

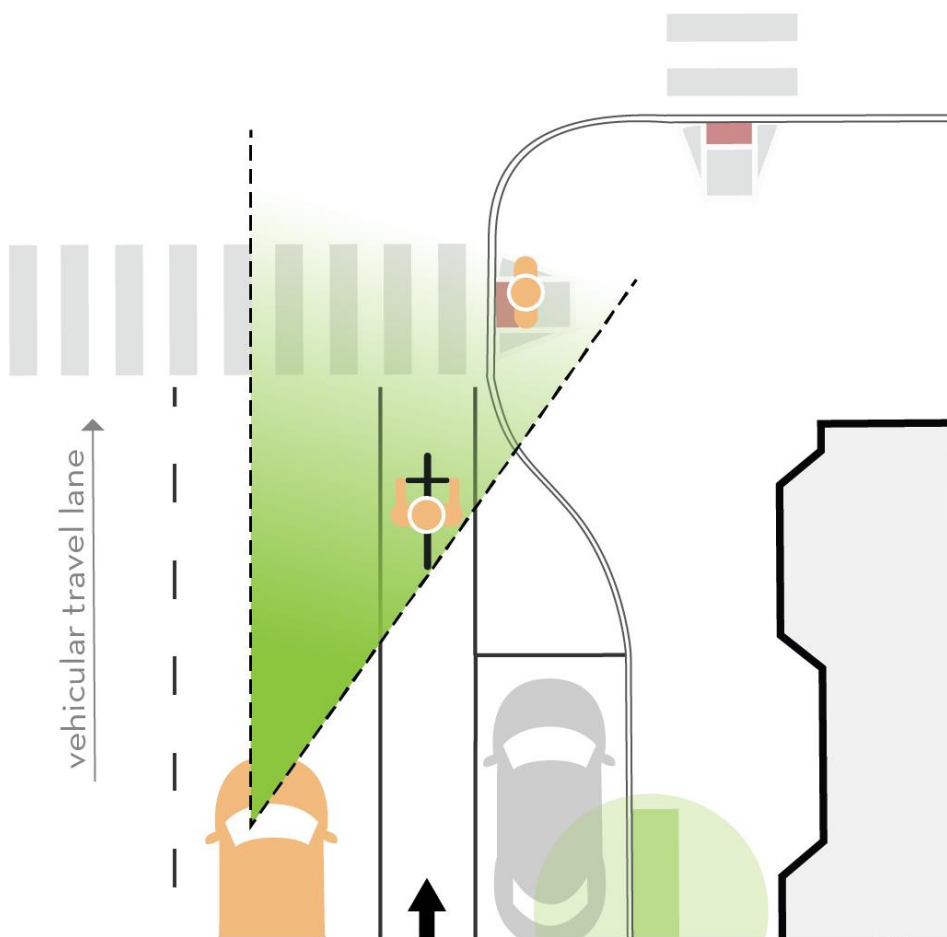
Upgrading Tactical Safety Improvements

District Department of Transportation

Agenda

- Project Background
- Identifying Need
- Quick-build Installation
- Upgrading to Permanent

What is a curb extension?



Shorter crossing distance

*

Reduces motorist turning speeds

*

Increased visibility between motorists and pedestrians

Tactical Curb Extension



Concrete Curb Extension



Why tactical curb extensions?

- Safety benefits are realized immediately
- Improve planning to construction timeline
- Provide an opportunity to right-fit designs and make changes before a permanent installation



Safety & Mobility Studies

Identifying Need

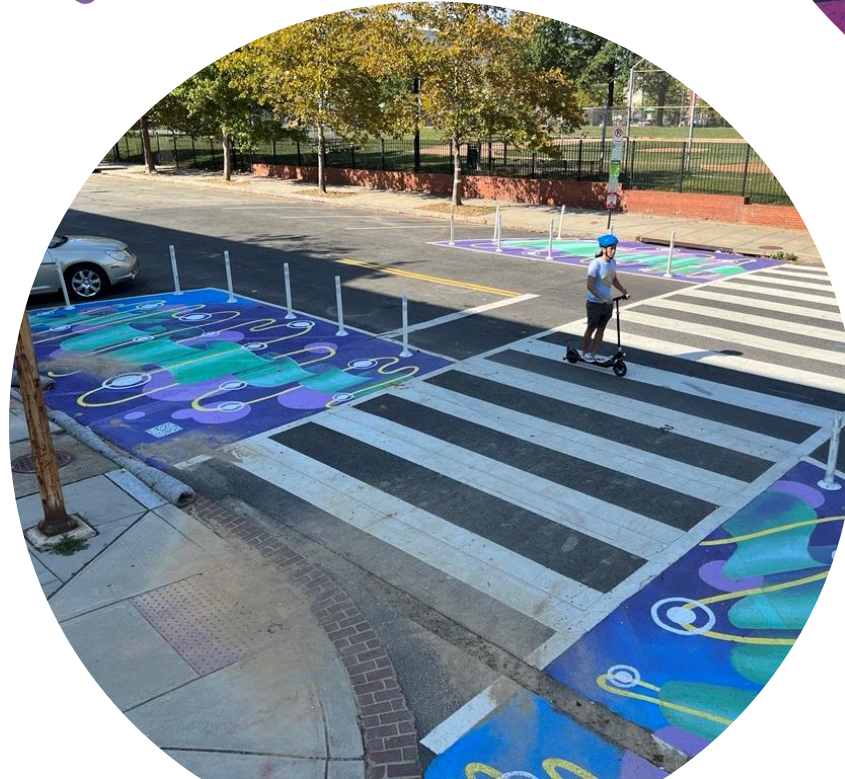
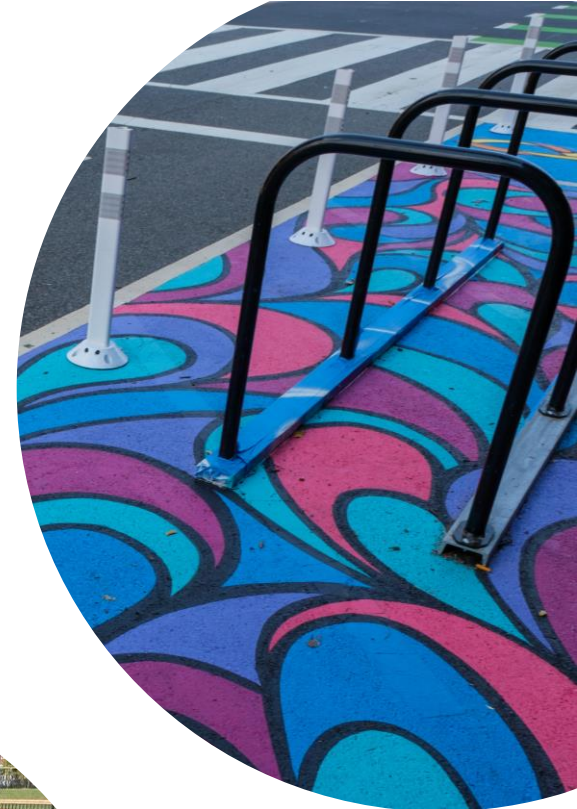
Expected Outcomes

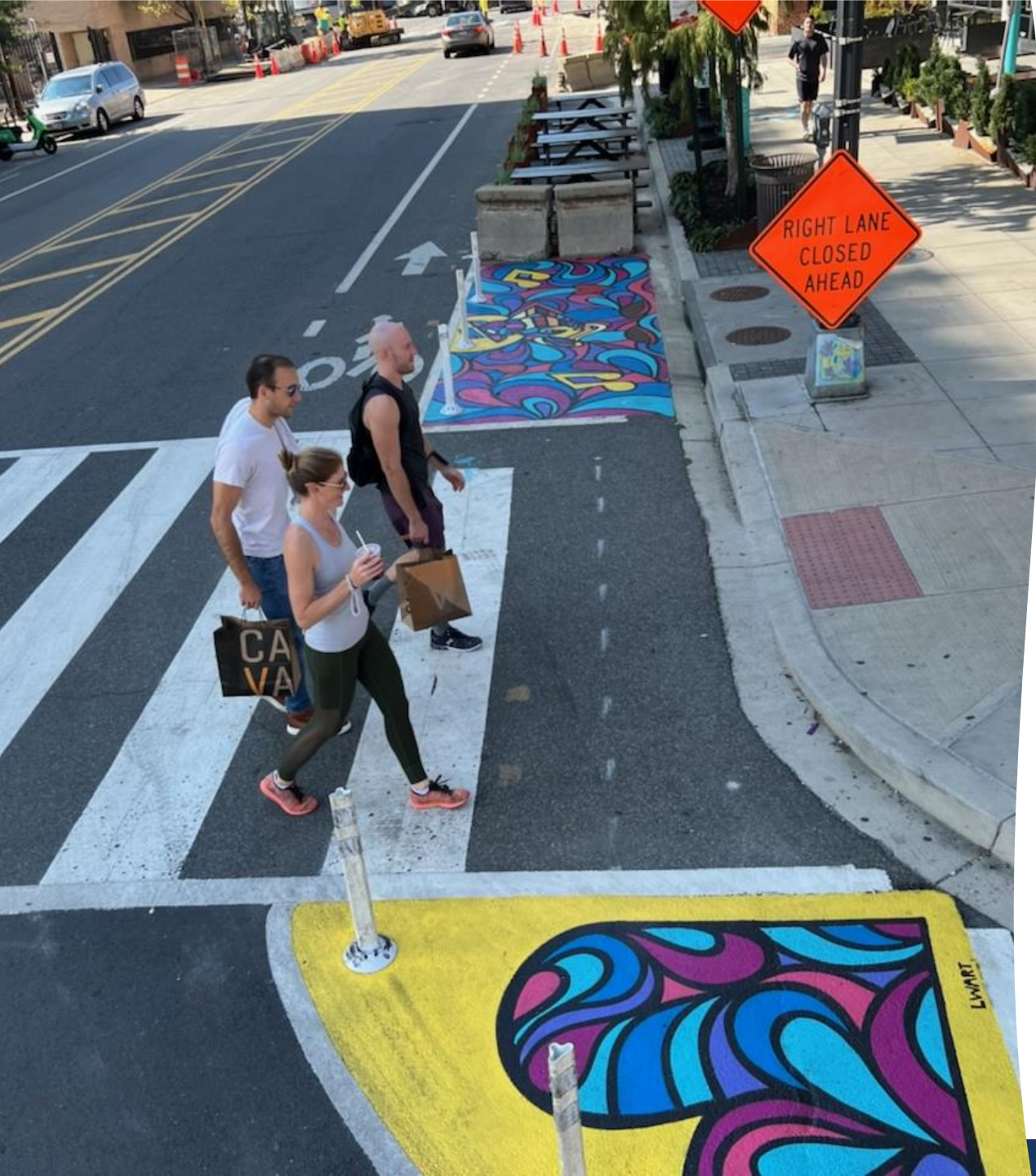
- Focus is on short-term, quick-build projects, that may include traffic calming and intersection safety enhancements.

40 short-term recommendations to be implemented within 3 years

10 of the 40 recommendations implemented during the study.

5 of the 10 immediate installations had murals installed.





Toolbox

- Key messaging for public engagement
- All recommendations were created to be tactical installations, though some will be implemented with more permanent materials
- Our tools consist of low-cost materials such as:
 - Flex posts
 - Paint
 - Modular Speed Bumps
 - Signage

Typical process:



3+ years from project recommendation to installation

Safety and Mobility Studies:

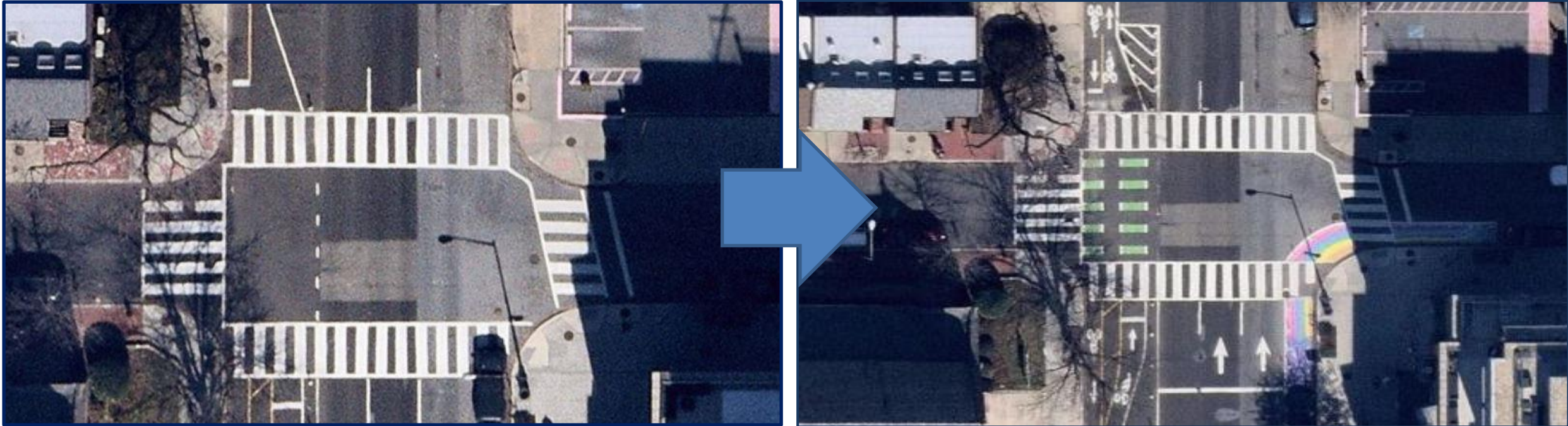


Recommendations installed quickly to realize the safety benefit while long-term planning continues.

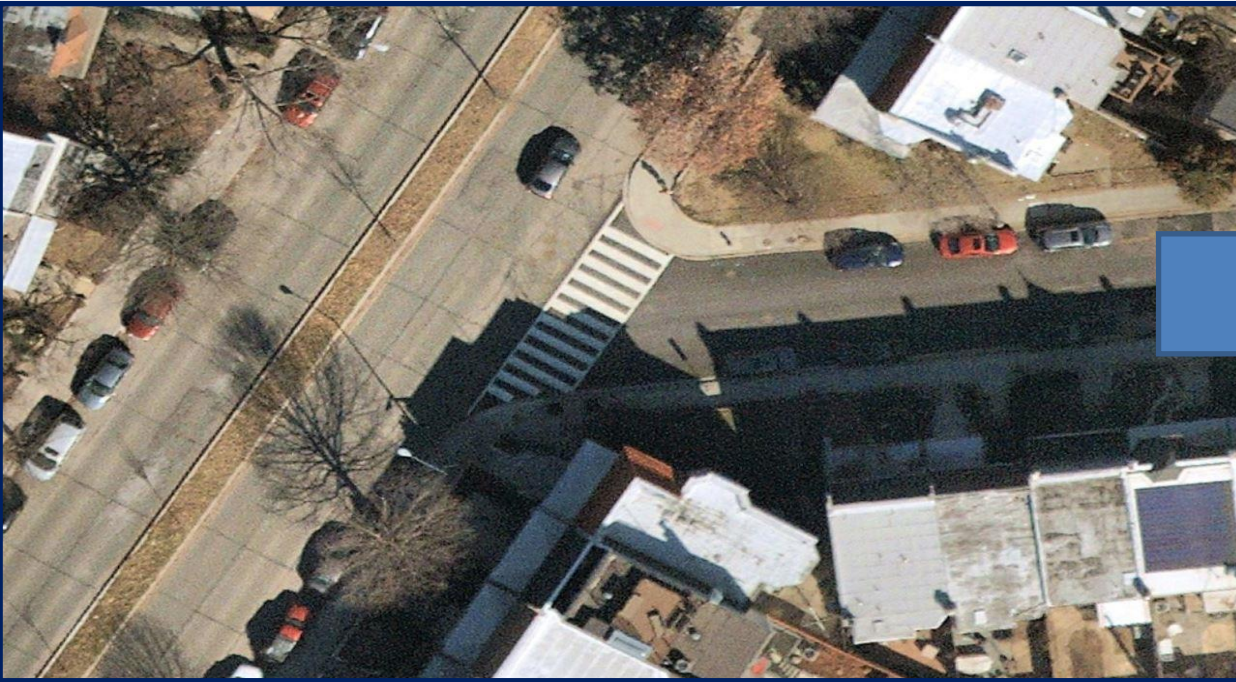
How did DDOT decide to incorporate tactical installations in planning processes?

- Shift from long-term, vision-focused studies into implementation-focused planning
- Safety and Mobility Studies identify immediately implementable and concrete actions to increase safety and improve transportation connectivity and accessibility on **neighborhood-serving streets**
- These types of projects are meant to be responsive to immediate needs and can also test solutions that could be built out in a future project

15th and Church NW – Washington DC

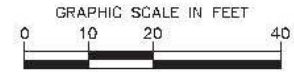


New Hampshire and Newton NW – Washington DC



Incorporating Design

MATCHLINE - SEE SHEET 4



IMPLEMENTATION NOTES

- A** INSTALL WHITE FLEXIPOSTS. SPACING SHALL BE CENTERED ON HATCH MARKINGS WHEN PRESENT OR TYPICALLY BE 5 FEET ON CENTER AND OFFSET 6 INCHES FROM LANE LINES, AWAY FROM TRAVEL LANES.
- A1** INSTALL WHITE FLEXIPOSTS. SPACING SHALL TYPICALLY BE 5 FEET ON CENTER AND INSTALLED ON WHITE LANE LINE.
- B** INSTALL GREEN PAVEMENT PAINT AS INDICATED TO RELOCATE TWO-WAY BICYCLE LANE APPROXIMATELY 6 FEET TO THE EAST. MAINTAIN 2 FOOT BUFFER BETWEEN NORTHBOUND BICYCLE LANE AND NORTHBOUND VEHICULAR TRAFFIC.
- C** INSTALL 6 FOOT WIDE PEDESTRIAN WALKING SPACE USING TAN PAVEMENT PAINT ALONG THE WEST CURB OF 15TH STREET NW.
- D** SEE DETAIL A. INSTALL THREE HELMETED BICYCLIST MARKINGS TO INDICATE THE ADVANCE BICYCLE BOX.
- E** SEE DETAIL B. INSTALL HELMETED BICYCLIST MARKINGS AND DIRECTIONAL ARROWS.
- F** SEE DETAIL C. INSTALL PEDESTRIAN LANE PAVEMENT MARKING.
- G** SEE DETAIL D. INSTALL ADVANCE YIELD LINE FOR BICYCLE LANE 5 FEET FROM CROSSWALK.
- H** PROVIDE PARKING BOX FOR DIPLOMAT PARKING RESTRICTION.
- I** RELOCATE EXISTING MUTCD R10-6A "STOP HERE ON RED" APPROXIMATELY 10 FEET TO THE SOUTH.
- J** INSTALL MUTCD R10-11 "NO TURN ON RED" SYMBOLIC SIGN.
- K** EXISTING PARKING SIGN ASSEMBLY TO REMAIN.

PAVEMENT MARKING LEGEND

| | |
|---------------------------|---------------------------------|
| WHITE, 4" WIDTH | WHITE, 24" WIDTH, 24" SPACE |
| WHITE, 4" WIDTH, 5' SPACE | WHITE 4" WIDTH, 2 LONG, 4 GAP |
| WHITE, 6" WIDTH | YELLOW, 4" WIDTH |
| WHITE, 12" WIDTH | WHITE RETROREFLECTIVE FLEXIPOST |

d.

Kimley Horn

EUCLID STREET NW/
15TH STREET NW
INTERSECTION MODIFICATIONS (1)

NEAR NW III SAFETY
AND MOBILITY STUDY

DISTRICT OF
COLUMBIA

SCALE 1"=20'
DATE: 6/30/21
SHEET NUMBER
3 OF 5

Incorporating Design

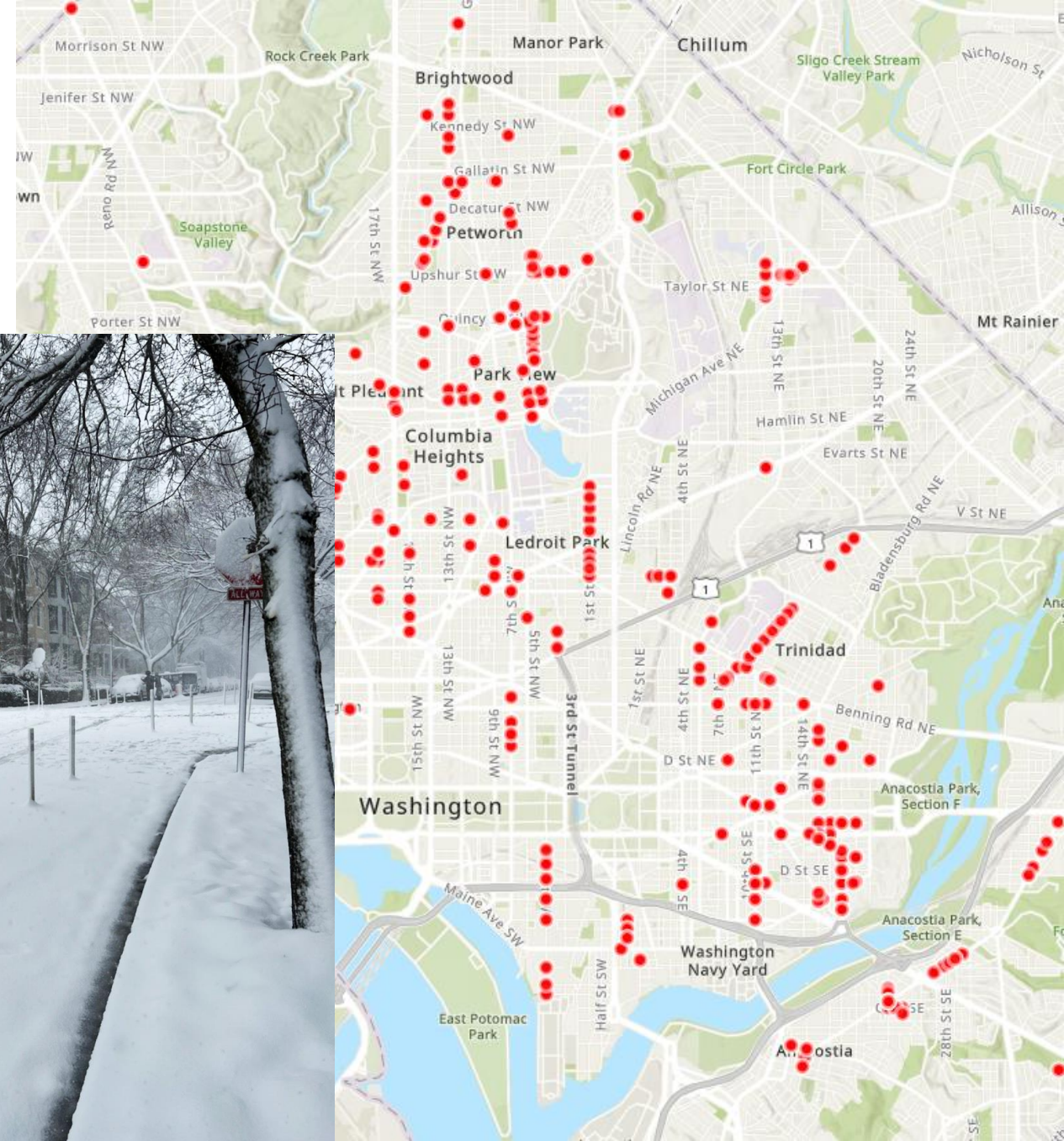


Vision Zero Hardening

Long-lasting Change

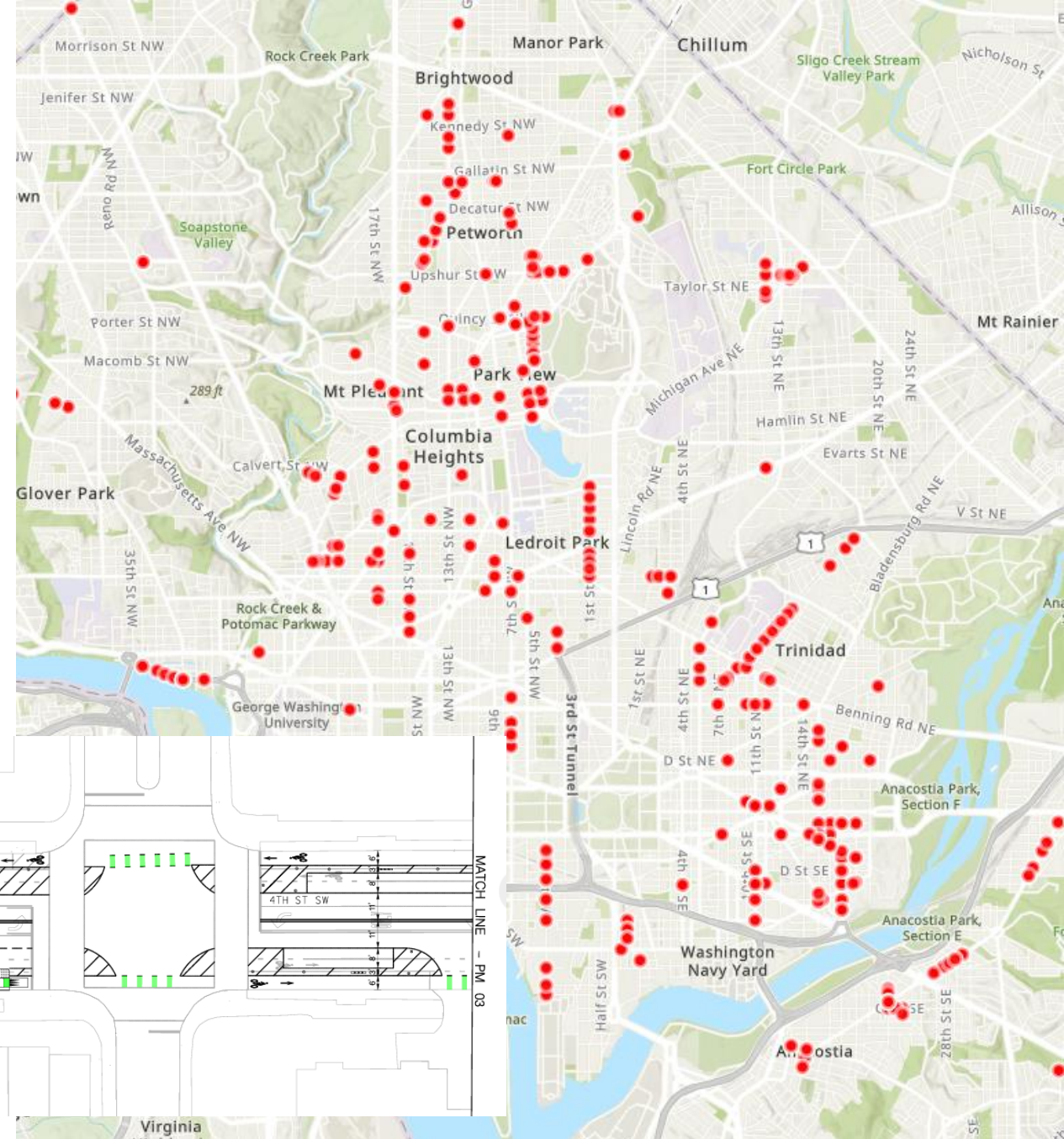
What Next?

- DDOT has installed over 400 tactical safety improvements in the last 5 years
- Process of upgrading has been focused on capital/large scale projects
- Increased maintenance costs



Vision Zero Hardening Program

- TAP-funded study to identify and prioritize locations for upgrading tactical curb extensions to permanent
- Inventory existing locations – from multiple DDOT programs and construction avenues



Identifying Priority Locations

- Create a model that prioritizes locations for upgrading
- Emphasize data points that capture the benefits of **permanent** over **tactical**
- Develop agency consensus on prioritization methodology

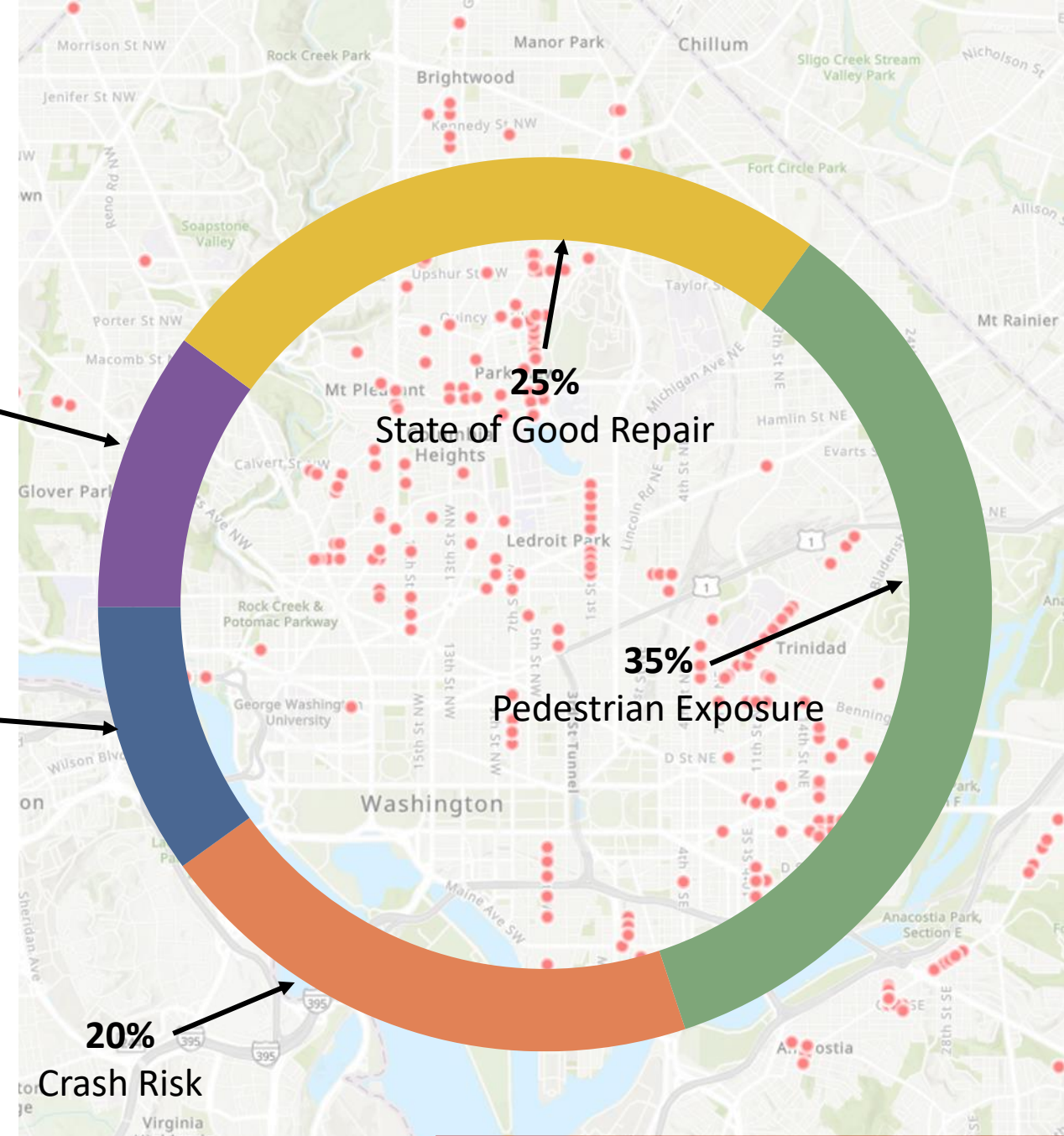
10%
Crash History

10%
Equity

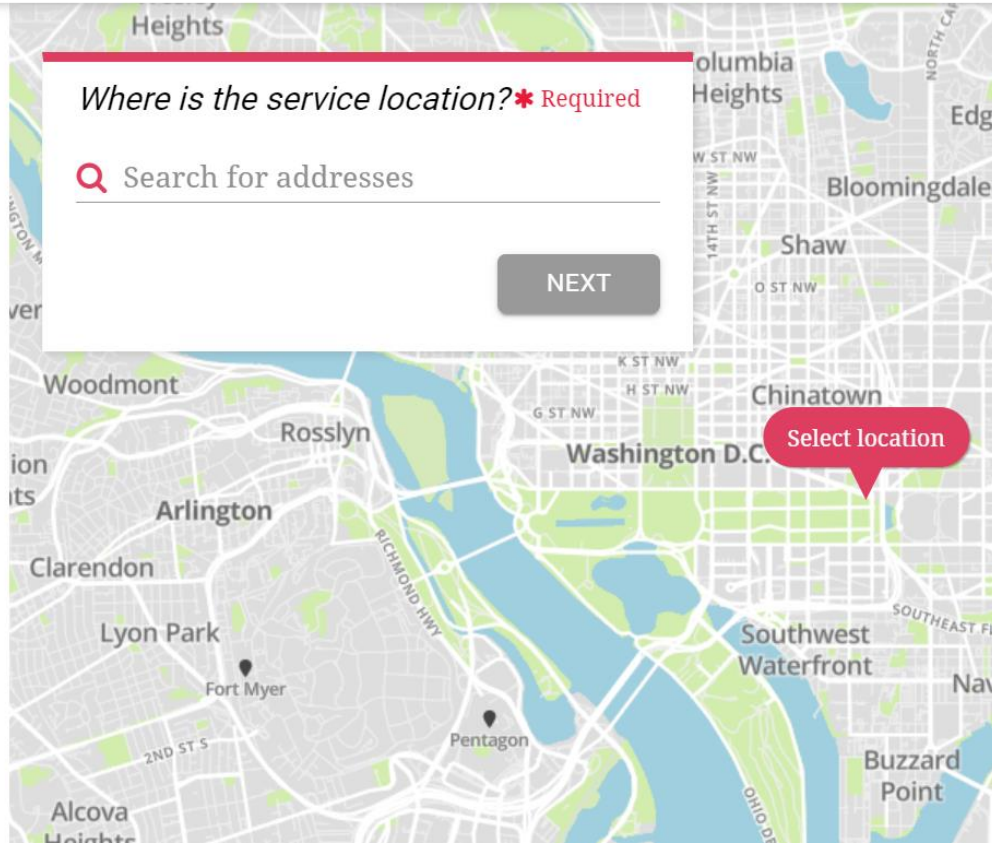
20%
Crash Risk

25%
State of Good Repair

35%
Pedestrian Exposure

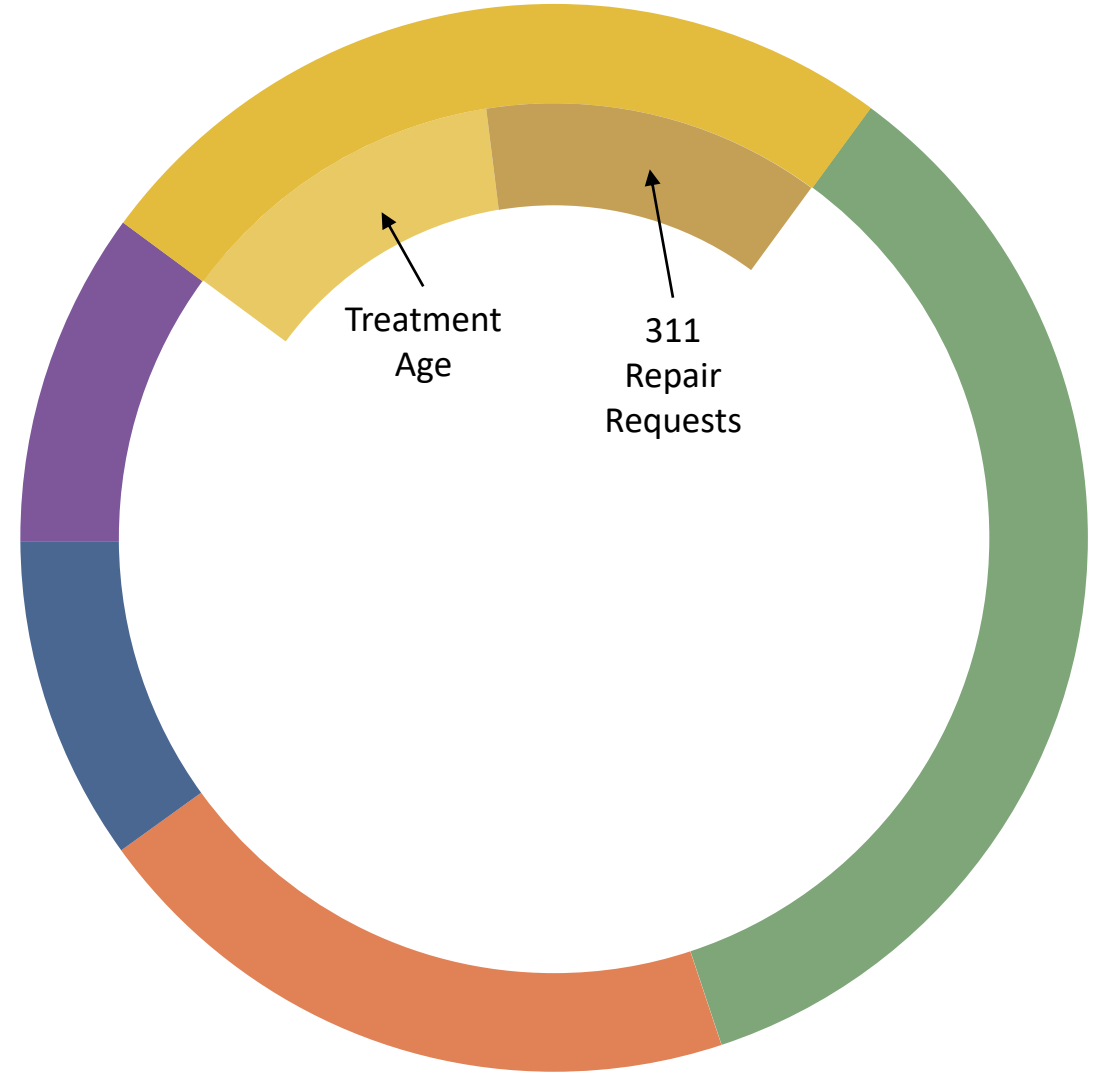


Identifying Priority Locations



- Service
 - Roadway
 - Striping /
 - Markings
- Location
- Details
- Contact

25%
State of Good Repair

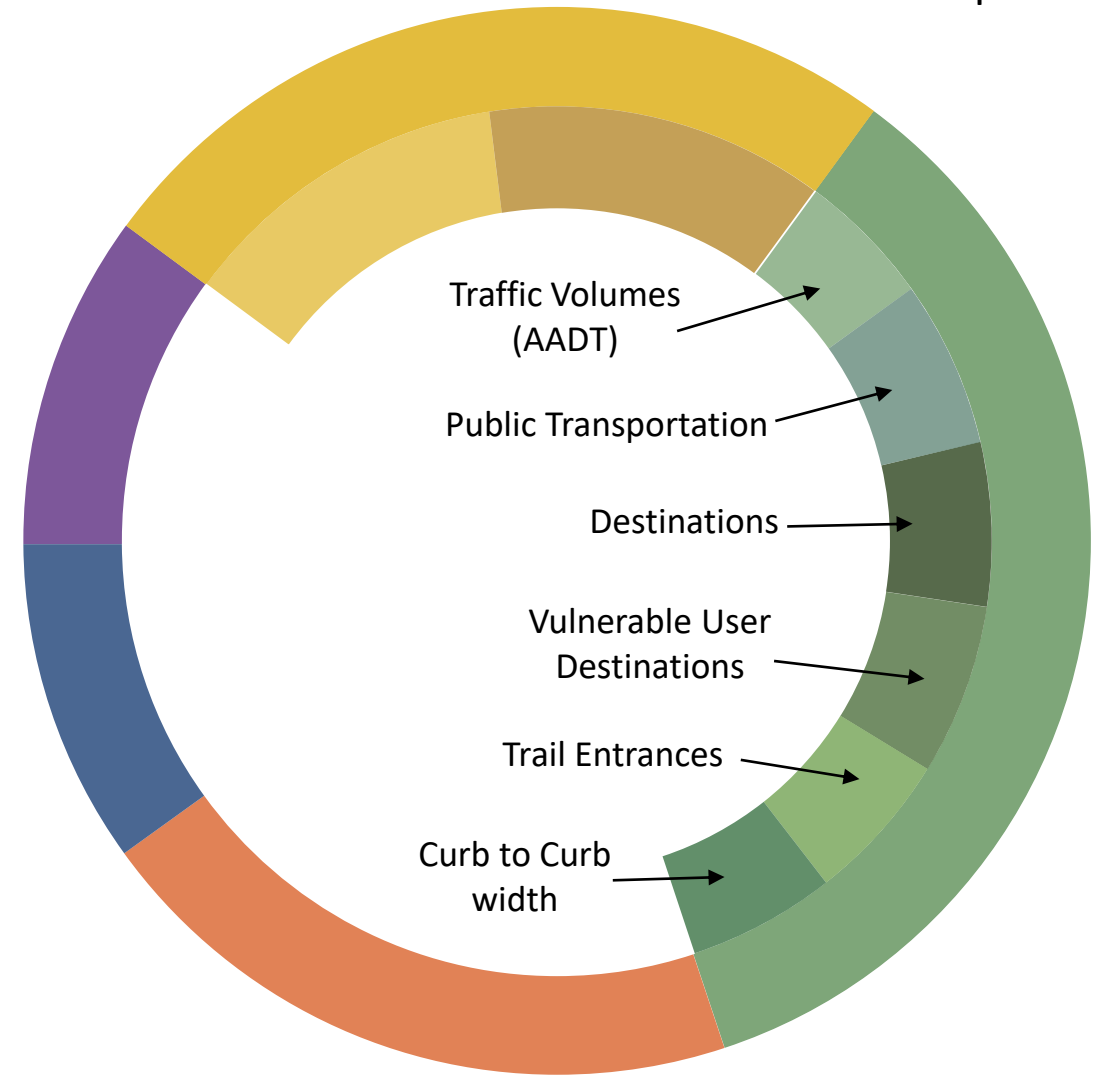


Identifying Priority Locations

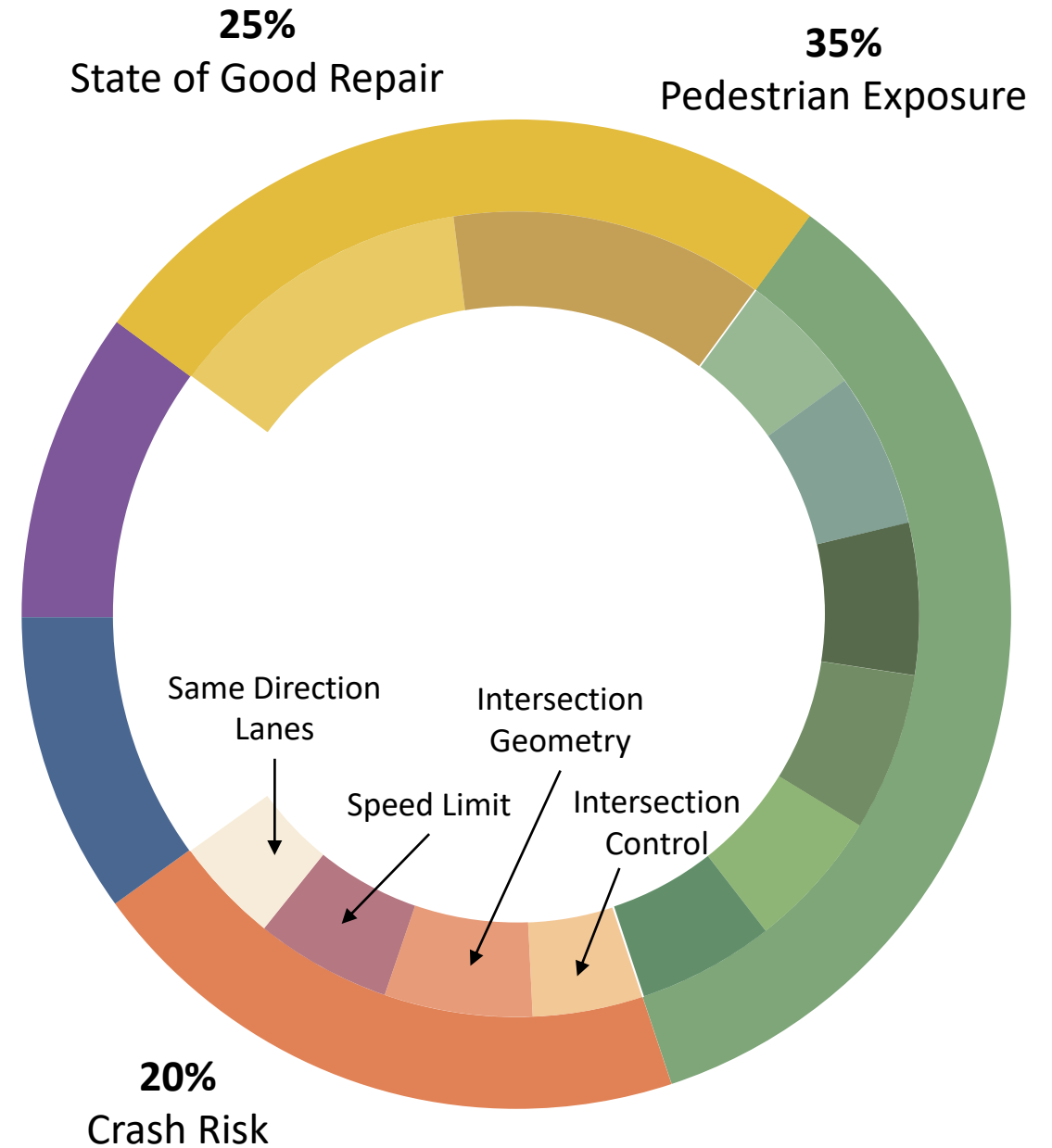


25%
State of Good Repair

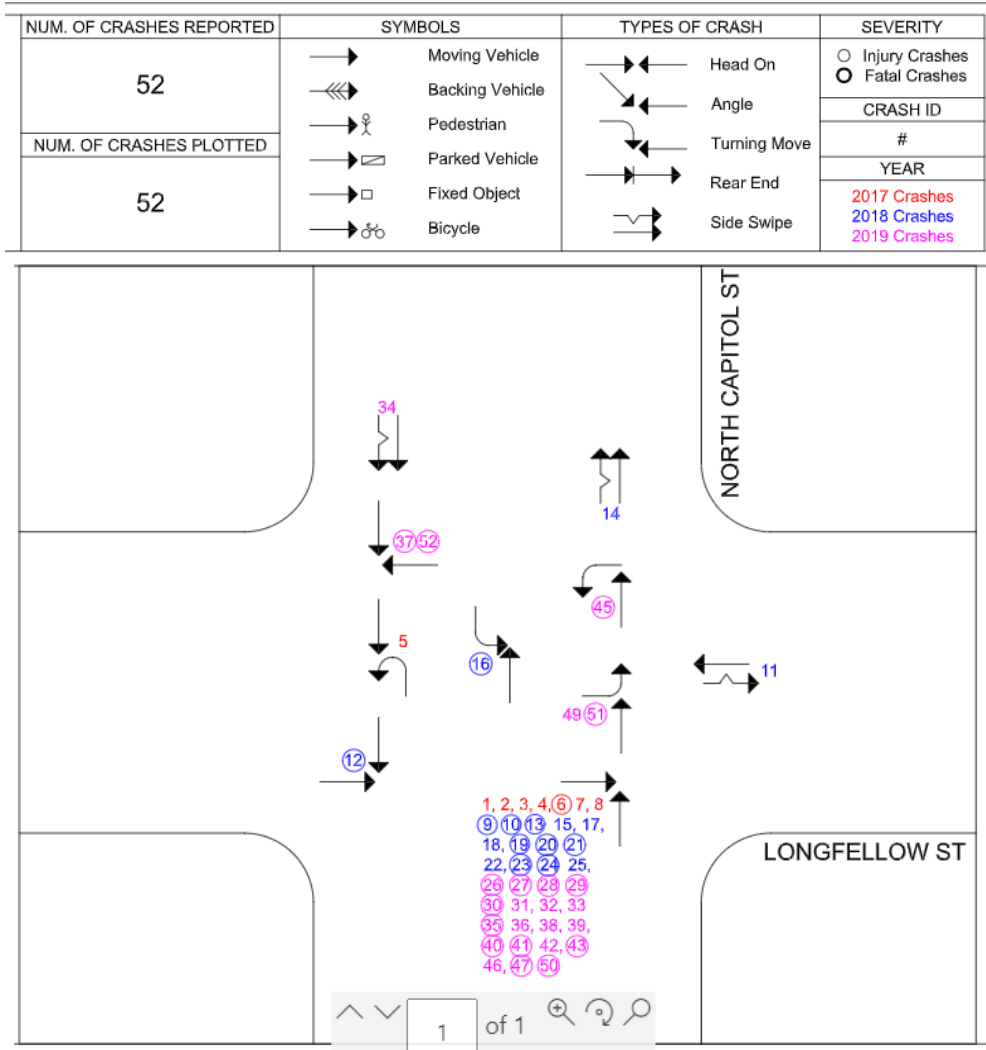
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Identifying Priority Locations



Identifying Priority Locations



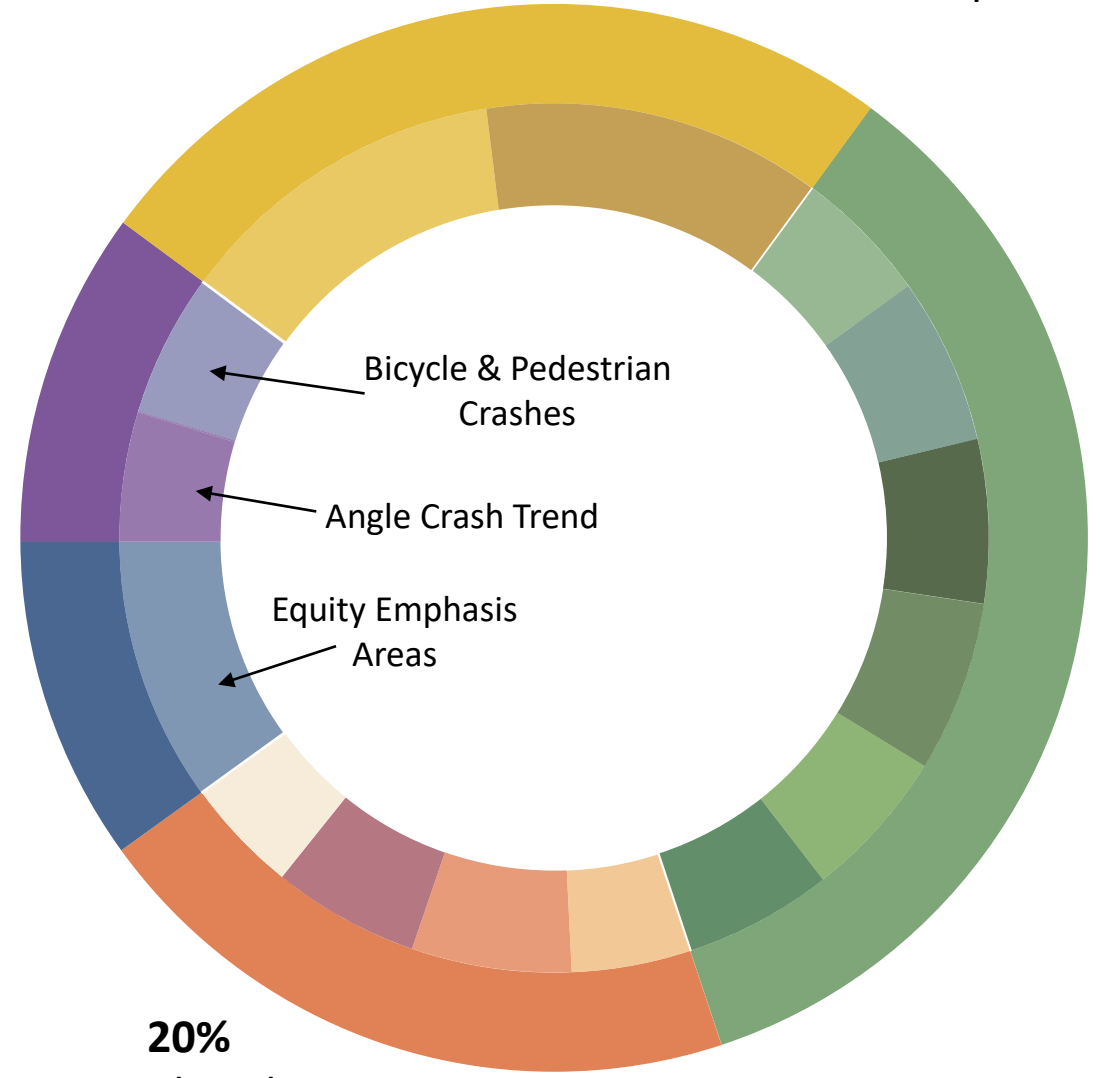
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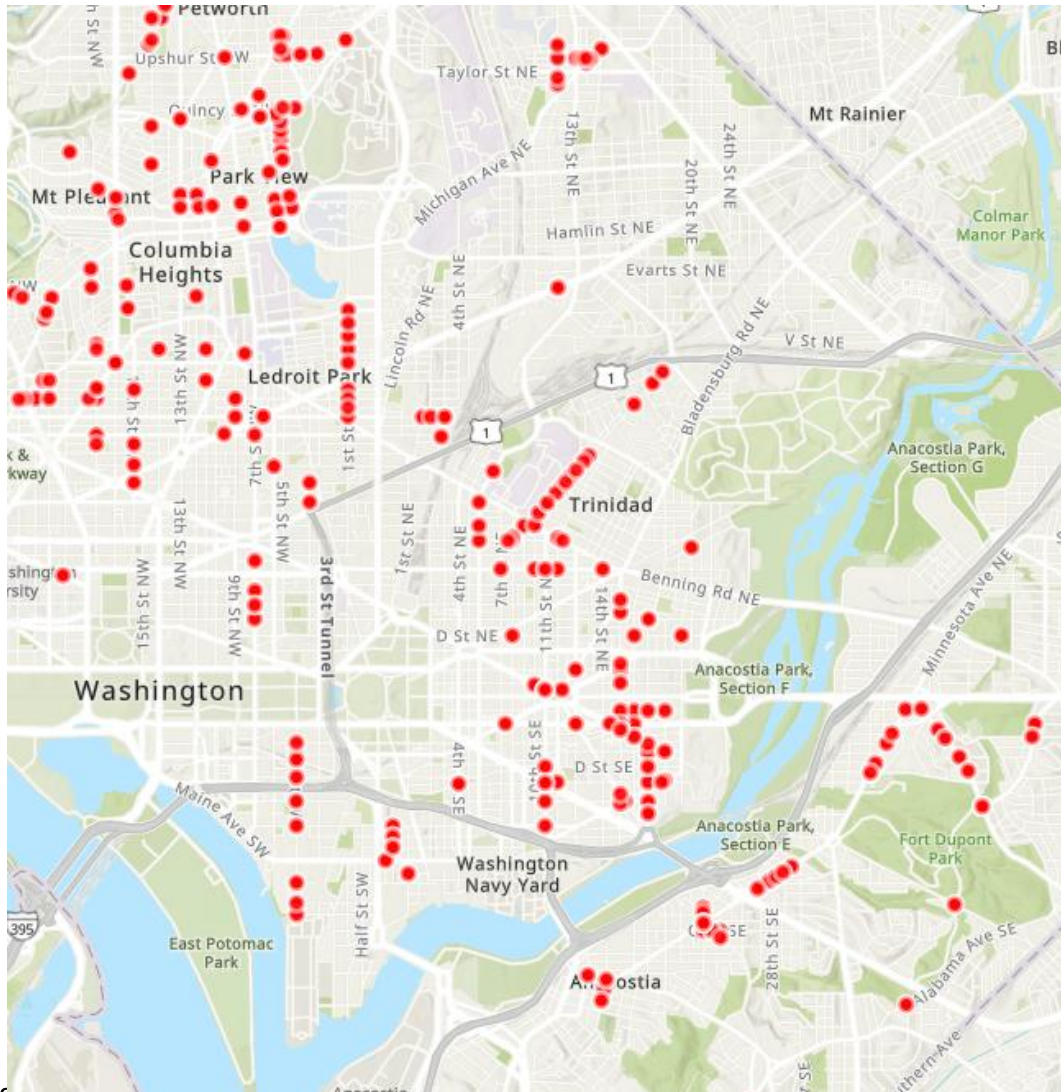
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Crash History

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Equity

20%
Crash Risk



Identifying Priority Locations



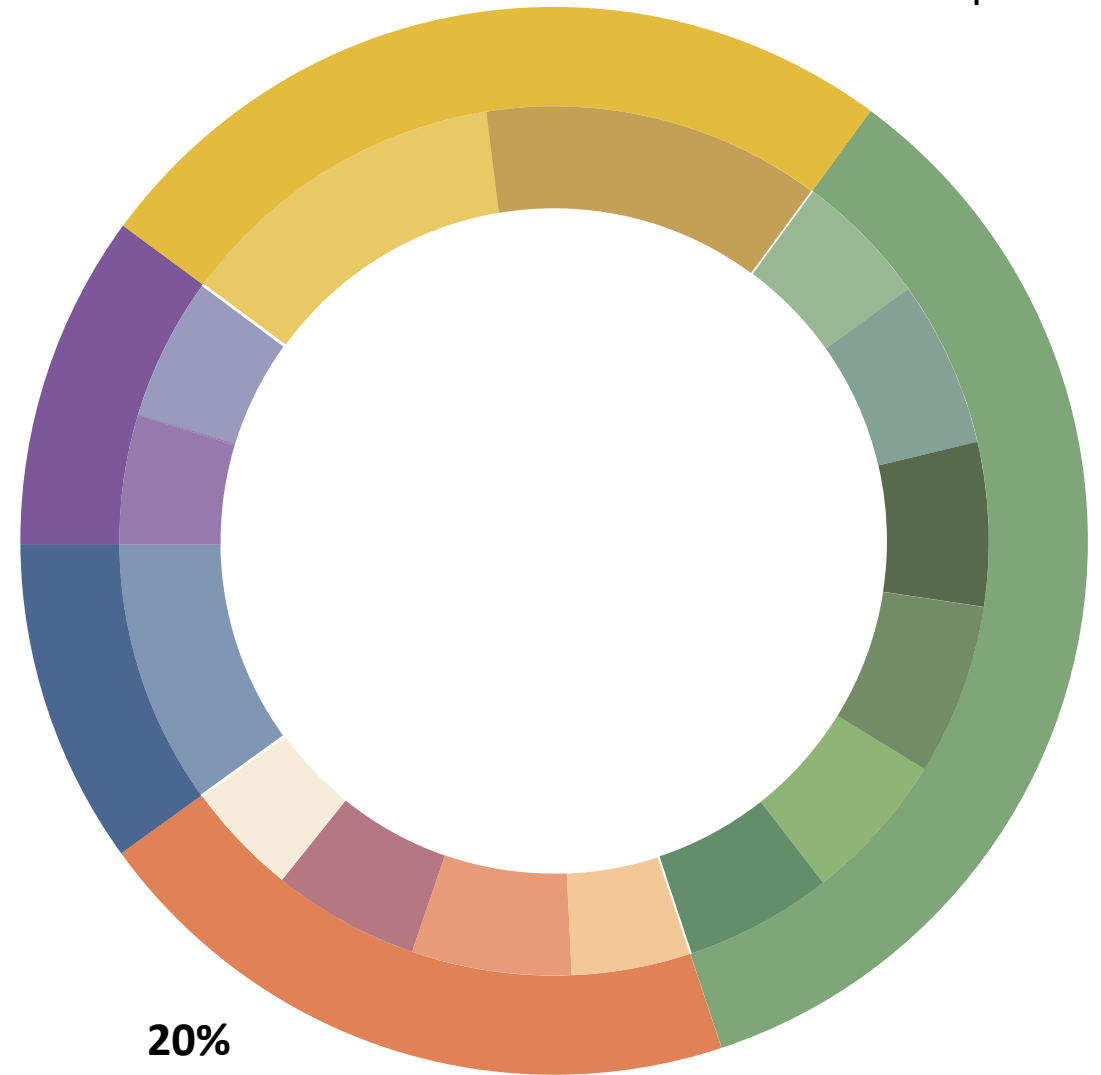
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State of Good Repair

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Pedestrian Exposure

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Crash History

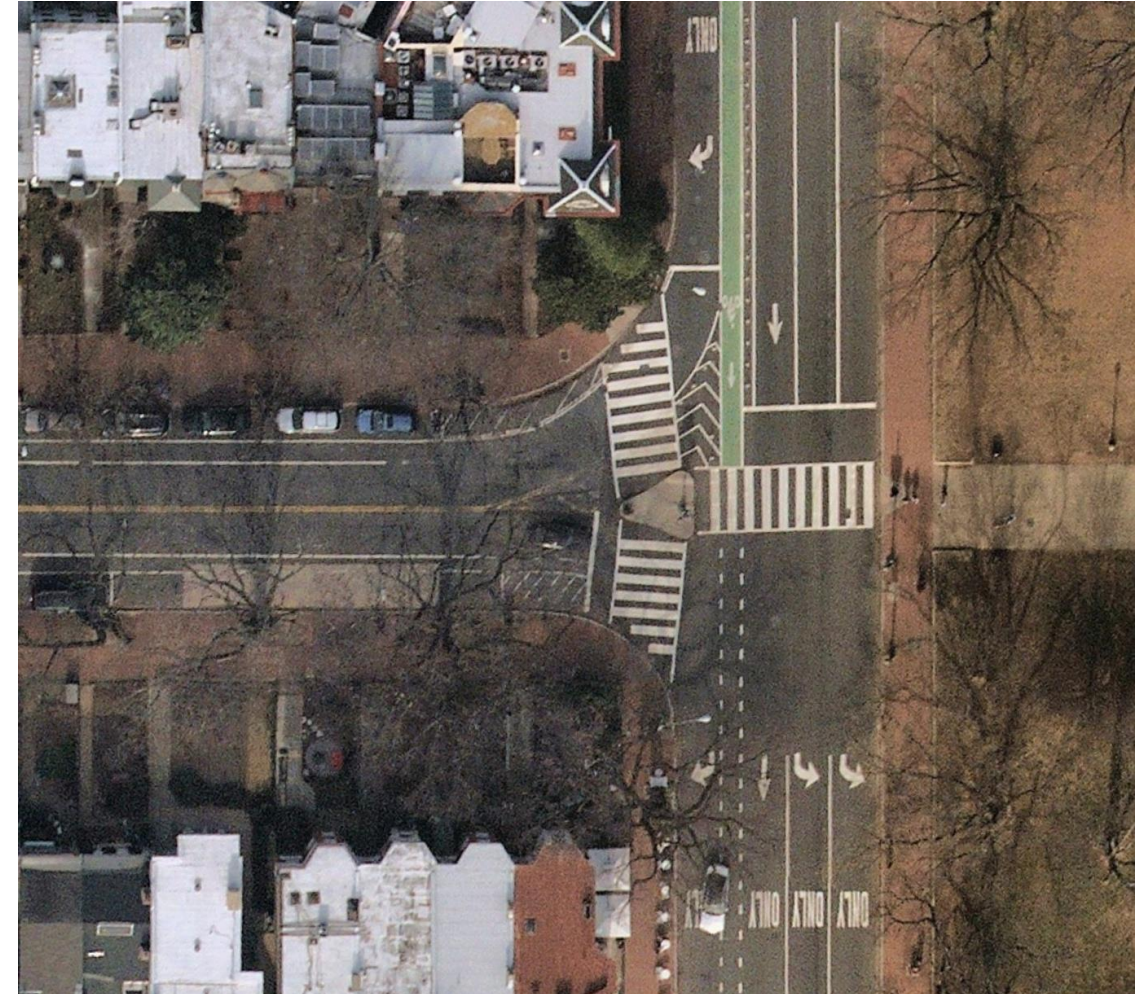
10%
Equity

20%
Crash Risk

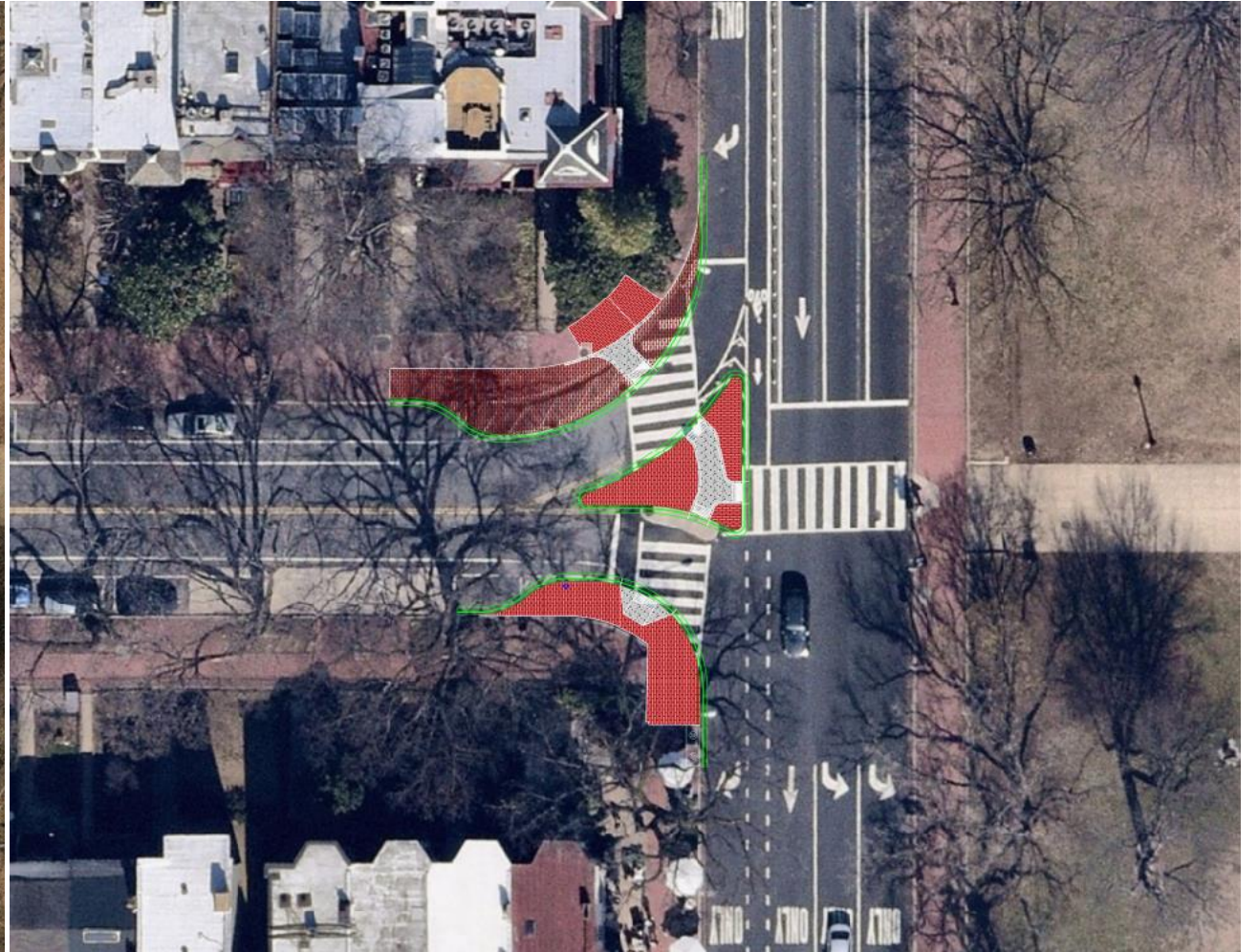
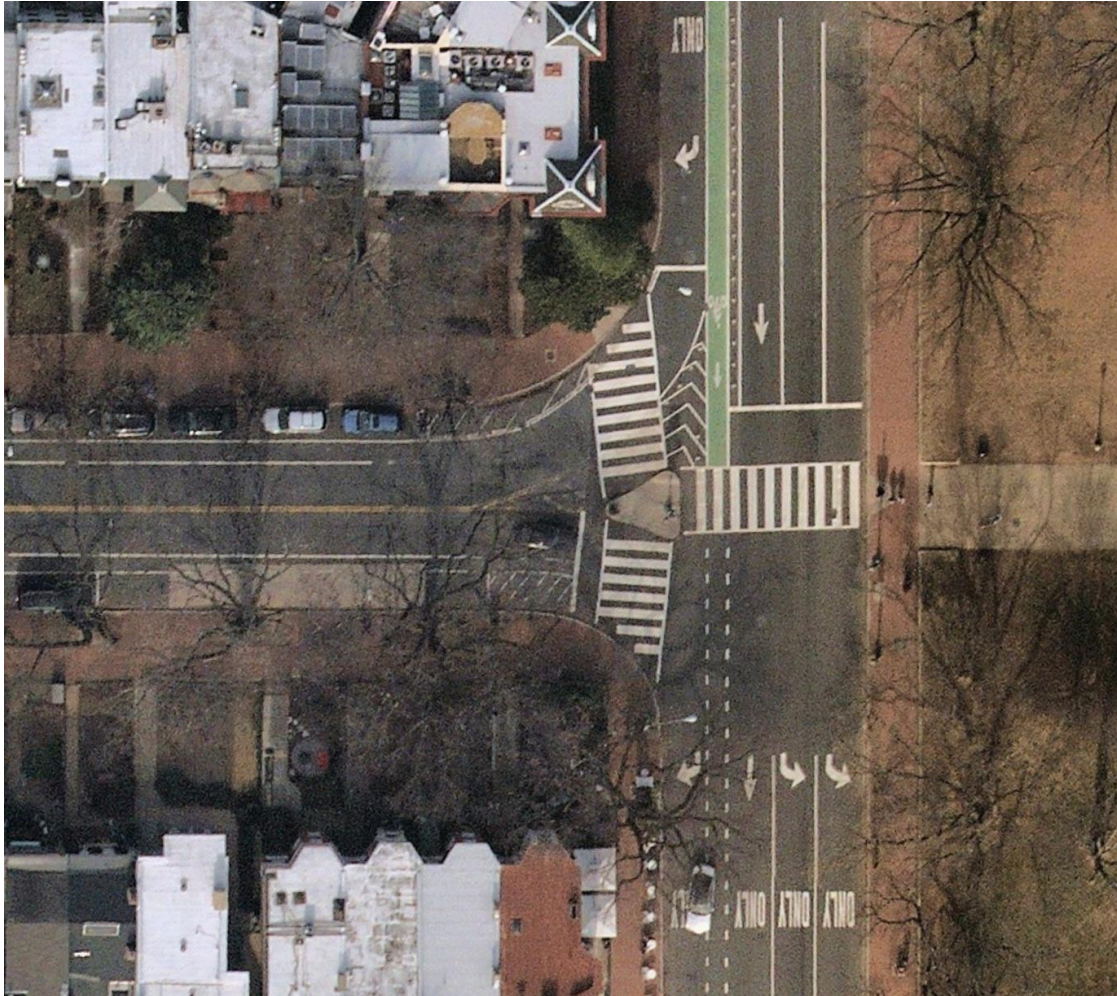


2023 Upgrading Location – 11th Street & East Capitol Street SE

- State of Good Repair
 - Portions installed beginning in 2009
 - 10+ 311 repair requests fulfilled in the past year
- Pedestrian Exposure
 - Main entrance to a national park
 - Within ¼ mile of multiple schools
 - Long crossing distance (45ft)
- Crash Risk
 - 3 lanes in one direction
- Equity
 - **Not** identified as a high need area
- Crash History
 - Right-hook trend

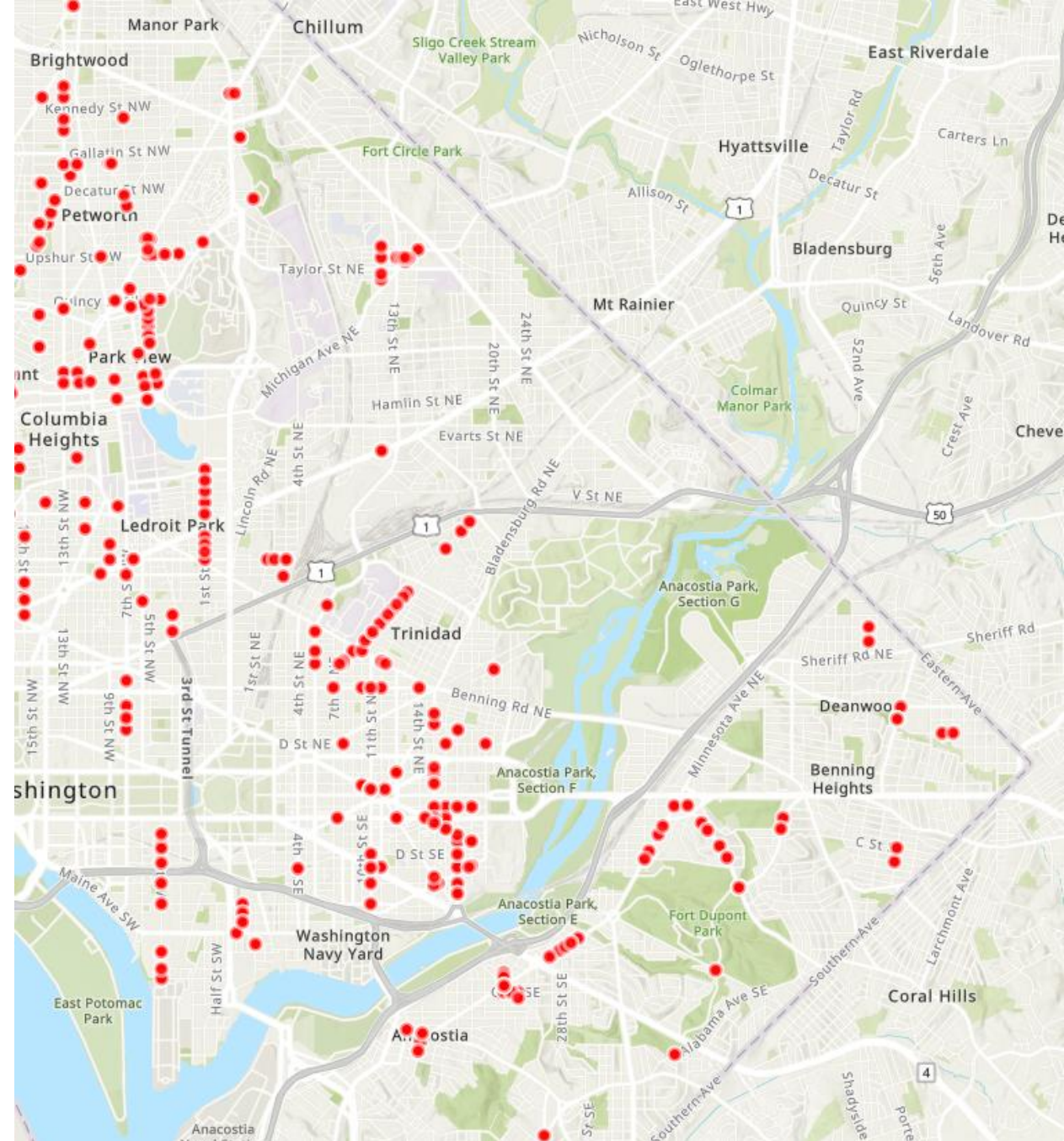


2023 Upgrading Location – 11th Street & East Capitol Street SE

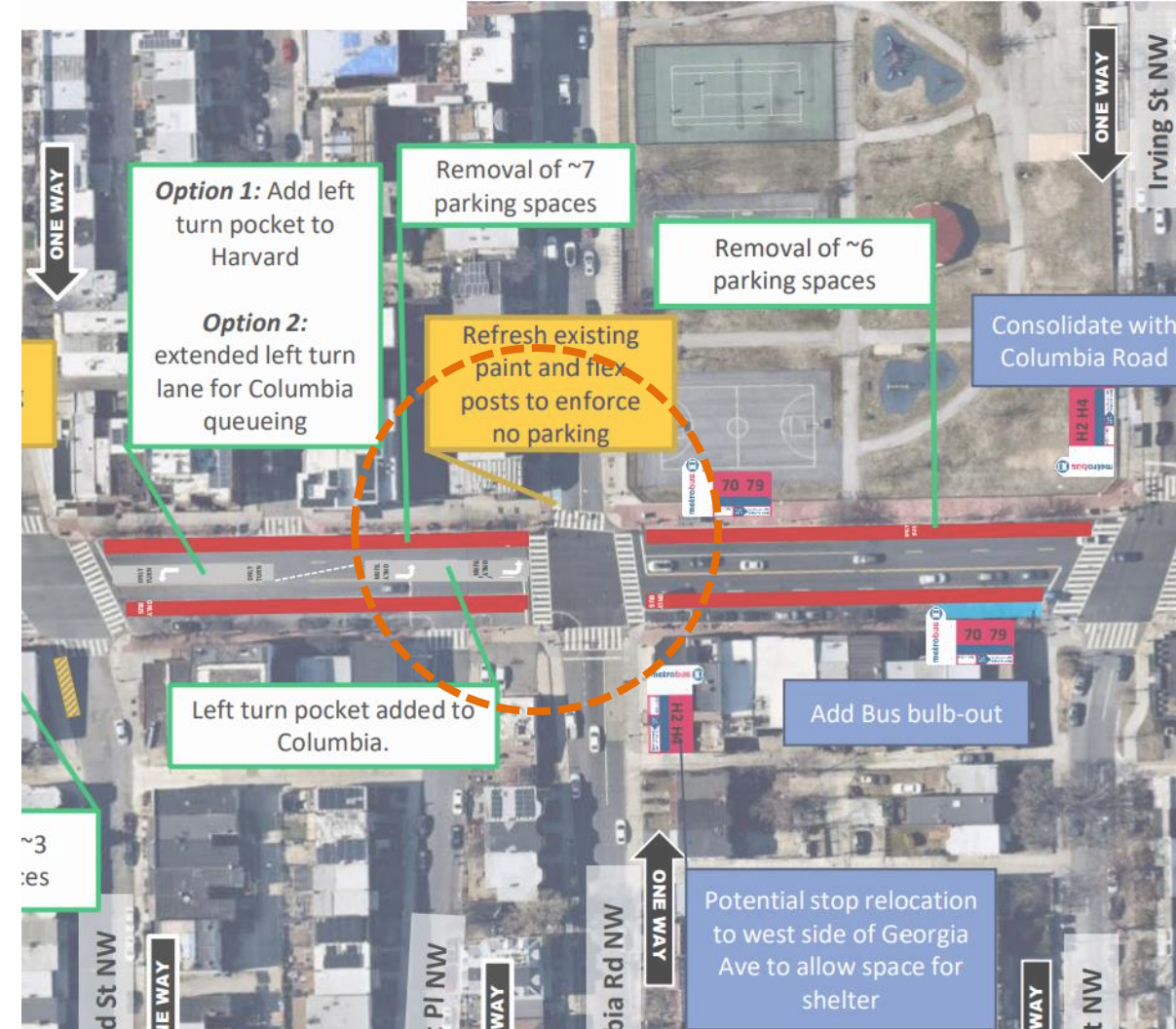


Feasibility

- Streamlining feasibility process to remove locations that are ...
 - Not feasible:
 - Future bus priority or protected bike lane
 - Feasible, but expensive:
 - Complex intersections or corridor
 - Relocation of storm drains or utility conflicts
 - Require signal hardware upgrades or relocation



Georgia Avenue & Columbia Street NW



Thank You!

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