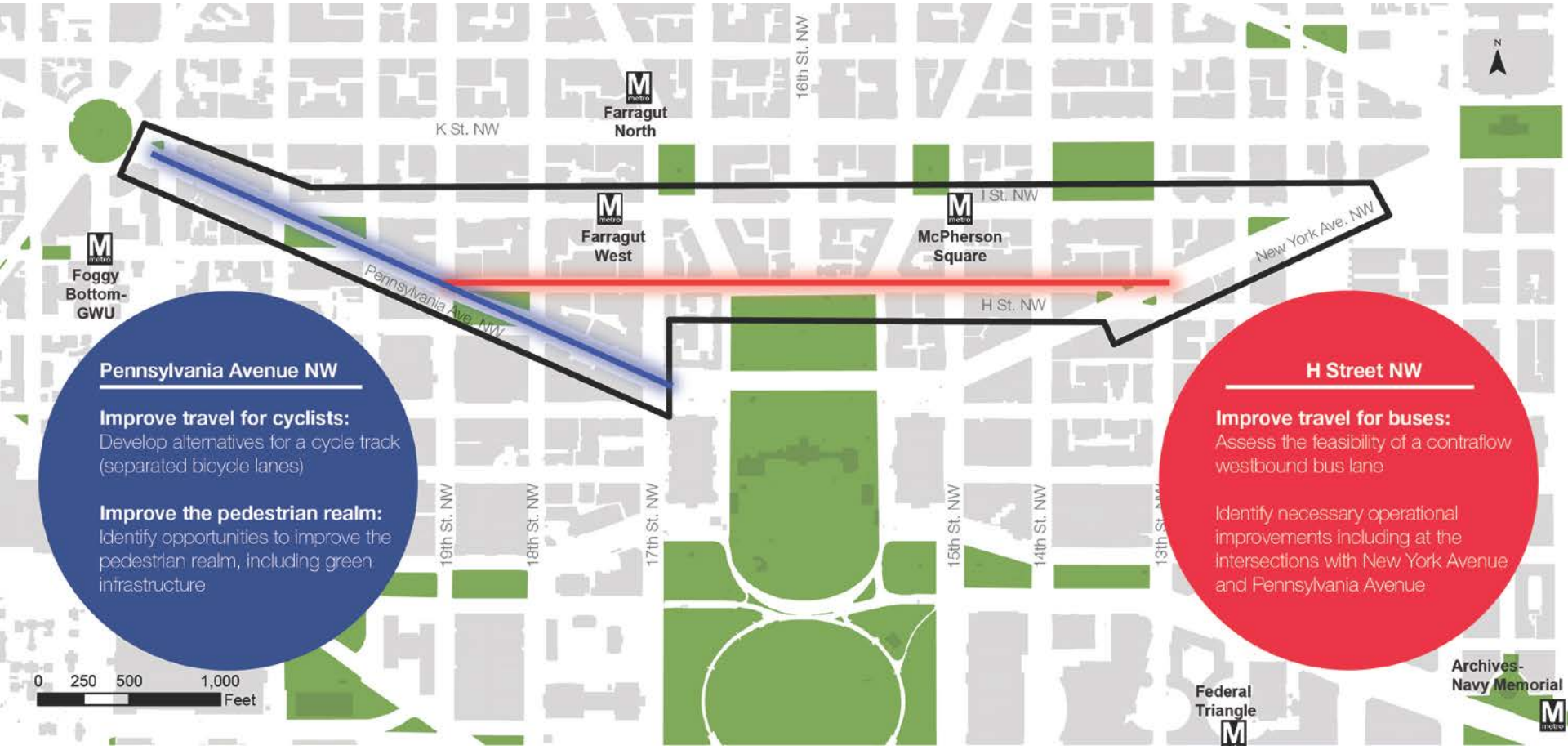
ANC 2A Meeting

July 19, 2017

Megan Kanagy, Transportation Planner

Study Area


K St. NW
Farragut North
16th St. NW
Farragut West
I St. NW
McPherson Square
New York Ave. NW
Foggy Bottom-GWU
Pennsylvania Ave. NW
H St. NW
19th St. NW
18th St. NW
17th St. NW
15th St. NW
14th St. NW
13th St. NW
Pennsylvania Avenue NW
Improve travel for cyclists:
Develop alternatives for a cycle track (separated bicycle lanes)
Improve the pedestrian realm:
Identify opportunities to improve the pedestrian realm, including green infrastructure
H Street NW
Improve travel for buses:
Assess the feasibility of a contraflow westbound bus lane
Identify necessary operational improvements including at the intersections with New York Avenue and Pennsylvania Avenue
0 250 500 1,000 Feet
Federal Triangle
Archives-Navy Memorial
N

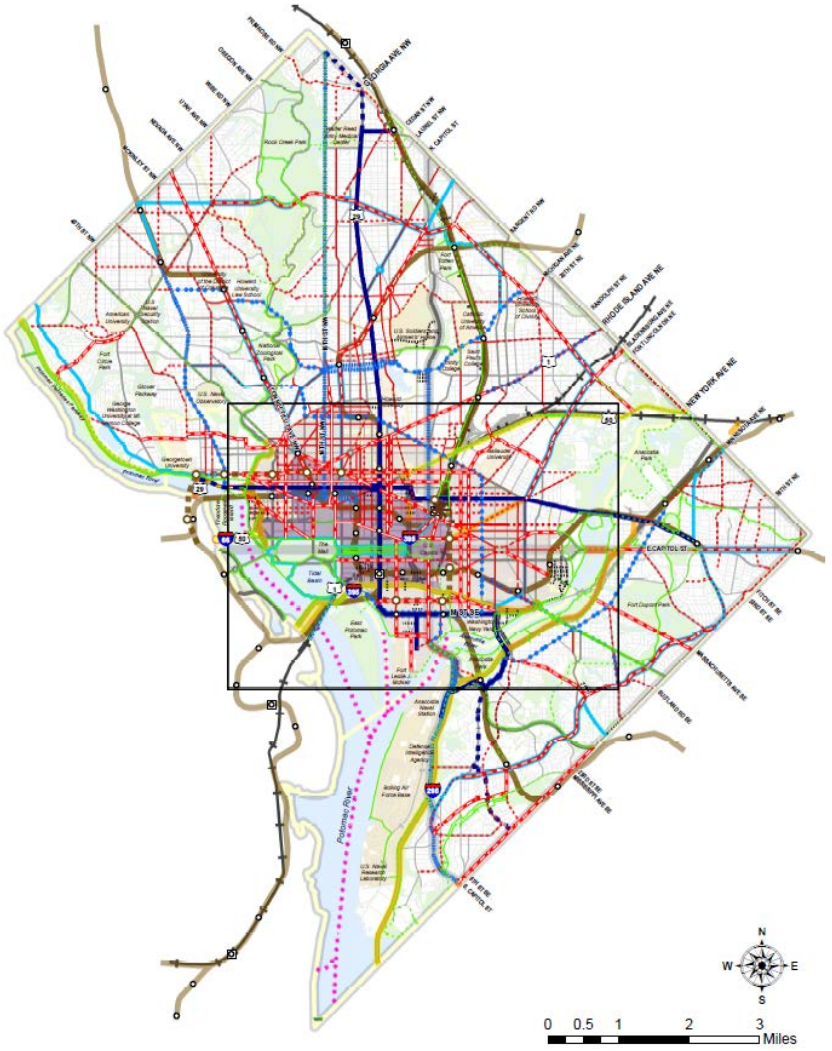
move dc
Our Transportation Future

Pennsylvania Avenue NW

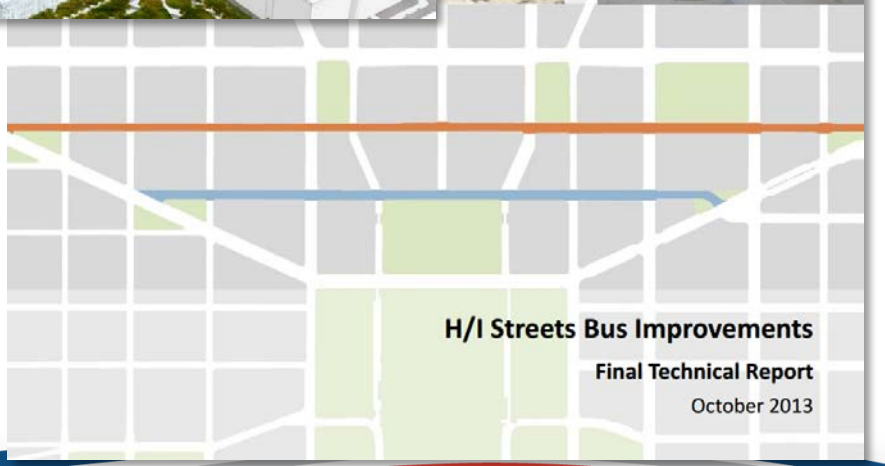
- Cycle track

H & I Streets NW

- High-capacity transit



Building on Past Work



District Department of Transportation

Project Timeline

Identify Issues & Collect Data

PUBLIC KICK-OFF MEETING
June 15, 2016

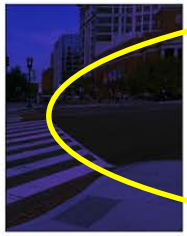
CAG MEETING #1
September 28, 2016

Develop Alternatives

PUBLIC ENGAGEMENT EVENTS
October 20, 2016

Evaluate Alternatives

CAG MEETING #2
June 2017



Select Recommended Alternative

FINAL PUBLIC MEETING
July 2017

CAG: Citizens Advisory Group

Existing Conditions

Pennsylvania Avenue NW

- 6 travel lanes plus parking
- Lack of cohesive streetscape
- Long crossings
- Excess vehicle capacity on some blocks

Existing Conditions

H & I Streets NW

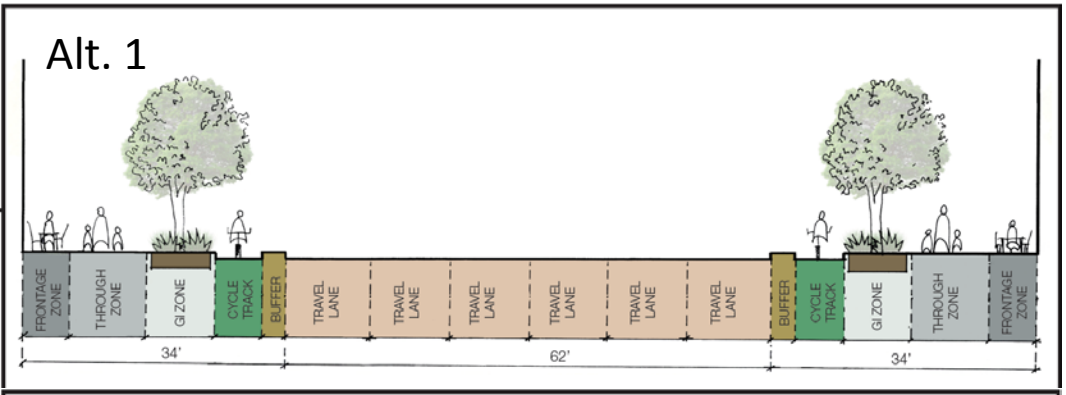
- H Street = 5 lanes eastbound
- I Street = 4 lanes westbound

} Similar traffic volumes

- Very heavy bus volumes
  - Over 30 bus routes serving about 20% of daily Metrobus bus ridership (includes K Street)
  - I Street is more congested than H Street
  - I Street bus speeds average 3.6 MPH in the PM (15^{th} to 17^{th} Street)

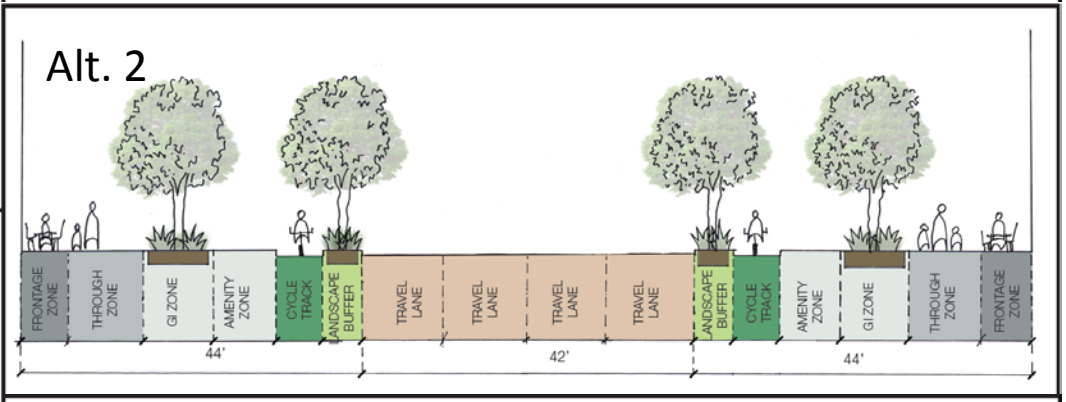
Alternatives

Alt. 1



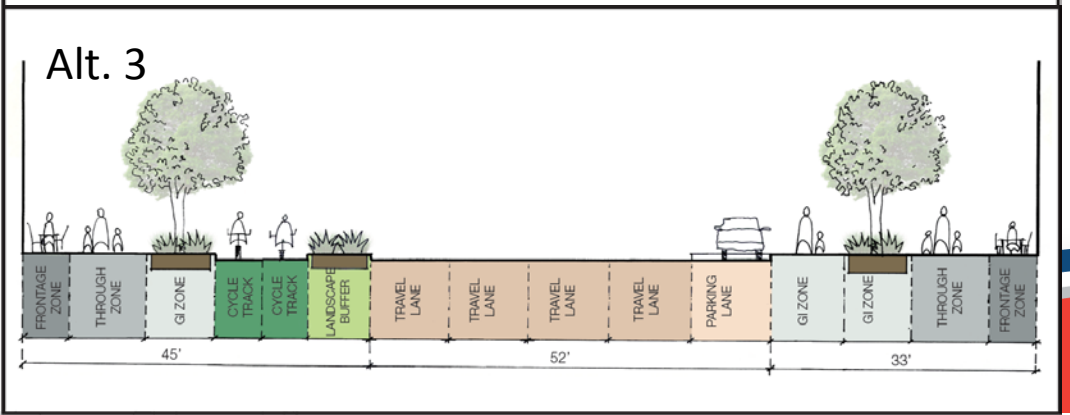
- Cycle track replaces parking lane
- Existing vehicle capacity maintained
- Limited pedestrian improvements
- H Street contraflow bus lane

Alt. 2



- Cycle track on each side of street
- Widened sidewalks and double row of trees
- H Street contraflow bus lane

Alt. 3

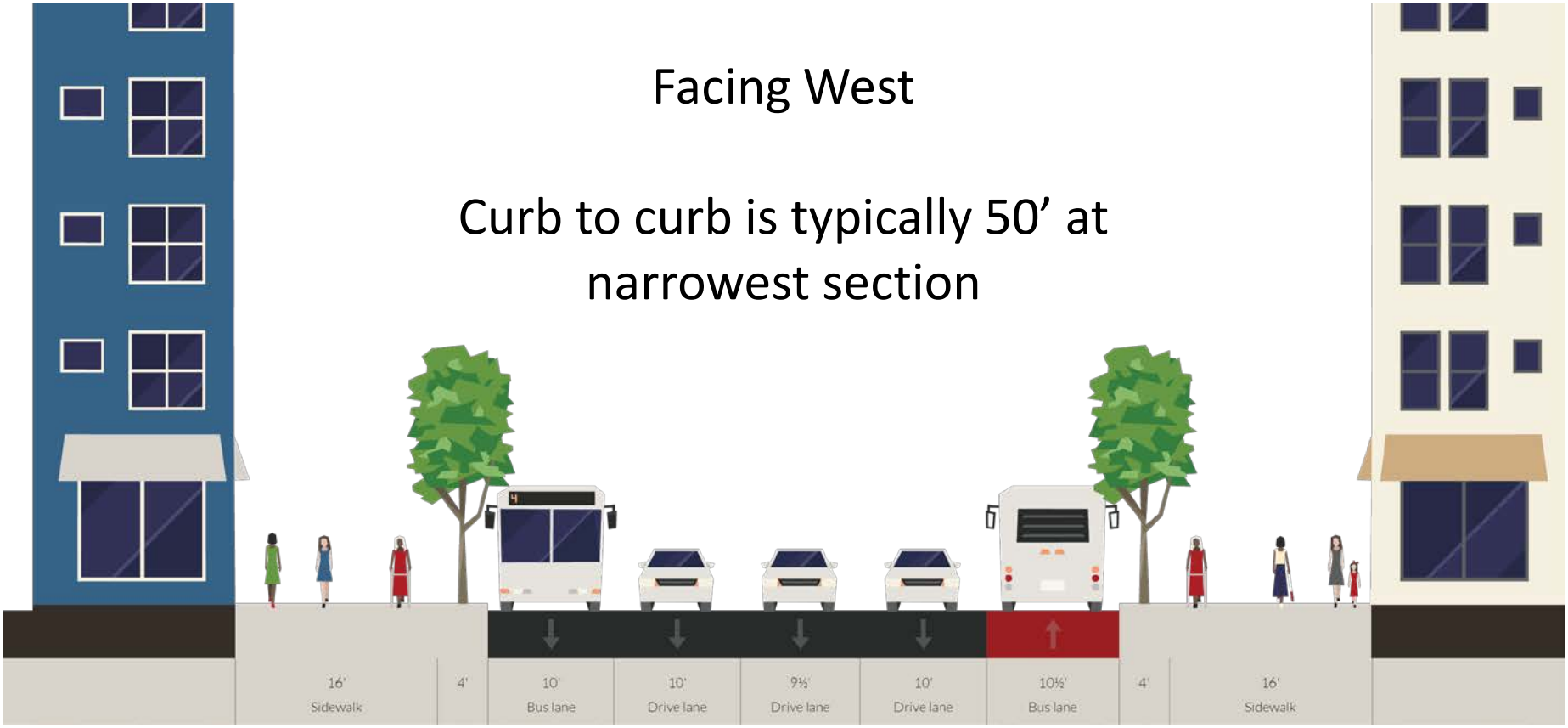


- Two-way cycle track on south side
- Widened sidewalks on north side with landscaping
- H Street contraflow bus lane

H Street with Bus Lane Cross Section

Facing West

Curb to curb is typically 50’ at narrowest section



10’ 10’ 9.5’ 10’ **10.5’**

Note: lane widths pending further measurement in the design phase

Alternatives Analysis

- Pedestrian/cyclist safety, comfort, and mobility
- Pedestrian realm and sustainability
- Maintain vehicle operations
- Transit performance
- Cost

Feasibility of H Street NW Bus Lane

		Existing Conditions	H Street NW Bus Lane Convert northern lane to westbound contraflow bus lane; shift some buses from K Street NW and I Street NW
Transit Performance	Transit travel time	• WB buses experience excessive delays (especially in PM)	• WB bus travel times improve (both in H Street NW contraflow and on I Street NW) • EB bus travel times similar to existing conditions
	Transit on-time performance	• Travel times subject to congestion	• Decrease variability in travel time through corridor • Increase in predictability of bus service
	Ease of multimodal	• Traffic conditions predictable • However, bus routes	• Education and enforcement required for interactions between other modes and buses in bus lane • Buses in contraflow lane subject to conflicts with turning vehicles and each other

Comparison of Pennsylvania Ave NW Alternatives

		Existing Conditions	Alternative 1 Convert parking to cycle track	Alternative 2 Widen sidewalks; add cycle track on each side with landscape buffer	Alternative 3 Widen northern sidewalk; add two-way cycle track on south side with landscape buffer
Pedestrian/Cyclist Safety, Comfort and Mobility	Number of vehicle lanes to cross (peak period)	• 6 travel lanes + 2 parking lanes • ~80'	• 4 travel lanes • ~60'	• 4-5 travel lanes • ~40-50'	• 4-6 travel lanes • ~40-60'
	Safety at complex intersections	• 80' unprotected crossings • Low pedestrian visibility coupled with high volume turns	• Shorter crossings • Increased pedestrian visibility • Neckdowns • Closure of slip lane at H Street NW	• Much shorter crossings • Increased visibility • Neckdowns/curb extensions • Closure of slip lane at H Street NW	• Much shorter crossings • Increased visibility • Neckdowns/curb extensions • Closure of slip lane at H Street NW
	Cyclist connectivity to surrounding network and predictability for drivers	• No existing bicycle facilities • No direct connection to nearby bicycle facilities	• Cycle track will fill gap in bicycle network • One-way alignment makes Washington Circle easier to navigate • More predictable for drivers	• Cycle track will fill gap in bicycle network • One-way alignment makes Washington Circle easier to navigate • More predictable for drivers	• Cycle track will fill gap in bicycle network • Two-way alignment makes Washington Circle more difficult to navigate • Less predictable for drivers
	Level of protection for cyclists	• No protection • Cyclists share lanes with vehicles	• Raised concrete buffer • Mixing zone at 19th Street NW	• Wide landscaped buffer with curb extensions that decrease exposure along corridor and at intersections • Mixing zone at 19th Street NW	• Wide landscaped buffer with curb extensions that decrease exposure at intersections, only adjacent to vehicles in one direction
	Pedestrian connectivity to Monroe and Murrow Parks	• Long, unprotected crossings	• Minor sidewalk extensions and shorter crossings	• Sidewalk extensions • Shorter crossings	• Sidewalk extensions • Shorter crossings
Pedestrian Realm & Sustainability	Uniformity of streetscape design and opportunities for activation	• Inconsistent streetscape • No new opportunities for activation	• Enhanced pedestrian realm • Limited new opportunities for sidewalk activation	• Enhanced pedestrian realm • New opportunities for sidewalk activation • Enhanced uniformity • Double row of trees	• Enhanced pedestrian realm • New opportunities for sidewalk activation
	Potential stormwater capture	• No change, capture limited to existing tree beds	• Limited opportunities for sidewalk and roadway stormwater capture	• Significant opportunities for capture along both sides of roadway and sidewalks	• Opportunities for capture along both sidewalks and south side of roadway
Maintain Vehicle Operations	LOS at intersections	• Fair LOS for vehicles: only one intersection with LOS E or F in the PM	• Fair LOS for vehicles: only one intersection with LOS E or F in the PM	• Fair LOS for vehicles: only one intersection with LOS E or F in the PM	• Fair LOS for vehicles: only one intersection with LOS E or F in the PM
	Driveway, alley and loading conflicts	• No conflicts	• Drivers must cross cycle track/buffer on both sides of street • On-street loading maintained in off-peak	• Drivers must cross cycle track/buffer on both sides of street • 2 loading zones on 1700 block must be relocated or removed	• Drivers must cross cycle track/buffer on south side of street • 2 loading zones on 1700 and 1900 block must be relocated or removed
	Parking	• 89 vehicle + 11 all-day motorcycle spaces • 63 AM and/or PM restricted spaces • 3 loading zones	• 138 vehicle + 11 motorcycle AM and PM restricted spaces • 3 loading zones	• 43 all-day spaces • 1 loading zone	• 57 all-day spaces • 1 loading zone
Cost	Capital cost	• No cost	• Full reconstruction of sidewalks and roadway	• Full reconstruction with enhanced landscaping and pedestrian realm	• Full reconstruction with enhanced landscaping and pedestrian realm

H Street: Benefits for Bus Riders

- 49,000+ daily riders on routes shifted to H Street bus lane would benefit from approx. 30% - 50% faster travel times

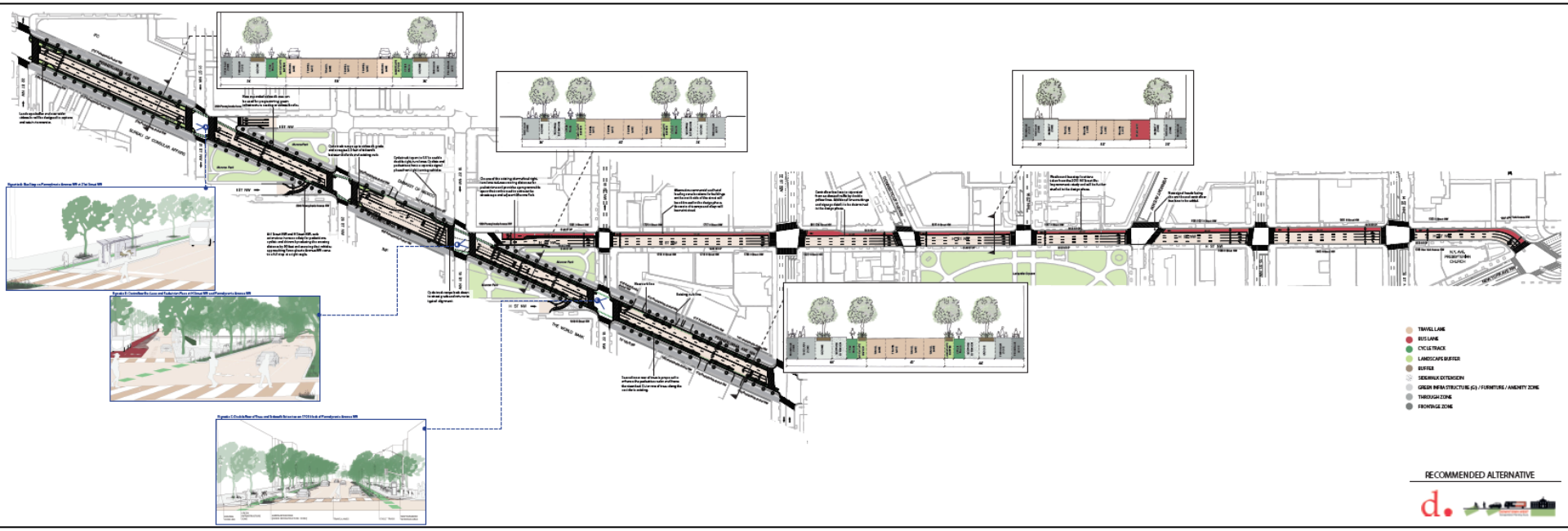
- 40,000+ daily riders on routes remaining on I Street would benefit from approx. 15% faster travel times

Recommended Alternative

Alternative 2 with contraflow bus lane on H Street is the recommended alternative

- More analysis needed on H Street in preliminary engineering phase
  - Recommendation is to proceed with additional analysis and continued stakeholder coordination

Recommended Alternative

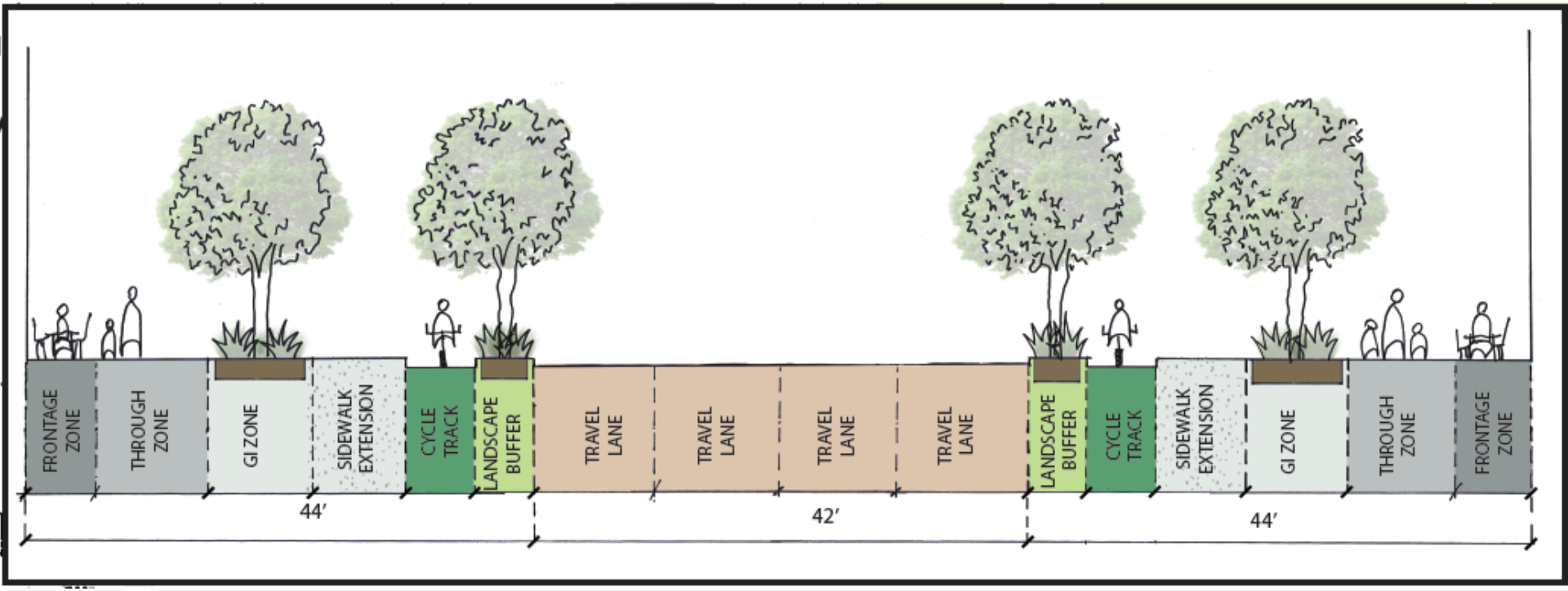


Roll map posted on project website:
downtownwestdc.com

Recommended Alternative: Pennsylvania Avenue

- One-way cycle track on each side with landscape buffer
- Double row of trees and 8’ additional sidewalk width
- Shorter pedestrian crossings
- Space for programming, green infrastructure, seating, and sidewalk cafes
- Parking retained on some blocks, with potential for additional off-peak parking

Recommended Alternative: 1700 Block of Penn. Ave.



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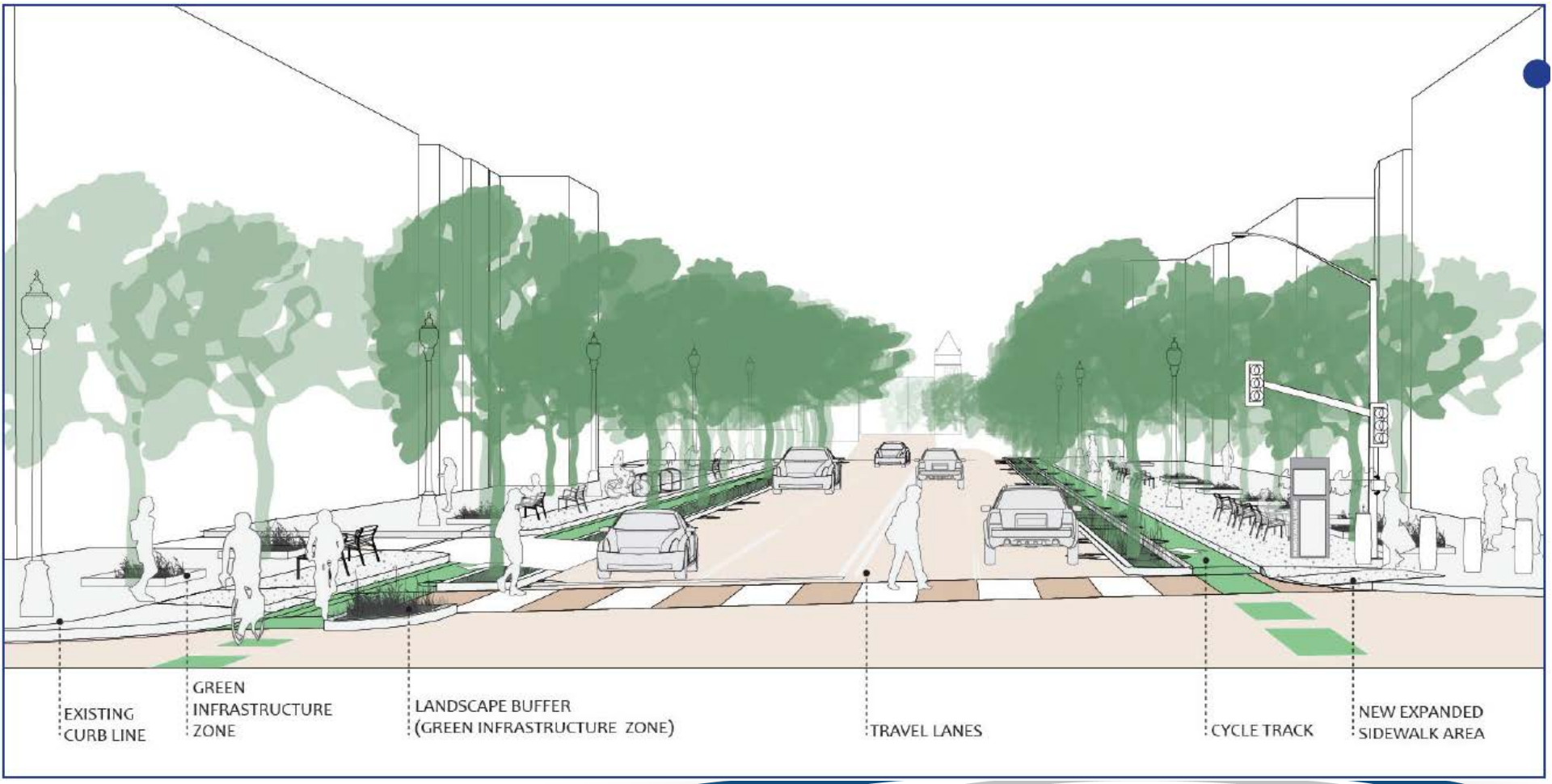
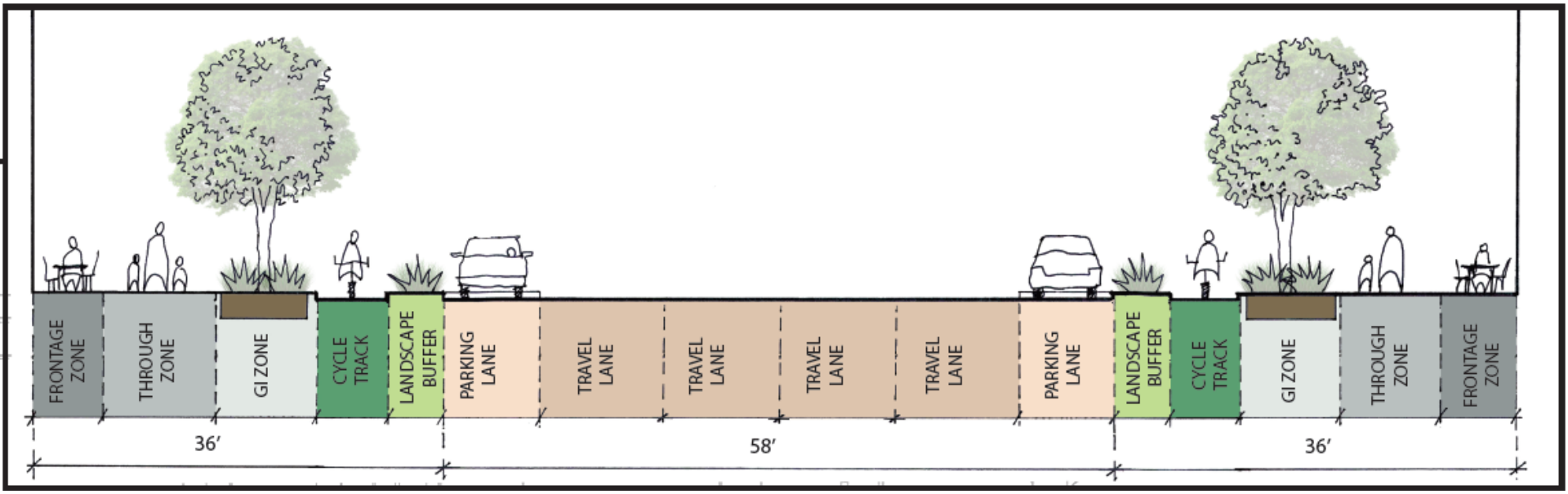


Recommended Alternative: 2100 Block of Penn. Ave.



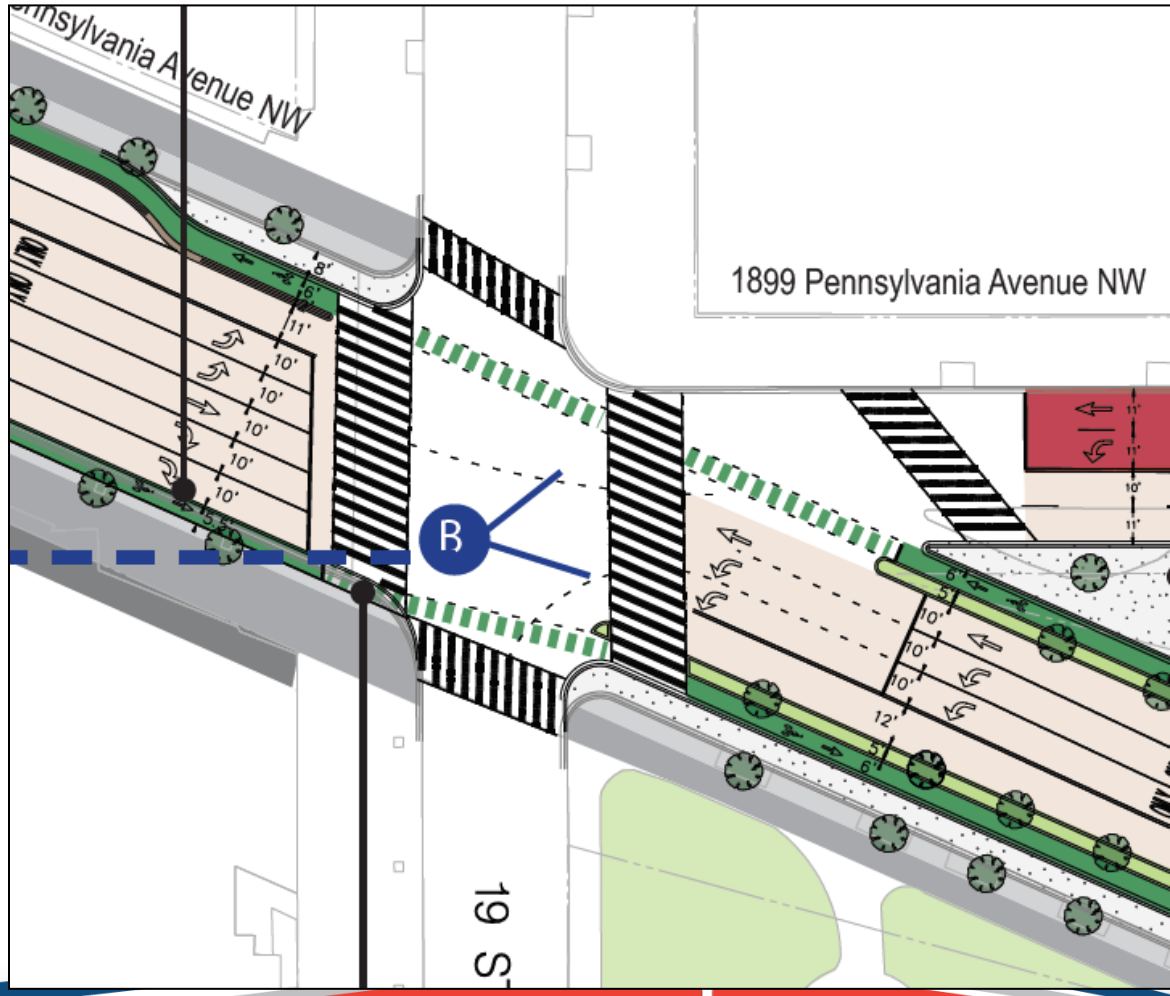
Recommended Alternative: Bus Stops on Penn. Ave.

Recommended Alternative: Traffic Results

	Intersection	AM PEAK		PM PEAK	
		Existing (2016)	Rec Alt (2040)	Existing (2016)	Rec Alt (2040)
H Street	H Street NW & 13th Street NW	B	B	B	B
	H Street NW & 14th Street NW	A	B	A	B
	H Street NW & 15th Street NW	A	B	B	B
	H Street NW & 16th Street NW	B	B	B	B
	H Street NW & 17th Street NW	C	C	C	C
	H Street NW & 18th Street NW	A	C	A	B
	H Street NW & Connecticut Avenue NW	B	B	B	B
	H Street NW & New York Avenue NW	C	C	D	D
	New York Avenue NW & 13th Street NW	A	A	A	A
	H Street NW & Vermont Avenue NW	B	B	B	C
Pennsylvania Avenue	Pennsylvania Avenue NW & 17th Street NW	B	B	B	B
	Pennsylvania Avenue NW & 18th Street NW	B	B	B	C
	Pennsylvania Avenue NW & 19th/H Street NW	C	E	C	F
	Pennsylvania Avenue NW & 20th Street NW	B	C	C	C
	Pennsylvania Avenue NW & 21st Street NW	C	D	B	D
	Pennsylvania Avenue NW & I Street	C	B	F	D
	Pennsylvania Avenue NW & 22nd Street NW	C	B	C	B

Recommended Alternative:
Traffic Results - Penn Ave./19th St./H St.

- Bus phase for left turning buses from H Street bus lane
- Separate phases for eastbound dual right turns and bikes/pedestrians crossing 19th Street
- Separate phases result in more delay
  - More analysis will be done as part of the preliminary engineering phase



Pennsylvania Avenue Next Steps

Public and stakeholder engagement

Planning Study → Preliminary Engineering → Final Design → Construction

Project phase will include:

- Survey
- Streetscape materials and public realm design
- Loading and curbside (including potential for off-peak parking)

H Street Next Steps: Preliminary Engineering

- Additional analysis needed including:
  - Alternative loading and access solutions for north side properties
  - Which bus routes use the bus lane
  - Number and location of bus stops
  - Roadway width confirmation
  - Operational considerations and safety
- Public and stakeholder engagement

Final Planning Study Meeting

Thursday, July 20

6:30 PM – 8:00 PM

Presentation at 7:00 PM

GWU Funger Hall, Room 222

2201 G Street NW

Comment on the Recommended Alternative

- Submit comments through August 21st
  - Mail, website, or email:
    megan.kanagy@dc.gov

- Attend tomorrow night's meeting or visit the project website for more information

  downtownwestdc.com

Thank you!

Questions? Comments?

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