



# Shockoe Valley Streets Improvement Project

*Steering Committee Meeting #2*

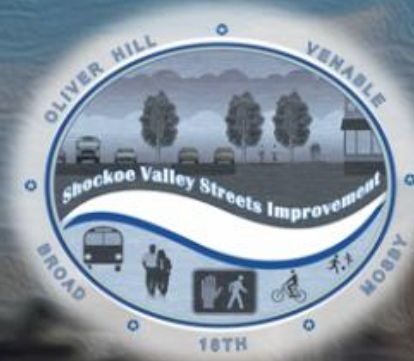
*March 27, 2018*

*PREPARED FOR:*



*PREPARED BY:*





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WELCOME TO RICHMOND'S  
**SHOCKOE VALLEY STREETS  
IMPROVEMENT PROJECT**

[www.shockoevalleystreets.com](http://www.shockoevalleystreets.com)

# Agenda

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*Welcome and Introductions*

*Review of Steering Committee Input*

*ULI Rose Fellowship Study*

*Land Use and Planning*

*Recommended Project Goals*

*Existing Conditions*

*Concept Development*

*Streets*

*Intersections*

*Next Steps*



# Steering Committee Members

**Carlos Brown** *VCU Health System*

**Hon. Cheryl Burke** *7<sup>th</sup> District, Richmond School Board (Interim)*

**Matthew Conrad** *Union Hill*

**Hon. Felicia Cosby** *6<sup>th</sup> District, Richmond School Board*

**Jeff Eastman** *VCU*

**Max Hepp-Buchanan** *Bike Walk RVA Director*

**Hon. Delores McQuinn** *Slave Trail Commission*

**John Murden** *New Vision Civic League*

**Stewart Schwartz** *Partnership for Smarter Growth*

**Sylvester “Tee” Turner** *Slave Trail Commission*

**Keith Westbrook** *Legislative Assistant to Delegate McQuinn*

**Brian White** *Shockoe Bottom Neighborhood*

**Tom Wilds** *Church Hill Association*

**Lawrence Williams** *East View Civic Association*

**Patricia Williford** *Mosby Tenant Council*







SURROUNDING  
CONGESTION

CSX RAIL  
PARTNERSHIP

REDUCTION IN  
GROWTH  
OPPORTUNITIES

LACK OF URBAN  
STREET GRID / UNAPPEALING  
TO PEDS.

CURRENT BUSINESS  
ACCESSIBILITY

PEDESTRIAN  
FOOTPRINT/WALKING  
SPACE

# CONCERNS

FAIR AND ADEQUATE  
ACCOMMODATIONS FOR  
ALL USERS (PEDS., BIKES,  
VEHICLES)

DRIVER CONFUSION  
IN ROUNDABOUTS

LACK OF CONSIDERATION FOR  
CITY'S FUTURE PLANS

CONSTRUCTION  
DISRUPTION

VOLUME CAPACITY OF  
PROPOSED 17<sup>TH</sup> & BROAD  
ROUNDABOUT

BROAD STREET  
CONGESTION

RETENTION  
PONDS AND PARKS



# OPPORTUNITIES

## ECONOMIC GROWTH

NEW  
BUSINESSES

UTILITY  
INFRASTRUCTURE  
IMPROVEMENTS

SMALL BUSINESS  
SHOPS/SPACES

POTENTIAL FOR  
UNDERUTILIZED  
AREAS

FLOOD  
MITIGATION

BETTER BUSINESS  
ACCESSIBILITY

ATTRACTIVE  
LANDSCAPING/  
STREETSCAPEING

CONNECTIVITY  
IMPROVEMENTS

BETTER NORTHSIDE/EAST  
END CONNECTION

LEIGH ST./  
DOWNTOWN  
CONNECTION USE

STREET TREES

ROUTE 360/MLK BRIDGE  
LANDSCAPING AND  
STREETSCAPING

SAFE CROSSING  
AT BROAD ST./I-95  
INTERSECTION

ADA COMPLIANT  
SIDEWALKS

GATEWAY ART

FAIRFIELD WAY/ROUTE 360  
LANDSCAPING AND  
STREETSCAPING



# Thanks to the following people for their support in making this panel possible:

The Honorable Levar Stoney, Mayor

City Councilmember Cynthia Newbille

Robert Steidel, Deputy Chief Administrative Officer of Operations

Jane Ferrara, Department of Economic & Community Development

Ellyn Parker, Public Art Coordinator

Jane Milici, Jeffrey Geiger, ULI Virginia



# Rose Commission Takeaways

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Neighborhood is full of history and culture that should be preserved. Sites such as Devil's Half Acre.

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In previous planning efforts, stakeholders were not listened to. There is a difference between engagement and outreach. This project needs to strive for engagement.

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The neighborhood is physically cut-off by large infrastructure (I-95 bridges, railroad trestles, MLK Viaduct).

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The floodplain poses unique challenges to future development.

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A shared vision needs to be developed.

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The neighborhood is a crucial piece of connectivity between downtown, Cannon Creek Greenway, and the Capital Trail. Connectivity influences health and wellness.





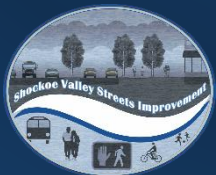
# Land Use & Planning



# Current Zoning

## LEGEND

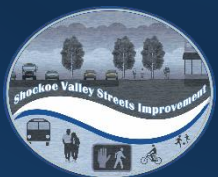
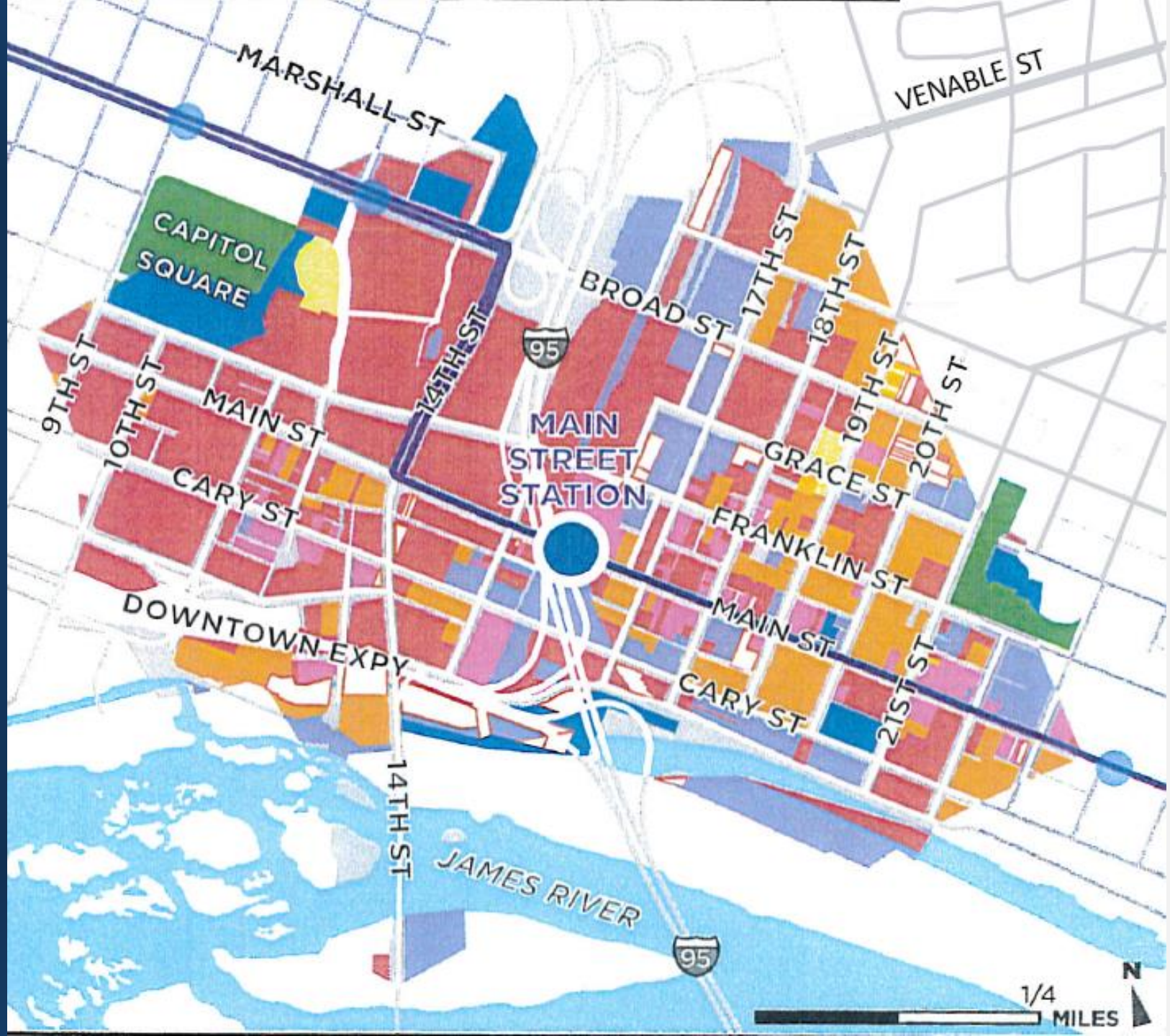
- B-4** Central Business District
- B-5** Central Business District
- B-6** Mixed-Use Business District
- M-1** Light Industrial District
- R-6** Single Family Attached Residential
- R-8** Urban Residential District
- R-53** Multi-Family Residential
- R-63** Multi-Family Urban Residential
- UB-PE4** Urban Business District, Parking Exempt Overlay





# Existing Land-Use

- Single-Family
- Multi-Family
- Commercial/Office
- Mixed-Use
- Govt/Institutional
- Industrial
- Parks/Open Space
- Undeveloped







- Corridor Mixed-Use
- Downtown Mixed-Use
- Industrial
- Industrial Mixed-Use
- Institutional
- Neighborhood Mixed-Use
- Nodal Mixed-Use
- Open Space
- Transitional
- Significant Node
- Opportunity Area
- Pulse Station
- Pulse Route
- Walkshed Boundary
- Elevated Railroad Trestle

# Future Land Use

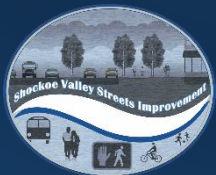
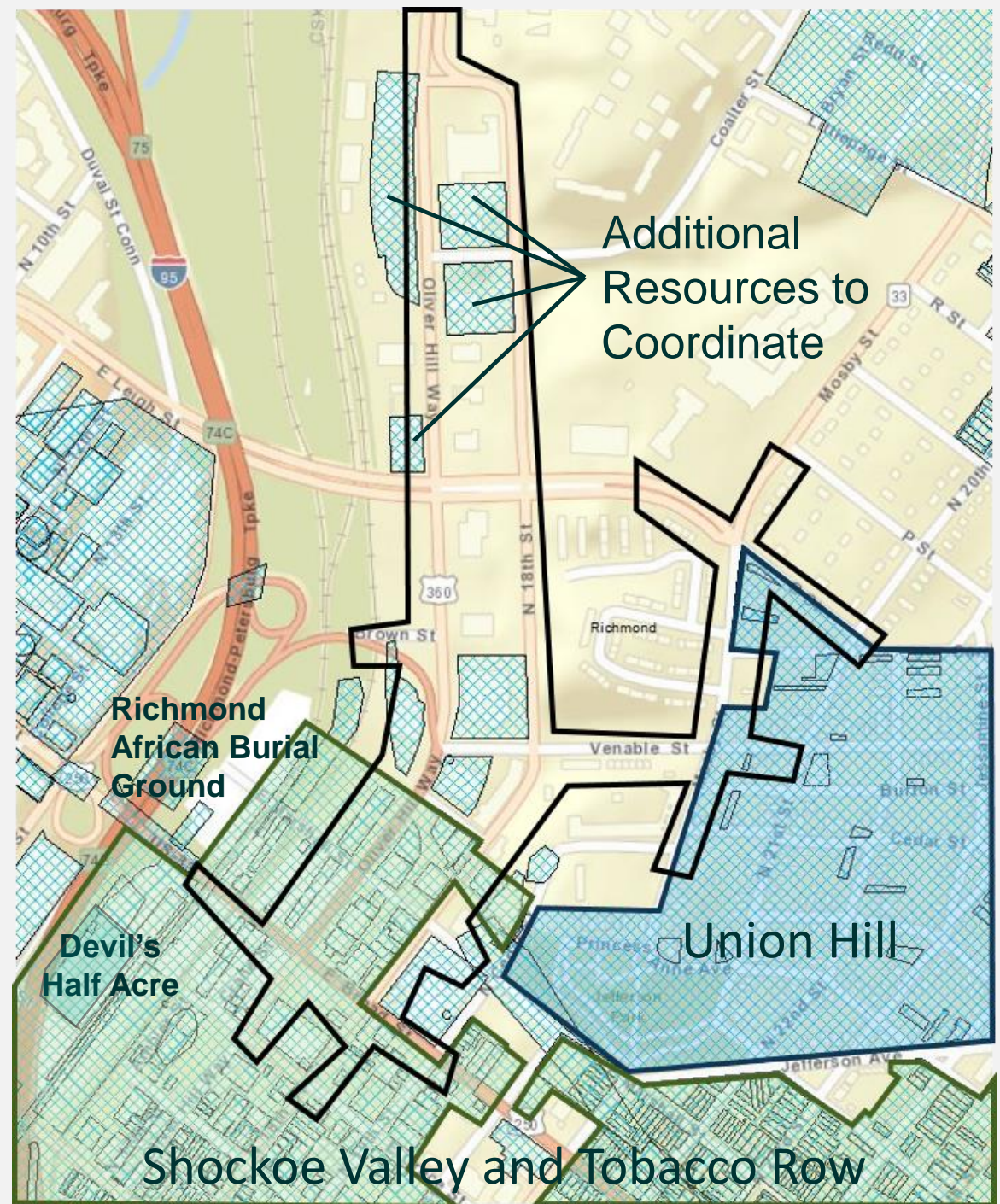


0 0.125 0.25 0.5 Miles

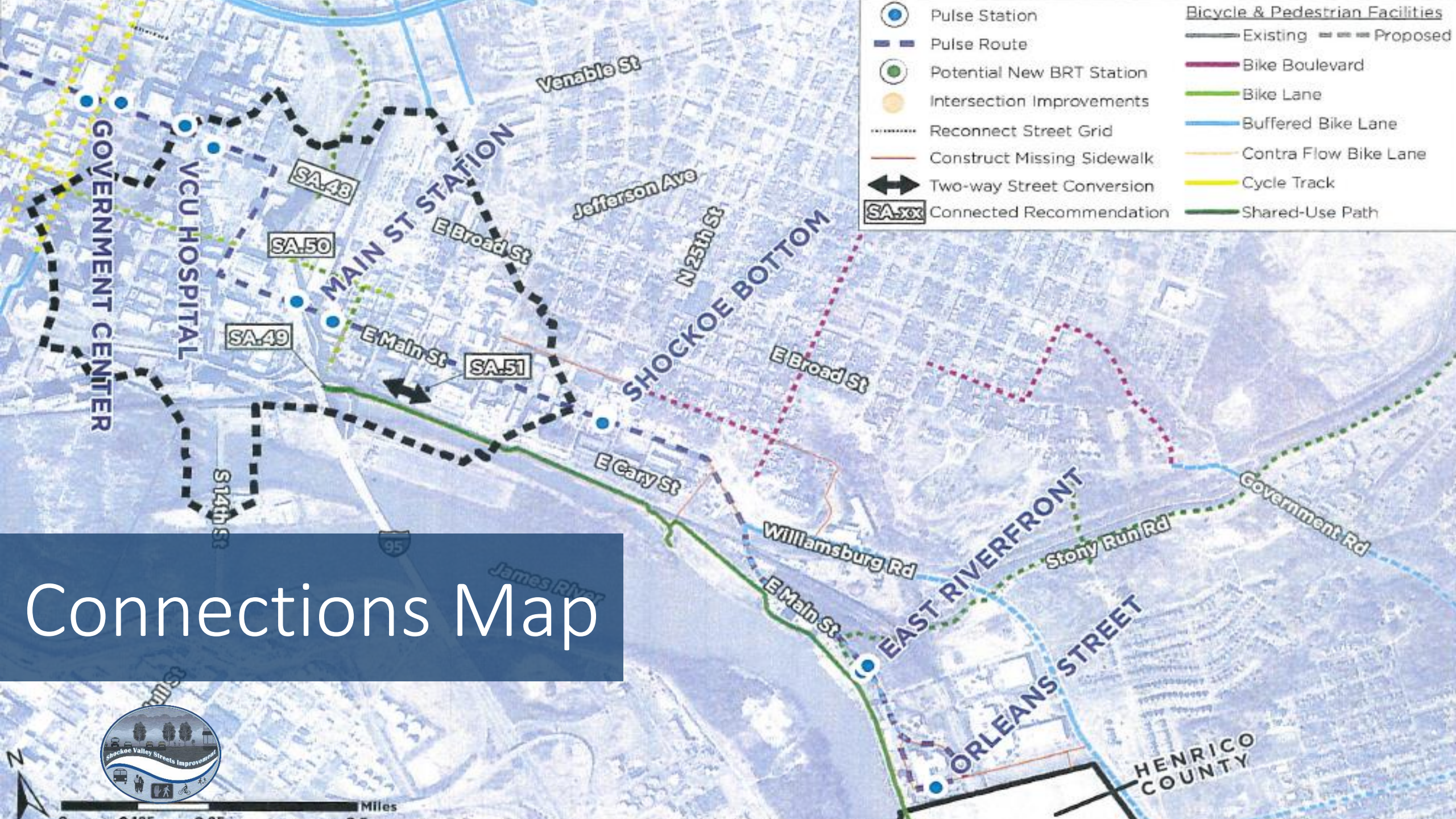
HENRICO COUNTY



# Historic Preservation

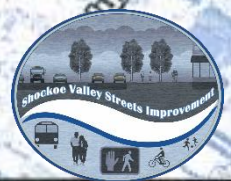






- |  |                            |  |                    |  |                       |
|--|----------------------------|--|--------------------|--|-----------------------|
|  | Pulse Station              |  | Existing           |  | Proposed              |
|  | Pulse Route                |  | Bike Boulevard     |  | Bike Lane             |
|  | Potential New BRT Station  |  | Buffered Bike Lane |  | Contra Flow Bike Lane |
|  | Intersection Improvements  |  | Cycle Track        |  | Shared-Use Path       |
|  | Reconnect Street Grid      |  |                    |  |                       |
|  | Construct Missing Sidewalk |  |                    |  |                       |
|  | Two-way Street Conversion  |  |                    |  |                       |
|  | Connected Recommendation   |  |                    |  |                       |

# Connections Map



HENRICO COUNTY



# Project Goals

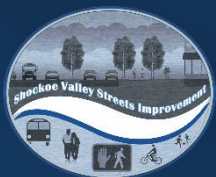


## *Improve safety and operations*

- Design improvements to reduce potential conflicts between all modes
- Improve access from I-95 “up the hill”
- Promote lower vehicle speeds
- Accommodate new transit system
- Reduce congestion (no impact on ramp queues)

## *Create bike and pedestrian scale roadways*

- Create complete streets (multimodal)
- Connect bike trails
- Beautify corridors and create places
- Support existing and future land uses



# Site Context



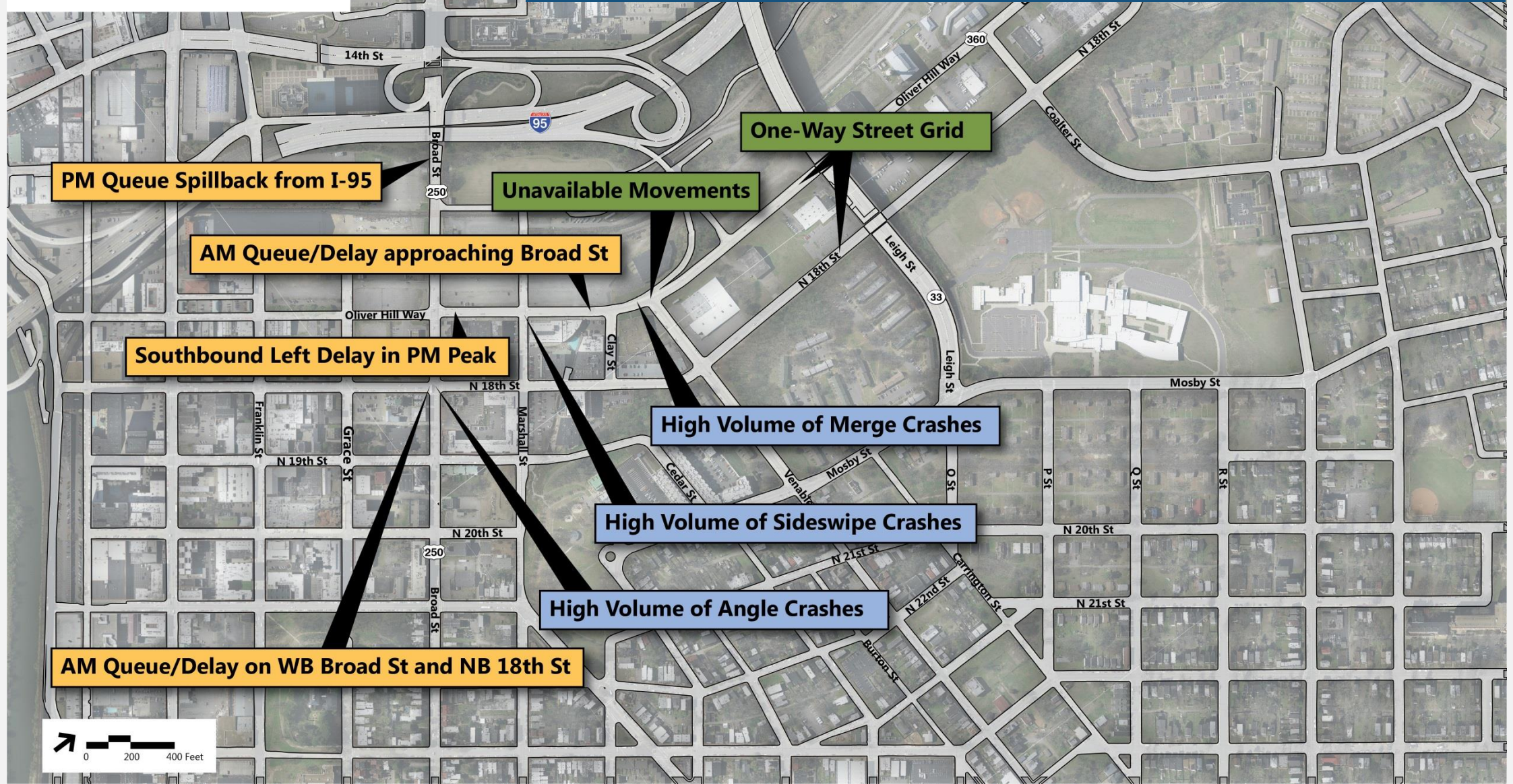


# Existing Traffic Operations & Safety Issues

Traffic Operations Issue

Safety Issue

Circulation Issue



PM Queue Spillback from I-95

AM Queue/Delay approaching Broad St

Southbound Left Delay in PM Peak

AM Queue/Delay on WB Broad St and NB 18th St

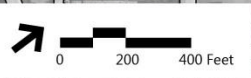
One-Way Street Grid

Unavailable Movements

High Volume of Merge Crashes

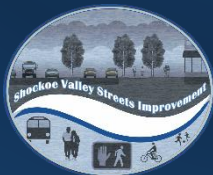
High Volume of Sideswipe Crashes

High Volume of Angle Crashes





# Road Circulation





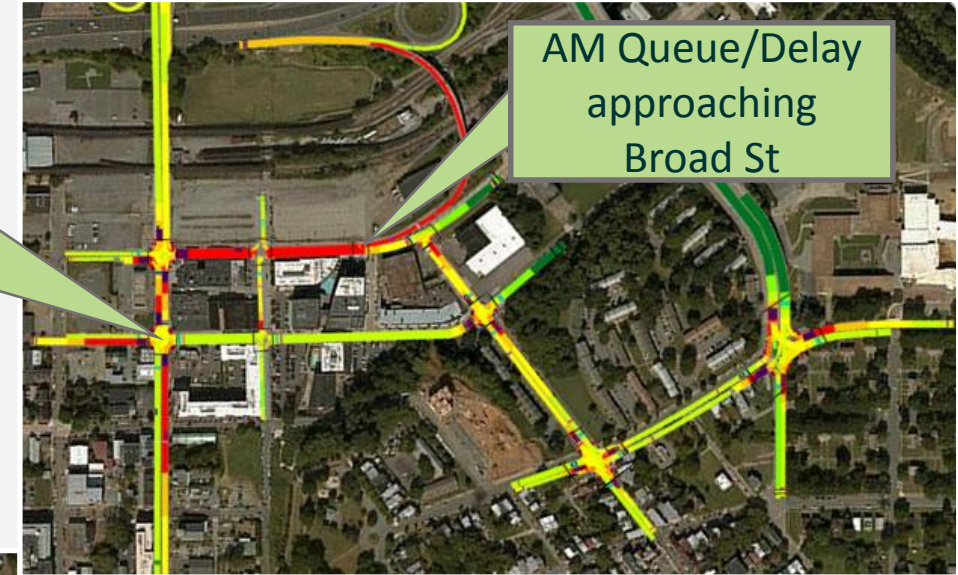
# Existing Conditions Modeled Congestion AM Peak Hour



7:45-8:00 AM

AM Queue/Delay  
on WB Broad and  
NB 18th

8:00-8:15 AM



AM Queue/Delay  
approaching  
Broad St

8:15-8:30 AM

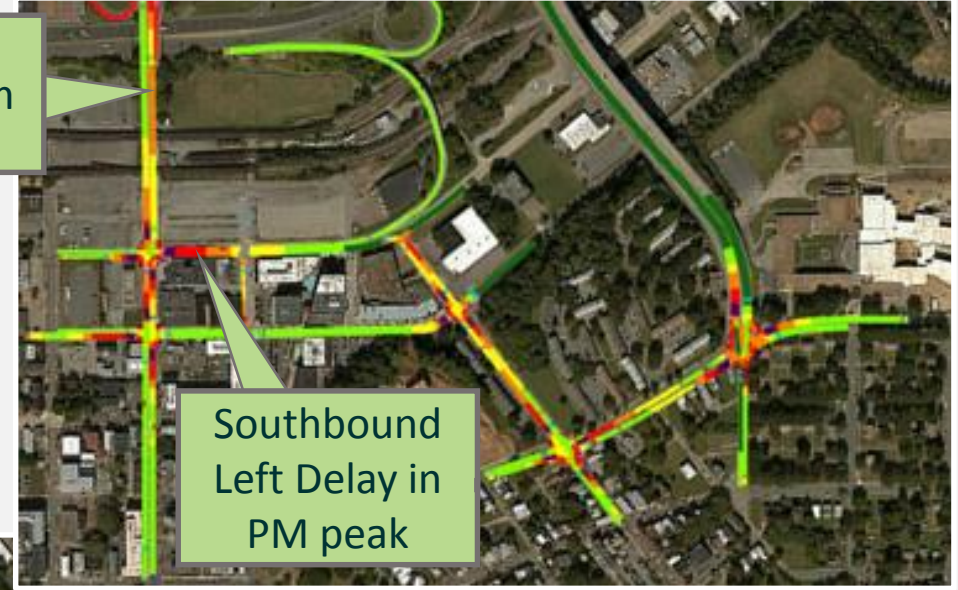




# Existing Conditions Modeled Congestion PM Peak Hour



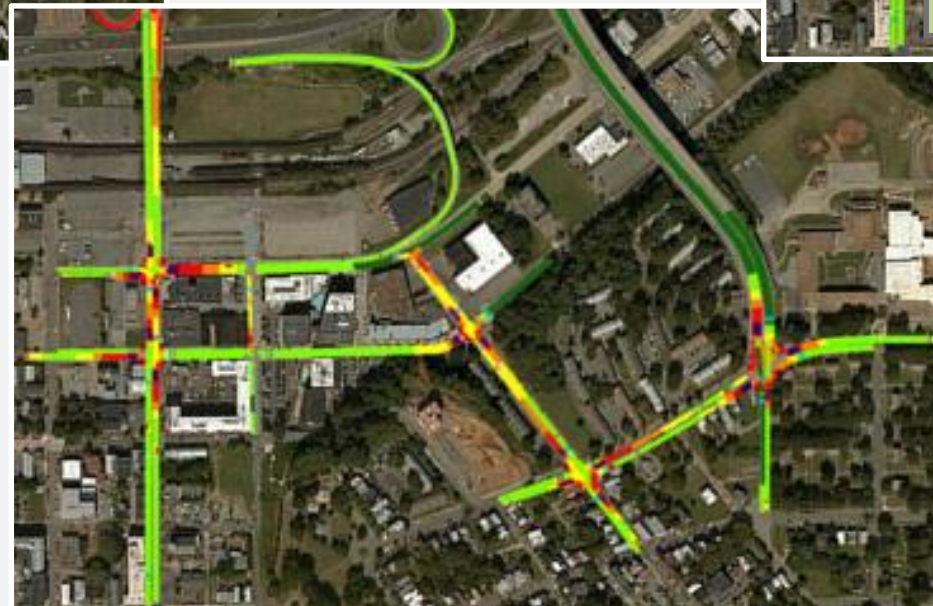
5:15-5:30 PM



5:45-6:00 PM

PM Queue  
Spillback from  
I-95

Southbound  
Left Delay in  
PM peak



5:30-5:45 PM



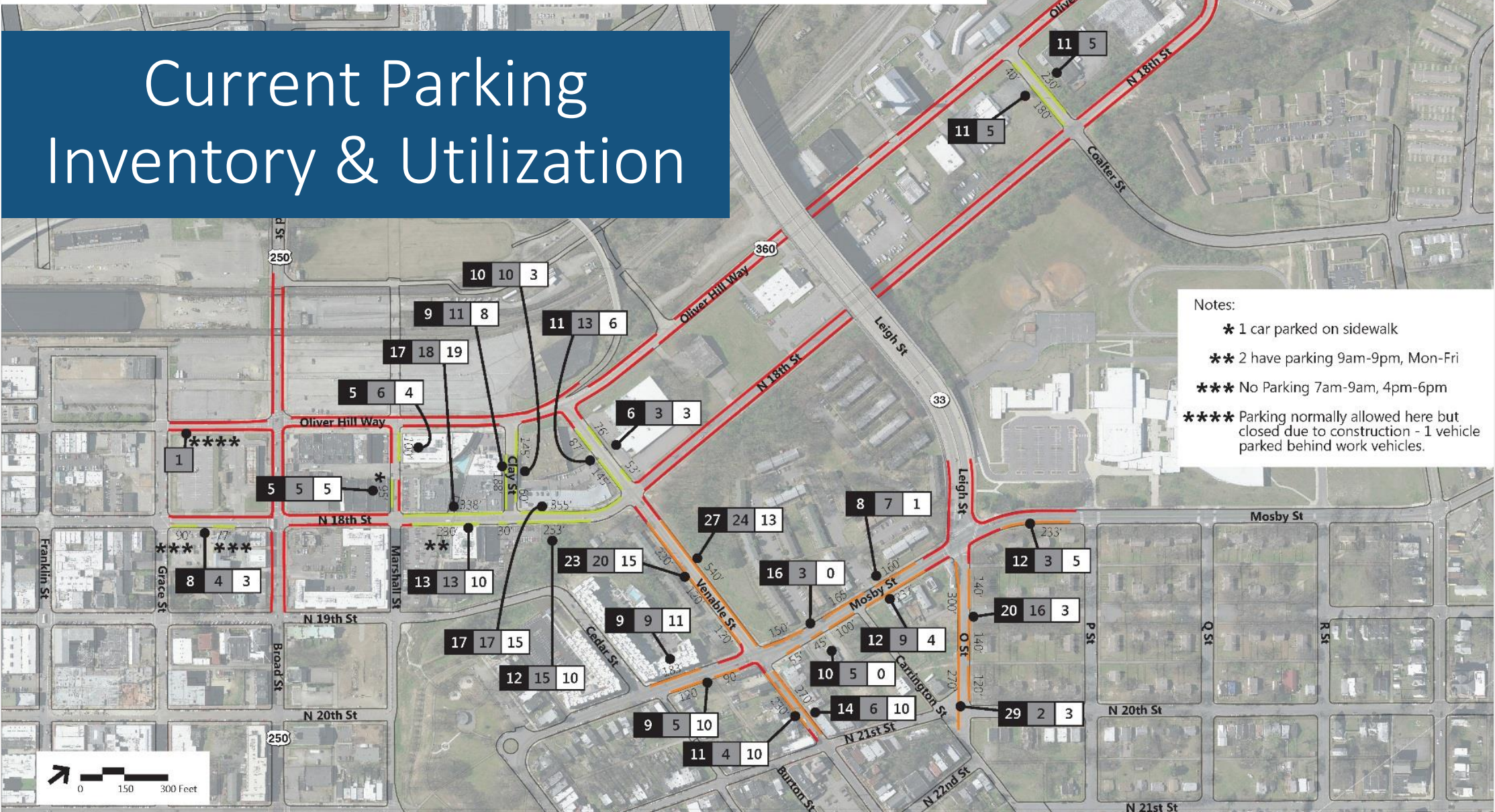


# Parking Capacity Map

- No Parking
- 2,322' / 20' per space = ~116 spaces    121 Vehicles Parked (Exceeds 100%)
- 4,008' / 20' per space = ~200 spaces    113 Vehicles Parked (57% Usage)

- XX** Inventory/Capacity
- XX** Weekday Parking Count (2/14/2018 Mid-Day)
- XX** Weekend Parking Count (2/10/2018 Mid-Day)

# Current Parking Inventory & Utilization



Notes:

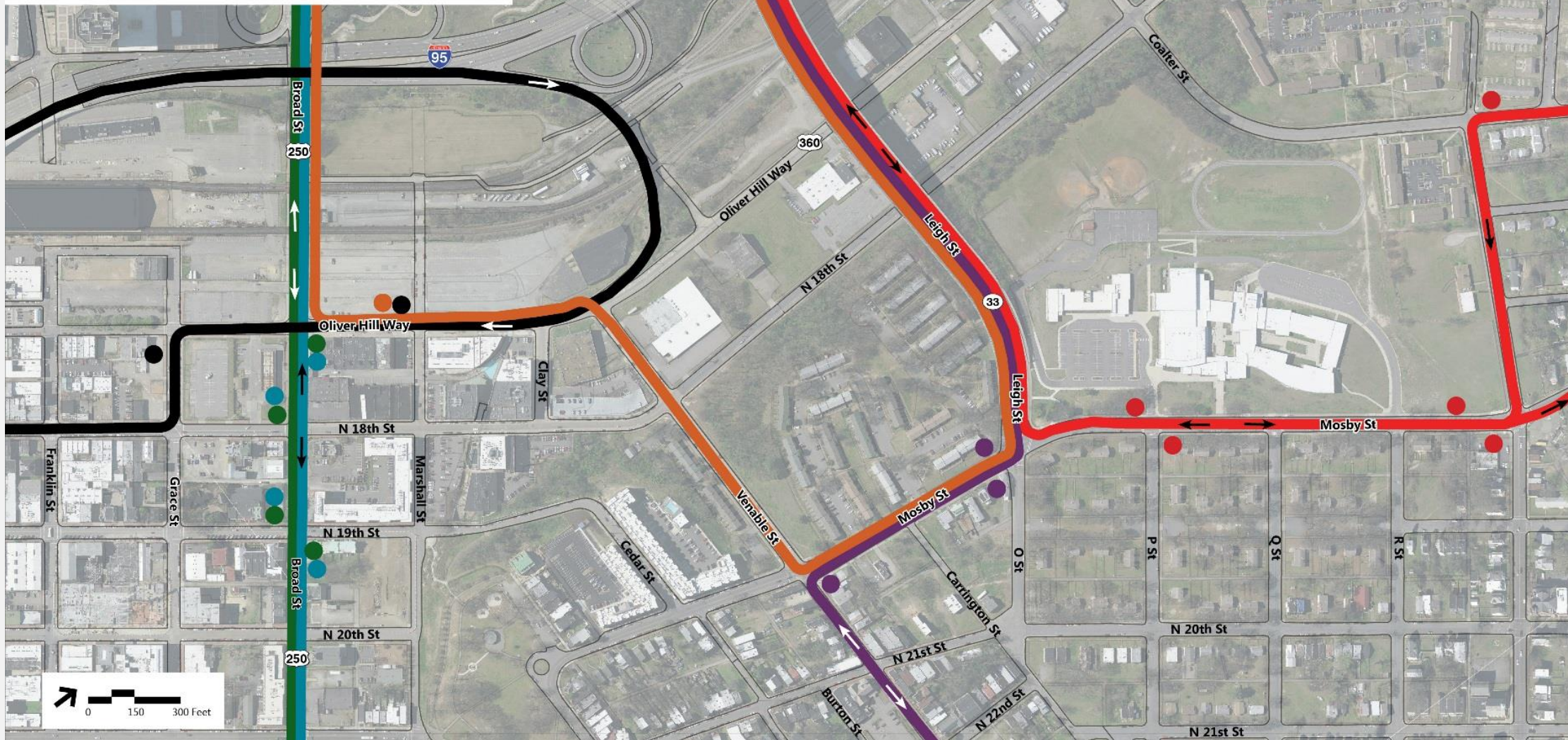
- \* 1 car parked on sidewalk
- \*\* 2 have parking 9am-9pm, Mon-Fri
- \*\*\* No Parking 7am-9am, 4pm-6pm
- \*\*\*\* Parking normally allowed here but closed due to construction - 1 vehicle parked behind work vehicles.



## Future Transit Map

-  GRTC 5 - Cary/Main/Whitcomb Frequency: 15 min
-  GRTC 12 - Church Hill Frequency: 30 min
-  GRTC 7 - Nine Mile Henrico Frequency: 30 min
-  GRTC 56 - South Laburnum Frequency: 60 min
-  GRTC 95 - Petersburg Frequency: 2 trips per peak
-  VCU A-Lot - Sanger Express Frequency: 6 min during peak

# Future Transit Routes





# Bike Connectivity Map

- Existing On-Road Bike Lane
- Existing Sharrow
- Proposed On-Road Bike Lane - One Direction
- Proposed On-Road Bike Lane - Both Directions
- Proposed Off-Road Two Way Bike Lane



To Slave Burial Grounds

To Cannon Creek Greenway

To 17th Street Cycle Track and Virginia Capital Trail

Intersection Improvements to Accommodate Bike & Pedestrian Crossing

Bicycle Connectivity



# Concept Development - Streets



# Complete Streets Fundamentals

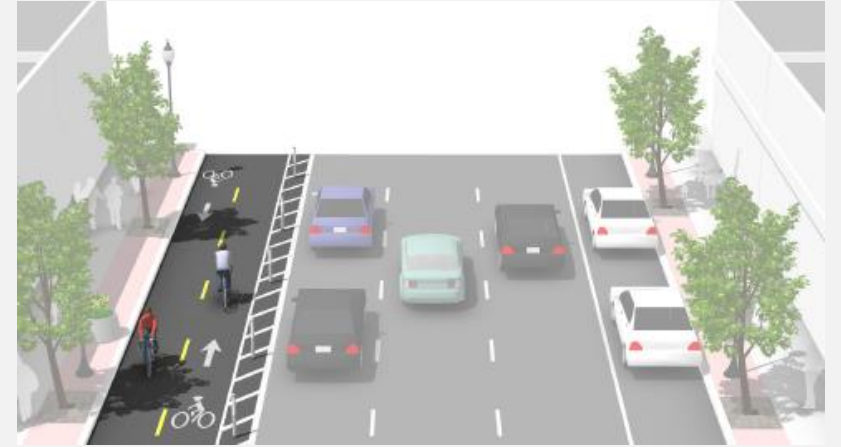
- *Promote safe, equitable, and comfortable transportation options for all travel modes (driving, walking, biking, transit).*
- *Design streets to reduce vehicle speeds and to reduce conflicts between modes.*
- *Provide separate, defined areas for each activity (driving, parking, walking, biking).*
- *Accommodate space for landscaping and other elements to attract users to walk, bike, live and shop in the area.*
- *Strongly consider two-way traffic flow to enhance connectivity.*



# Bike Lane Configuration Options



Option 1



Option 2

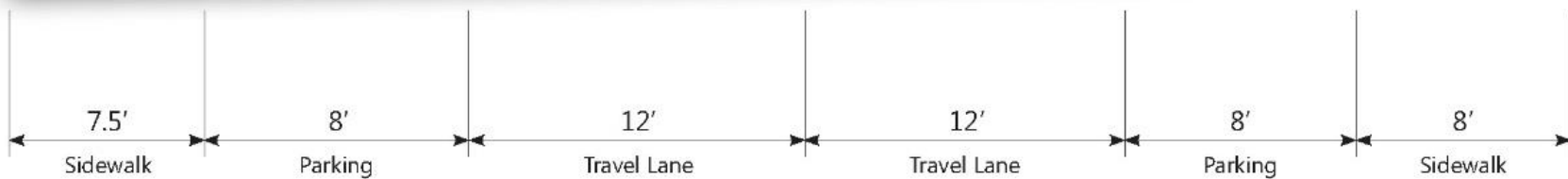


Option 3

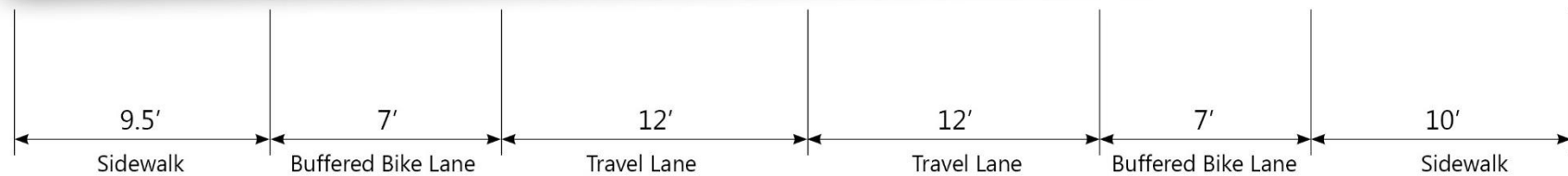


Source: Richmond Bicycle Master Plan

# 18<sup>th</sup> Street - Existing

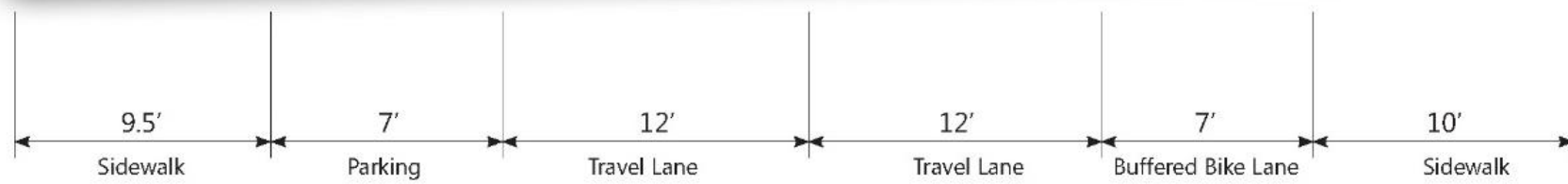


# 18<sup>th</sup> Street – Two-Way Option

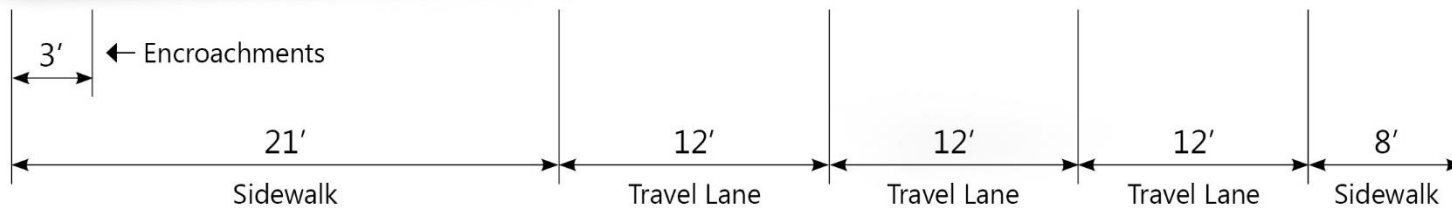




# 18<sup>th</sup> Street – One-Way Option



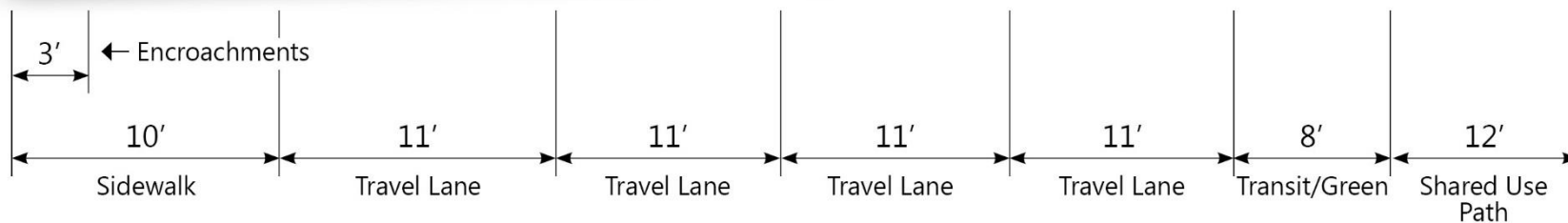
# Oliver Hill Way - Existing



Total Width: 65' from building face to back of sidewalk

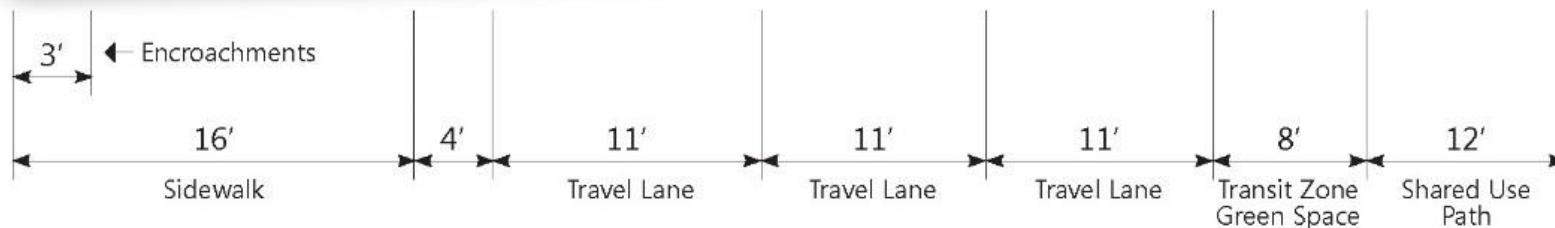


# Oliver Hill Way – Two-Way Option



Total Width: 74'  
from building  
face to back of  
path

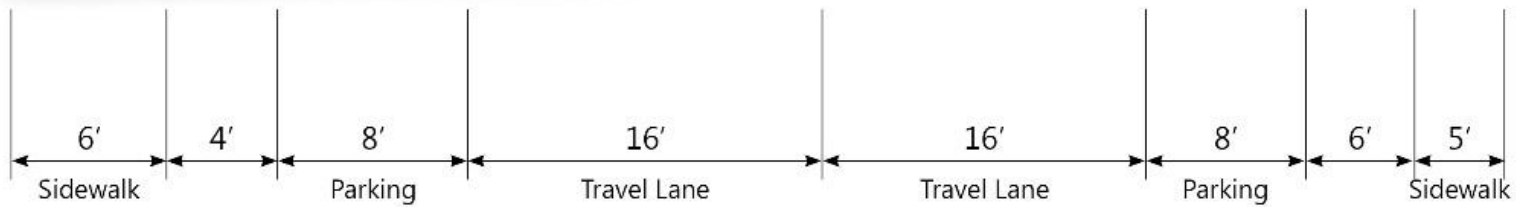
# Oliver Hill Way – One-Way Option



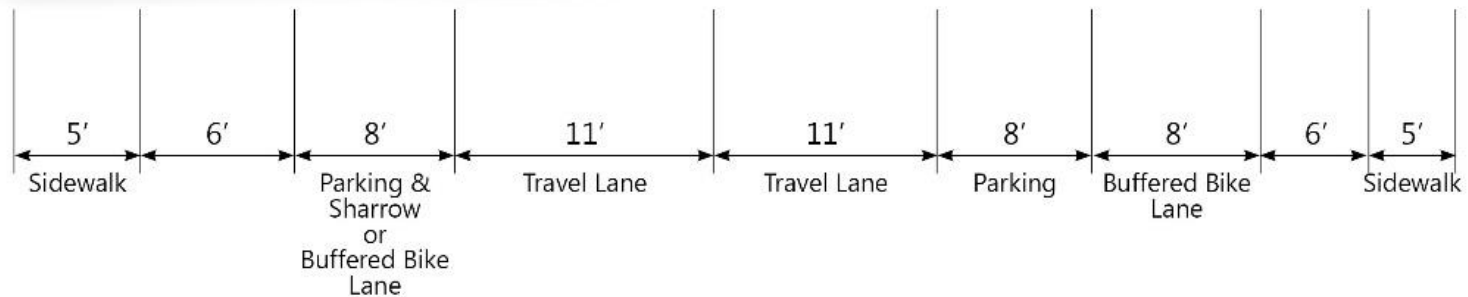
Total Width: 73'  
from building  
face to back of  
path



# Venable Street - Existing

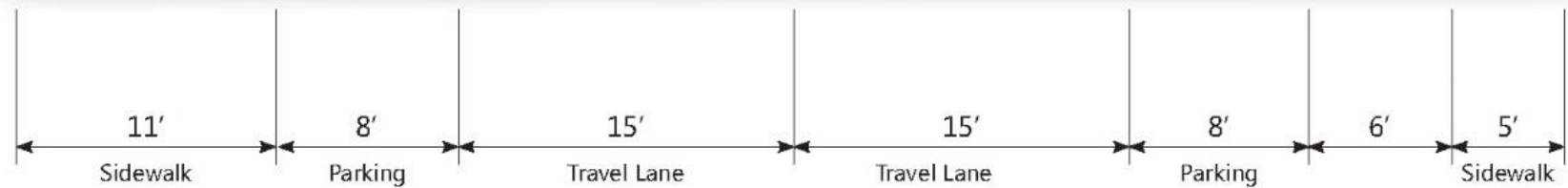


# Venable Street – Two-Way Option

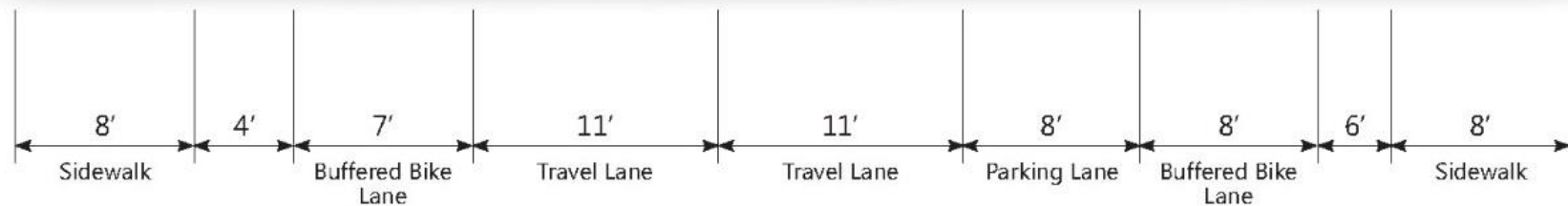




# Mosby Street - Existing



# Mosby Street – Two-Way Option





# Concept Development - Intersections



# Intersection Fundamentals

- *Design intersections to reduce conflicts between modes and promote pedestrian and bicycle safety and comfort.*
- *Make intersections and crossings accessible by installing curb ramps and providing adequate time to cross.*
- *Keep pedestrian crossing distances as short as possible to reduce exposure and increase safety.*
- *Provide increased frequency of crossing opportunities.*
- *Reduce vehicle speeds and increase visibility at intersections to decrease the number and severity of crashes.*





# The Basics of Good Complete Street Intersection Design

1. *ADA Curb Ramps*

2. *Marked Crosswalks*

3. *Tight Curb Radii*

4. *Curb Extension*

5. *Pedestrian Refuge Island*







Mechanicsville Turnpike and Fairfield Way



E. Broad Street at N. 10<sup>th</sup> Street



S. 9<sup>th</sup> Street and E. Byrd Street

## The Basics of Good Complete Street Intersection Design

- 6. *Signal Timing and Operations*
- 7. *Bicycle Intersection Treatments*
- 8. *Accessible Transit stops*





# The Basics of Good Complete Street Intersection Design

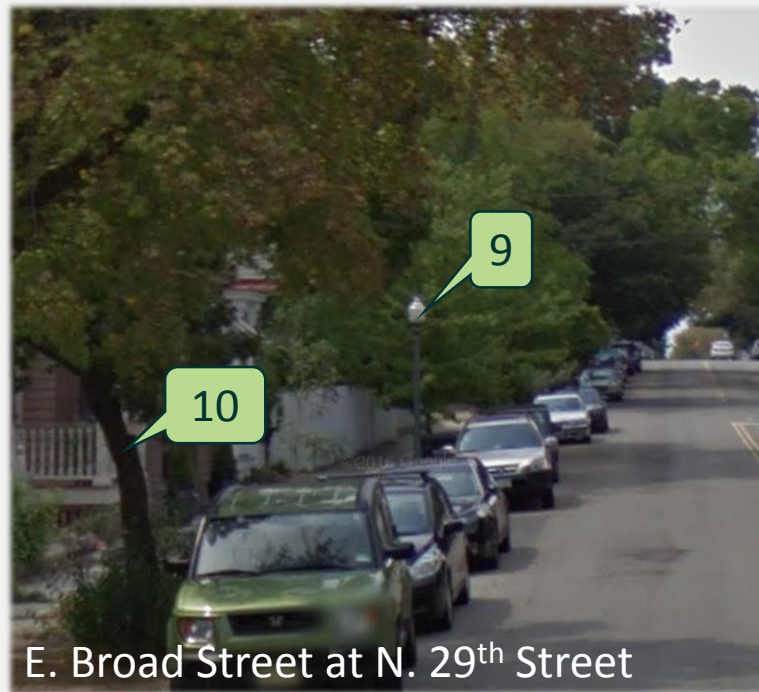
## 9. Street and Pedestrian Lighting

## 10. Street Trees, Planters, and Stormwater Planters

## 11. Street Furnishings



E. Broad Street at N. 4<sup>th</sup> Street



E. Broad Street at N. 29<sup>th</sup> Street

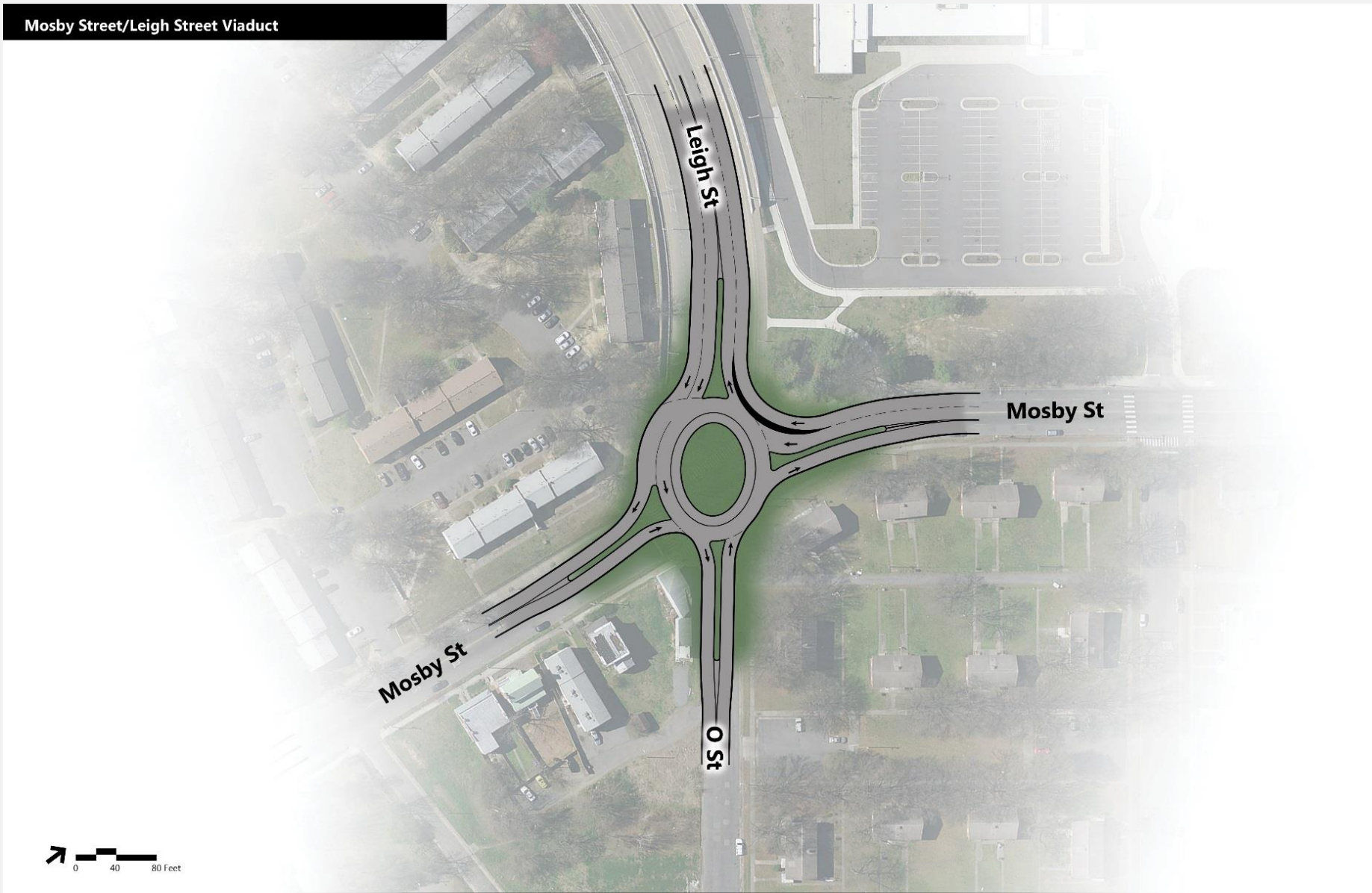


E. Cary Street at S. Sheppard Street



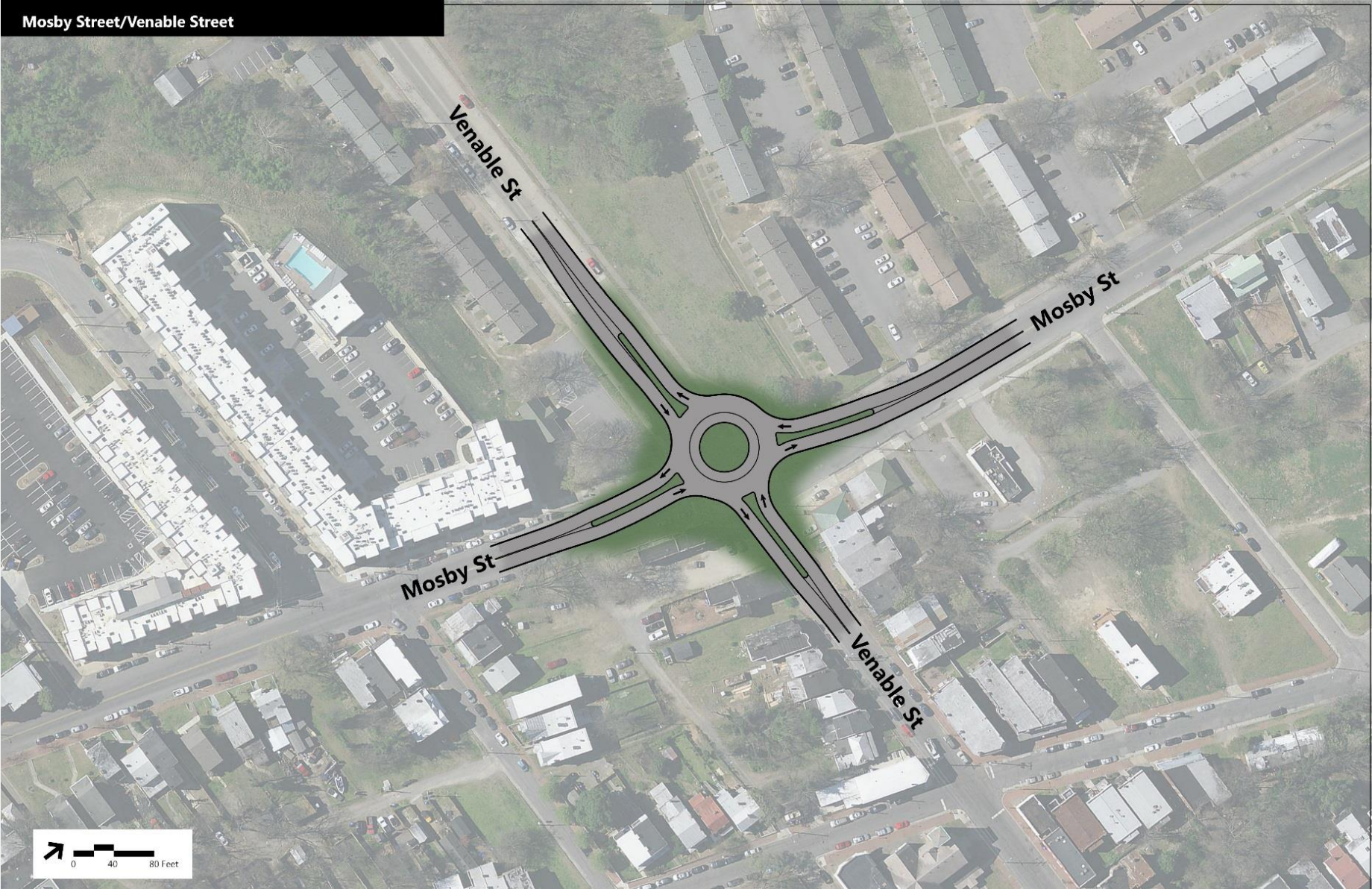


# Mosby Street / Leigh Street Viaduct



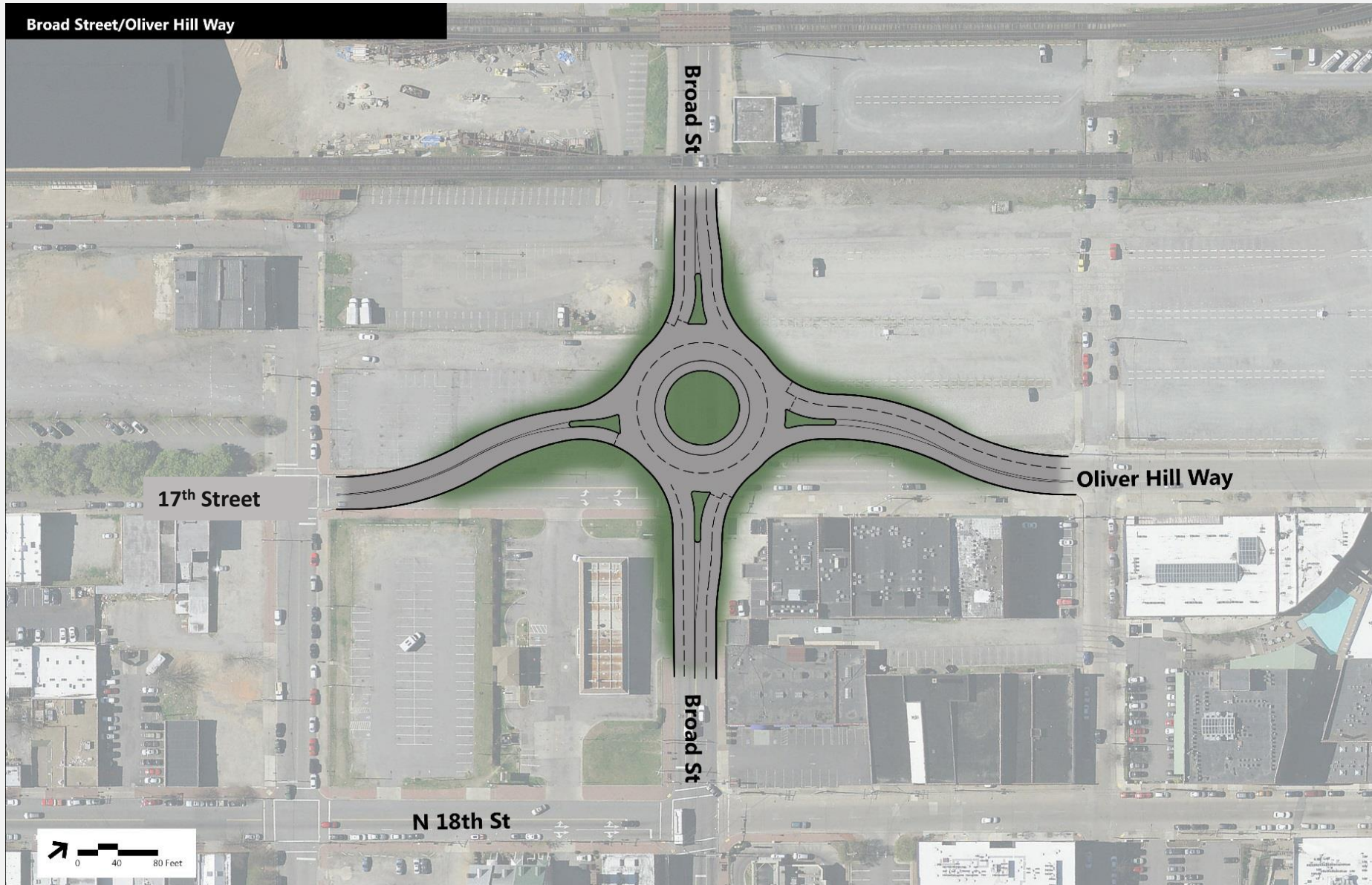


# Mosby and Venable Streets



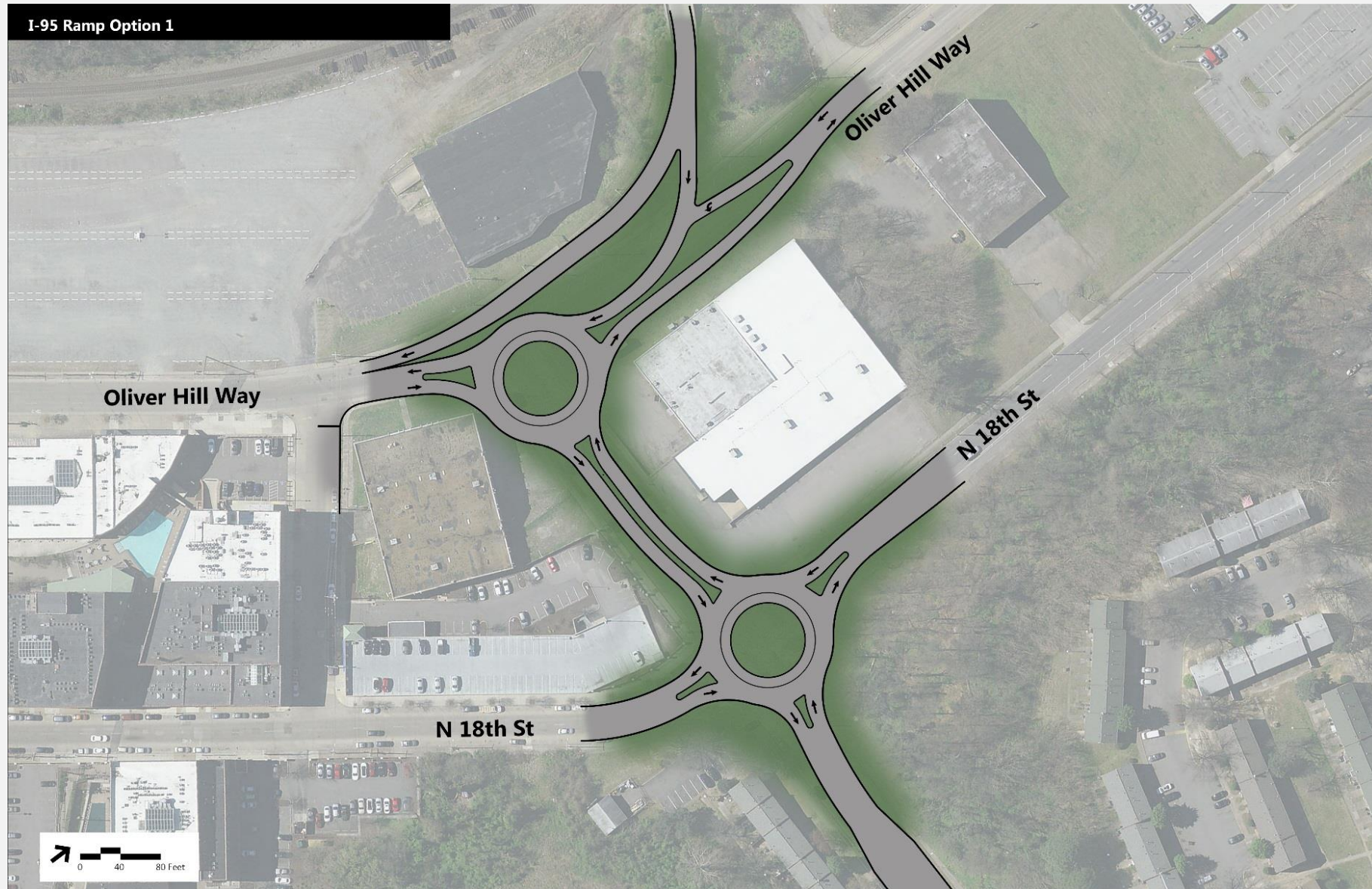


# Oliver Hill Way / E. Broad Street



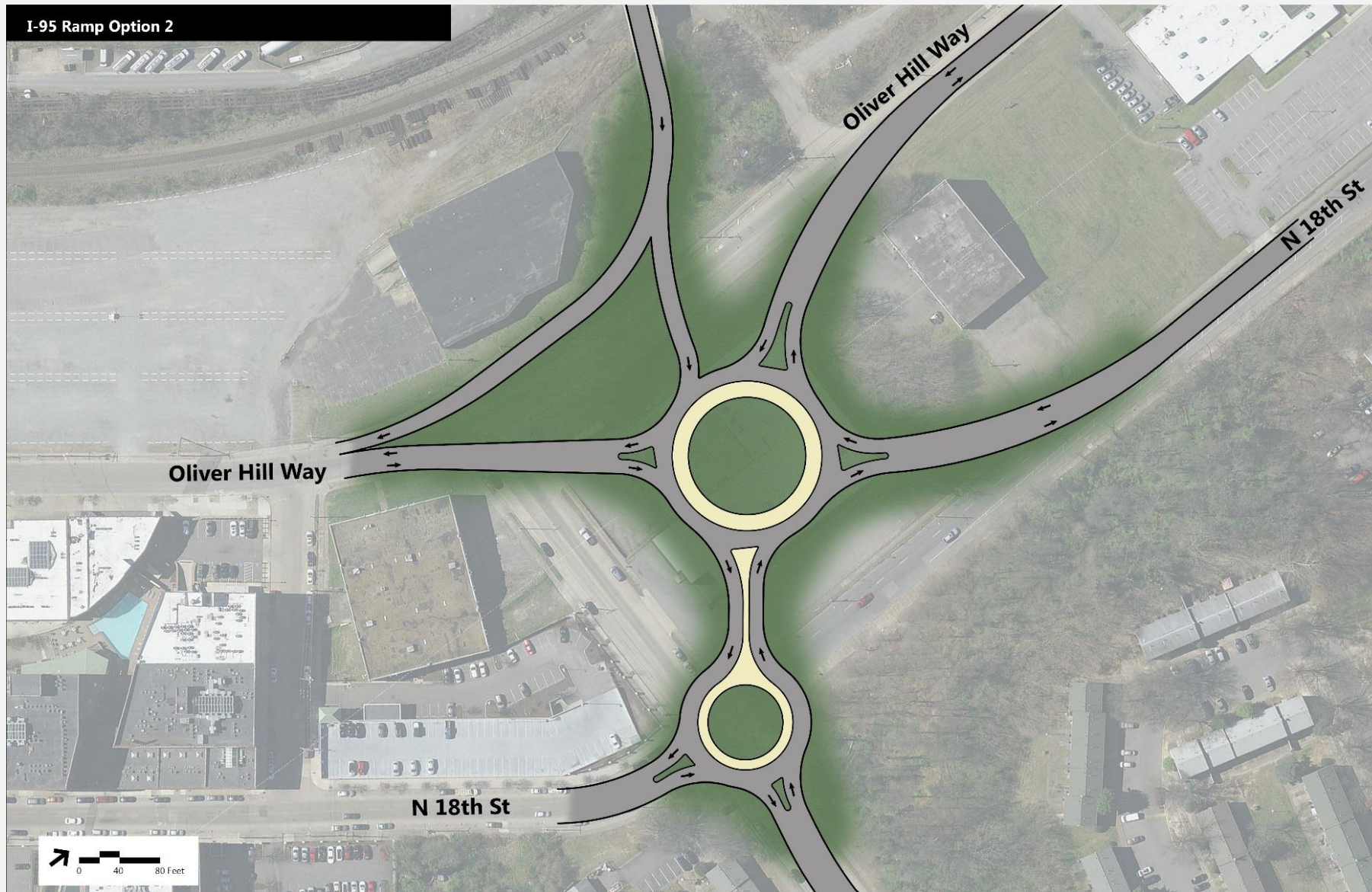


# I-95 Ramp Terminus Option 1



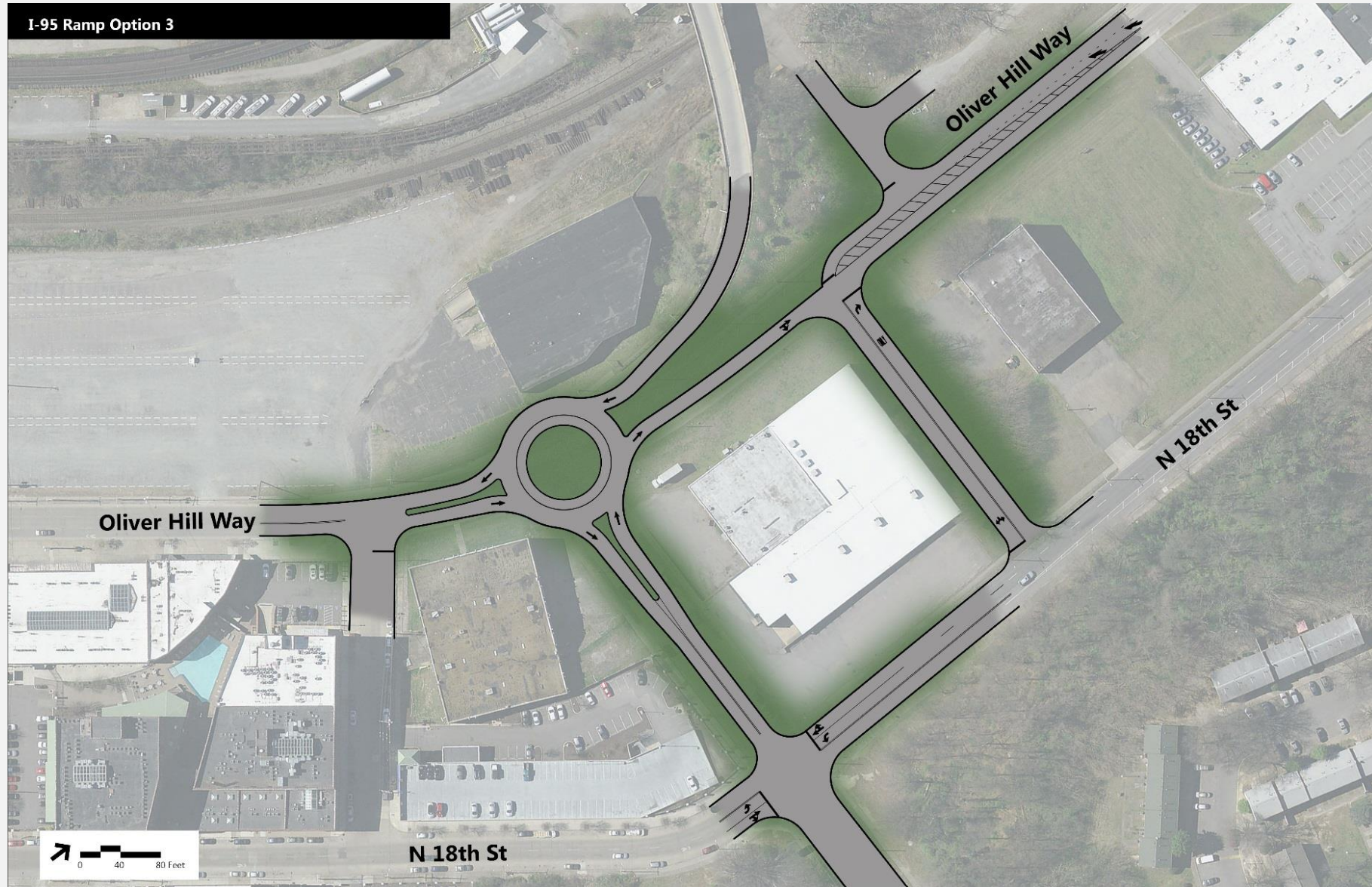


# I-95 Ramp Terminus Option 2





# I-95 Ramp Terminus Option 3





# Next Steps

- Public Workshop: May 2018
  - Goals
  - Street Concepts
  - Intersection Concepts
- Steering Committee #3: Summer 2018 (after Public Workshop)







THANK YOU