

16TH STREET NW **BUS LANES PROJECT**



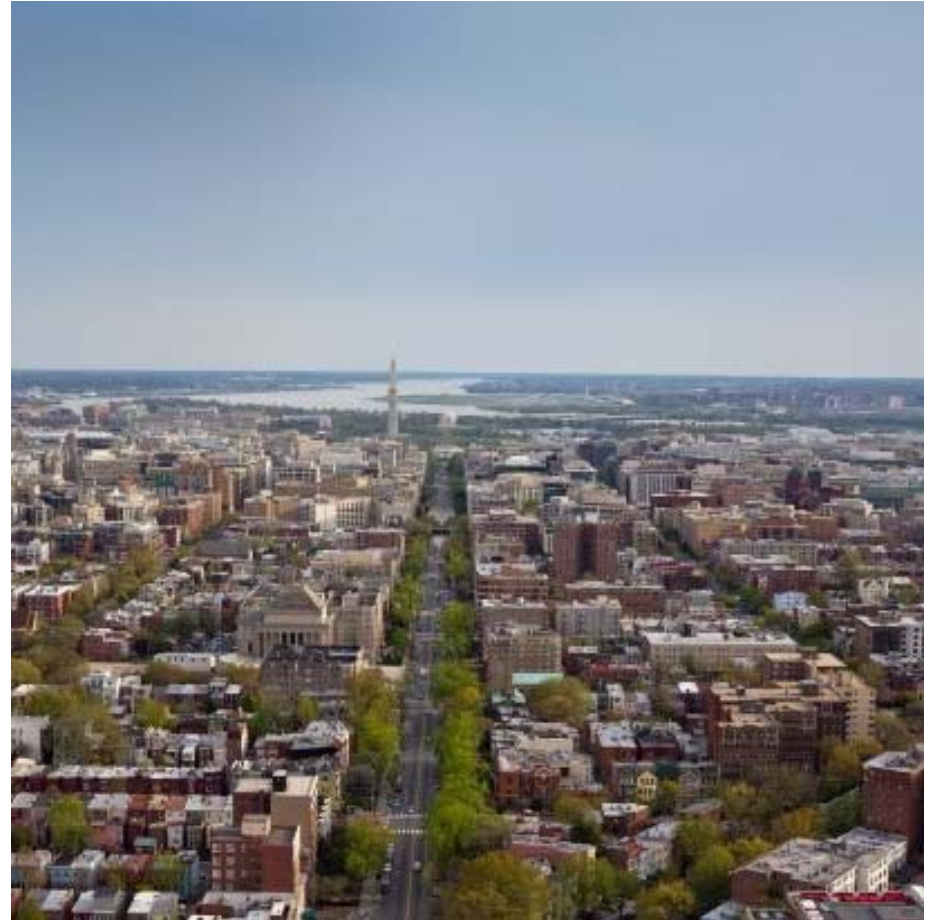
Online Open House



District Department of Transportation

Presentation Agenda

1. Project Overview/Update
2. Proposed Design Layout
3. Bus Operations
4. Left-Turn Restrictions
5. Parking Restrictions
6. Bus Stop Consolidation
7. Project Schedule
8. Feedback



Project Overview



Goal: To improve the performance and reliability of bus routes along 16th Street NW between H Street NW and Arkansas Avenue NW.

PUBLIC & STAKEHOLDER FEEDBACK

Public Meetings

June 15, 2017 – Citizens Advisory Group (CAG)

- Discussed changes from the planning study

July 27, 2017 – Public meeting

- Presented 5 roadway design layout options

August 4 – October 3, 2017 - Online Open House

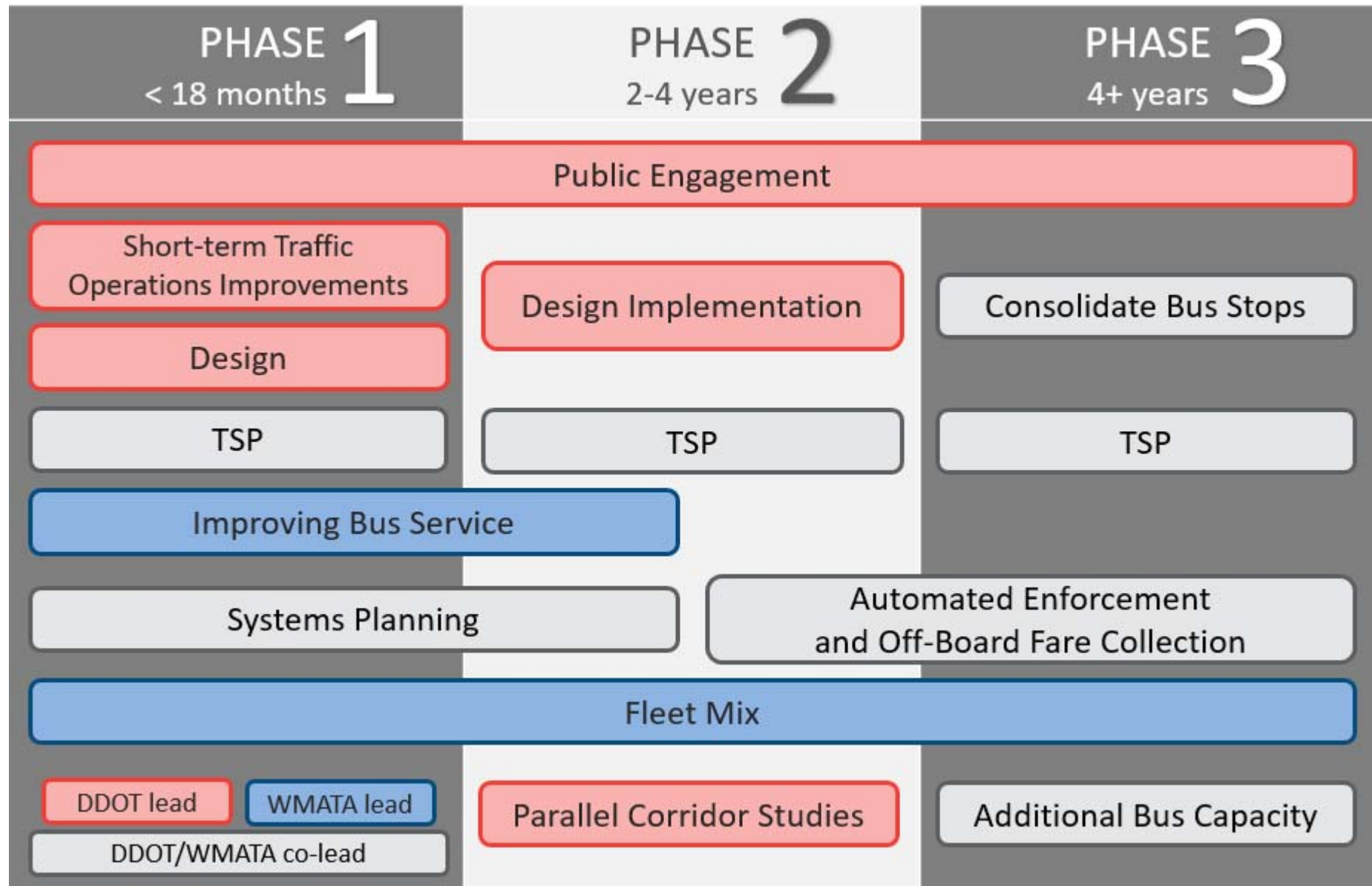
- Received feedback on the roadway design layout options

September 26, 2017 – Public Engagement Event

- Received feedback from bus riders on the roadway design layout options

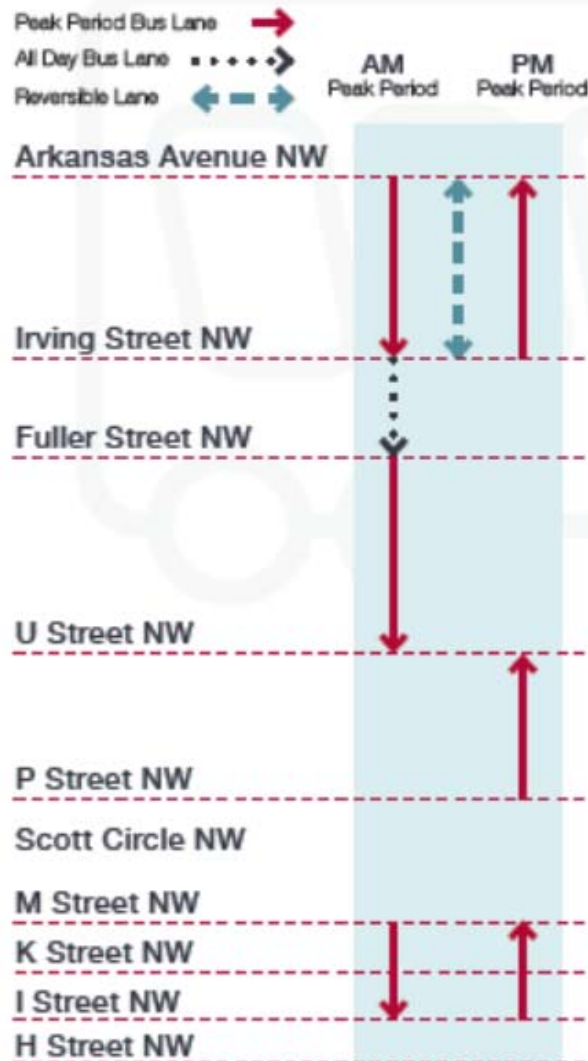


PLANNING STUDY RECOMMENDATION (2016)



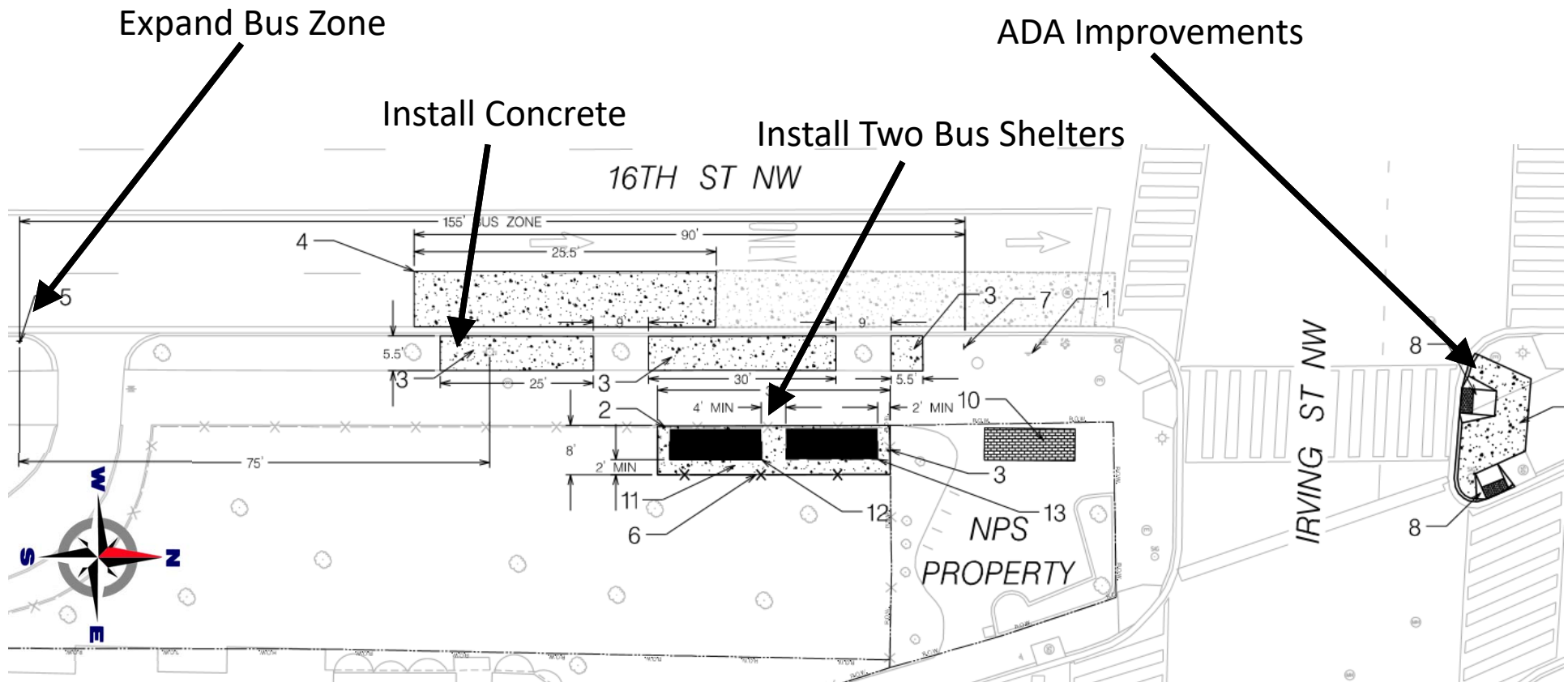
Proposed Design Layout

Proposed Design Layout



- Bus queue jumps
- Improved bus stops (ADA, bus zone expansions, additional bus shelters)
- Pedestrian improvements
- Transit Signal Priority (TSP)
- Simple navigation (no extension of reversible lane)

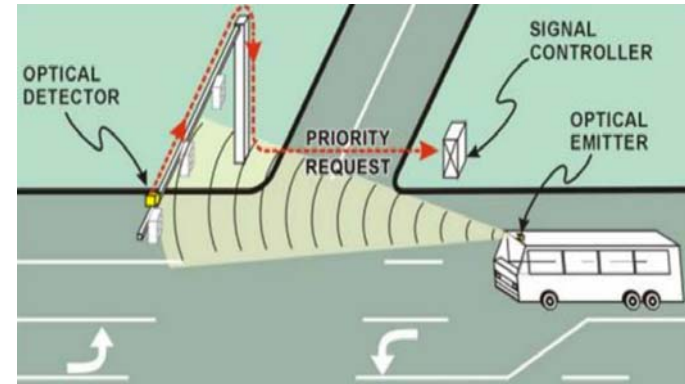
Bus Stop Improvements



Bus Operations

- Queue jumps are proposed at the following locations:

- NB at Harvard Street NW
- NB at U Street NW (existing)
- NB at M Street NW
- SB at M Street NW



Transit Signal Priority (TSP)

- Transit Signal Priority (TSP) has been operating at all 33 signalized intersections
- DDOT is working concurrently with WMATA on these improvements:
 - All-door boarding
 - Off-board fare collection equipment



Transit Time Savings



	IMPROVEMENT	SAVINGS (MIN)	ALTERNATIVE(S)
★	Bus Stop Removal/Consolidation	1.0 - 1.3	1, 2, 3
★	Bus Lanes	2.4 - 2.7	2, 3
★	Queue Jump Lanes	< 0.1	1
★	Intersection Reconfiguration at Harvard Street/Columbia Road/Mt. Pleasant Street NW	0.1 - 0.3	2
★	Fleet Mix Upgraded with Low-Floor and Articulated Buses	0.5 - 0.6	1, 2, 3
★	Off-Board Fare Payment	1.3 - 1.6 (S1, S2, S4) 0.9 - 1.5 (S9)	1, 3 (S9 only)
★	SmarTrip Card Top-Off	0.3 - 0.5	2
★	All-Door Boarding	0.6 - 0.7 (S1, S2, S4) 0.4 - 0.6 (S9)	1, 3 (S9 only)
★	S1 Converted to Limited Stop Service	2.6	1
★	Remove Midday Parking	1.7 - 1.9	1, 2

Note: Table is from the 16th Street NW Transit Priority Planning Study completed in April 2016

★ *Included in the proposed design layout option*

★ *Still under consideration*

★ *Improvement implemented*

★ *Not under consideration*



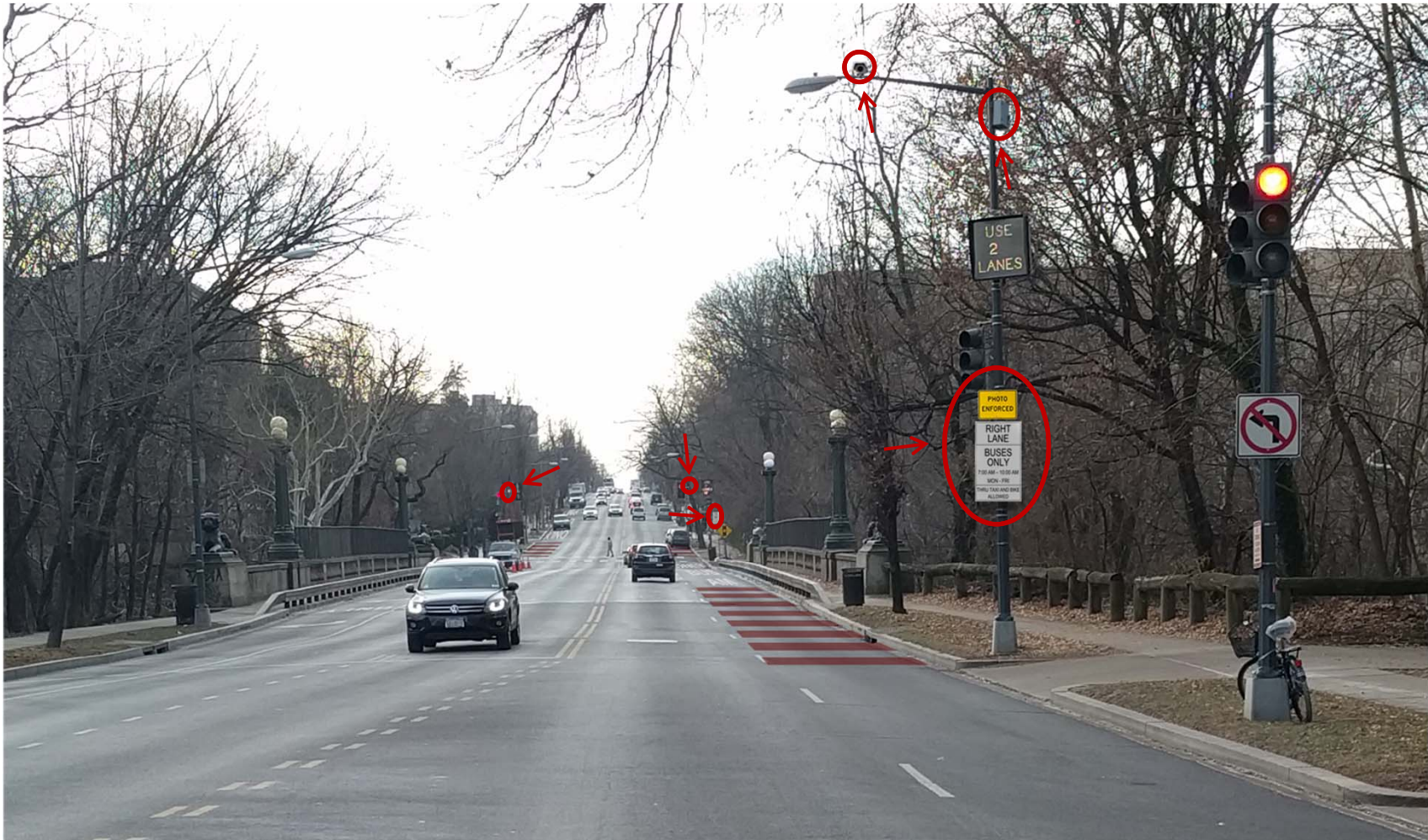
Transit Time Savings



	AM Peak Southbound (min)	PM Peak Northbound (min)
Preferred Alternative (from Planning Study 2016)	3.7 - 5.7	4.6 - 5.8
Proposed Design Layout Option (from Design Phase 2018)	1.9 - 2.6	1.8 - 3.2

- The Preferred Alternative calculation (from the planning study 2016) includes all aspects of the project and the Proposed Design Layout Option primarily includes infrastructure improvements.
- The preferred alternative transit time savings was developed as part of the *16th Street NW Transit Priority Planning Study completed in April 2016.*
- Transit time savings range is dependent on the bus line (S1, S2, S4, and S9).
- TSP is not included in these transit time savings. TSP is classified as a reliability improvement as it currently applies only to buses running behind schedule on 16th Street NW.
- DDOT is collaborating with WMATA on TSP evaluation and optimization.

Proposed Design Layout





Left-Turn Restrictions Northbound (Changes from Existing)



NORTHBOUND FROM 16th STREET

Arkansas Avenue NW to U
Street NW

Park Road NW

All Day

*Right on Pine Street/Sacred
Heart Way/Left on Park Road

U Street NW to M Street
NW

Riggs Place NW

PM Peak Period

*15th Street

R Street NW

PM Peak Period

*15th Street

P Street NW

AM and PM Peak Period

*15th Street

M Street NW to H Street
NW

* Alternative Routing



Left-Turn Restrictions Southbound (Changes from Existing)



SOUTHBOUND FROM 16th Street

Arkansas Avenue to U
Street

U Street to M Street

M Street to H Street

Monroe Street NW

AM Peak Period

*Right on Newton Street
/Left on Brown Street/Left on
Monroe Street

P Street NW

PM Peak Period

* Q Street

Irving Street NW

AM and PM Peak Period

*New left turn at Harvard
Street

Euclid Street NW

AM Peak Period

*New left turn at Harvard
Street

* Alternative Routing

Proposed Design Layout

*Addition of Harvard Street
Southbound Left-Turn Lane*



*Curb Modification at Pine
Street/Sacred Heart Way*



Parking Restrictions

- Today, parking is permitted during the peak periods in the off-peak direction.
- Proposed design layout is consistent with the Planning Study recommendations to remove all parking in the AM and PM Peak Periods.
- Removal of 23 parking spaces in the midday.
- Bus Zone Expansions are being evaluated, approximately 30 parking spaces will be permanently removed.
- Overnight and weekend parking is still permitted.

Midday Parking Restrictions

SOUTHBOUND

Arkansas Avenue to U Street

Spring Road to Oak Street
(2 parking spaces)

Oak Street to Newton Street
(5 parking spaces)

Euclid Street to Crescent Place
(3 parking spaces)

U Street to M Street

U Street to T Street
(4 parking spaces)

T Street to S Street
(1 parking space)

Q Street to P Street
(1 parking space)

M Street to H Street

NORTHBOUND

Arkansas Avenue to U Street

U Street to M Street

M Street to H Street

U Street to T Street
(3 parking spaces)

S Street to R Street
(3 parking spaces)

P Street to O Street
(1 parking space)

Bus Stop Consolidation

Current Bus Stop Spacing on 16 th Street	WMATA recommended bus stop spacing	TCRP - BRT Guidelines for Typical Arterial Streets
Northbound		
7 bus stops per mile	4-5 bus stops per mile	1-4 bus stops per mile
Southbound		
6 bus stops per mile		

The bus stop spacing along 16th Street will be approximately 5 bus stops per mile for both the northbound and southbound directions after bus stop consolidation.

Bus Stop Consolidation

- Southbound Locations
 - Lamont Street NW
 - V Street NW
- Northbound Locations
 - L Street NW
 - Q Street NW
 - V Street NW
 - Lamont Street NW



Bus Stop Consolidation

Why was Newton Street Bus Stop removed from the bus stop consolidation list?

- Over 70 percent of the comments received on bus stop consolidation were to maintain the Newton Street bus stop.
- Newton Street Bus Stop provides direct connectivity to the Mt. Pleasant neighborhood. It is the nearest bus stop to serve the Stoddard Baptist Nursing Home, Bancroft Elementary School, and Thrive DC a nonprofit that serves the homeless community.

Bus Stop Consolidation - Northbound



Consolidated Stop: Lamont Street

Closest Adjacent Bus Stop

Park Road: 2.3 minute walk (1 block)

Adjacent Bus Stop Improvements

- Install second shelter at Park Road. Relocate street furniture and expand the bus zone area
- Improve the pedestrian crossing at Sacred Heart Way
- Install second shelter at Irving Street

Consolidated Stop: V Street

Closest Adjacent Bus Stop

U Street: 2.7 minute walk (1.5 blocks)

Adjacent Bus Stop Improvements

- Install second bus shelter at U Street

Bus Stop Consolidation - Northbound



Consolidated Stop: Q Street

Closest Adjacent Bus Stop

P Street: 2.6 minute walk (2 blocks)

Adjacent Bus Stop Improvements

- Install second bus shelter at P Street

Consolidated Stop: L Street

Closest Adjacent Bus Stop

M Street: 3.2 minute walk (1 block)

Adjacent Bus Stop Improvements

- Install a second bus shelter at M Street and relocate street furniture
- Install a second bus shelter at I Street

Bus Stop Consolidation - Southbound

Consolidated Stop: Lamont Street

Closest Adjacent Bus Stop

Irving Street: 2.5 minute walk (1 block)
(distance to new Irving Street stop)

Adjacent Bus Stop Improvements

- Relocate Irving Street bus stop to facilitate transfers to Columbia Heights Metro Station
- Install second bus shelter at Irving Street and expand bus zone area
- Install second shelter at Park Road

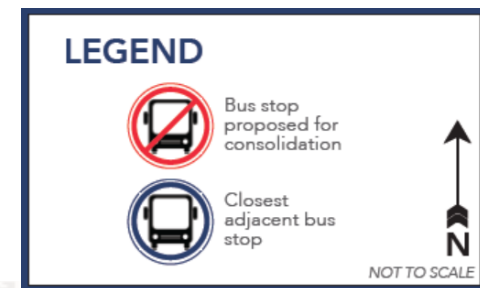
Consolidated Stop: V Street

Closest Adjacent Bus Stop

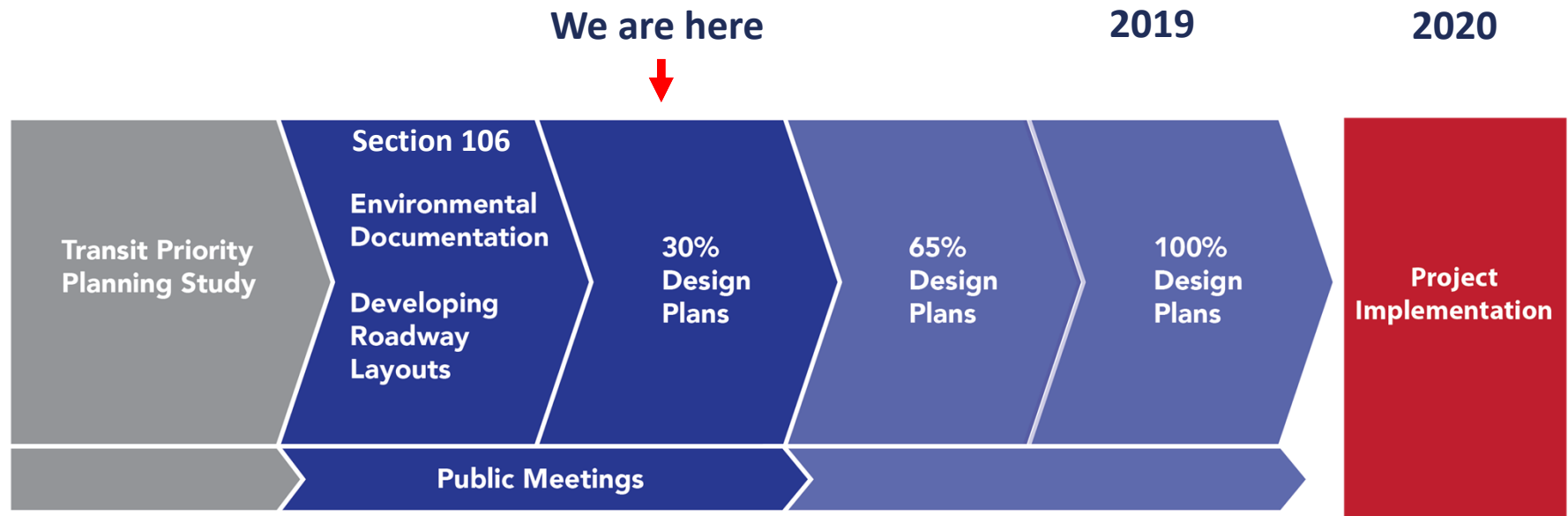
U Street: 3.1 minute walk (2 blocks)

Adjacent Bus Stop Improvements

- Relocate Crescent Place stop to just south of the intersection and install a bus shelter
- Install second shelter at U Street and relocate street furniture



Project Overview - Timeline



- DDOT is working in parallel with WMATA on implementing all-door boarding and off board fare payment. DDOT is partnering with Howard University on a camera enforcement study to develop a policy.

Stay Involved



Project Website

- www.16thstreetnwbus.com



Twitter

- <https://twitter.com/16thStBusLanes>



Facebook

- <https://www.facebook.com/16thStBusLanesDC>



Spring Worth – Project Manager

Email: Spring.Worth@dc.gov

Office: (202) 673-1736