflicts

Ideas? Questions? Comments?



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(leave a voicemail or request a call back)



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ddot.dc.gov/page/bus-priority

ddot.dc.gov/page/h-street-nw-bus-priority

Learn about other bus priority projects, the corridor network, and the Toolbox



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GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

d.

District Department of Transportation



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