# DISTRICT DEPARTMENT OF TRANSPORTATION



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# DC 295/I-295 Corridor Improvement Study

Project Status Report to:

National Capital Region

Transportation Planning Board / Freight Subcommittee

### Project Team



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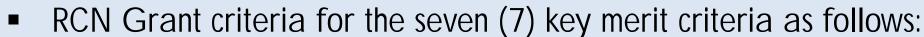


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### Project Overview and Purpose

# NAE / Reconnecting Communities Grant . . .

- Safety and Operational Improvements Projects
- Background and Long-term Commitments
- Ultimate Redesign to be Neighborhood Focused
- Other Benefits and Requests from Community & Stakeholders



- 1. Equity and Environmental Justice
- 2. Access Improvements (mobility and connectivity)
- 3. Facility Sustainability
- 4. Community-based Stewardship, Management and Partnerships
- 5. Equitable Development
- 6. Climate and Environment
- 7. Workforce development and Economic Opportunity





### Project Purpose – Phase 1

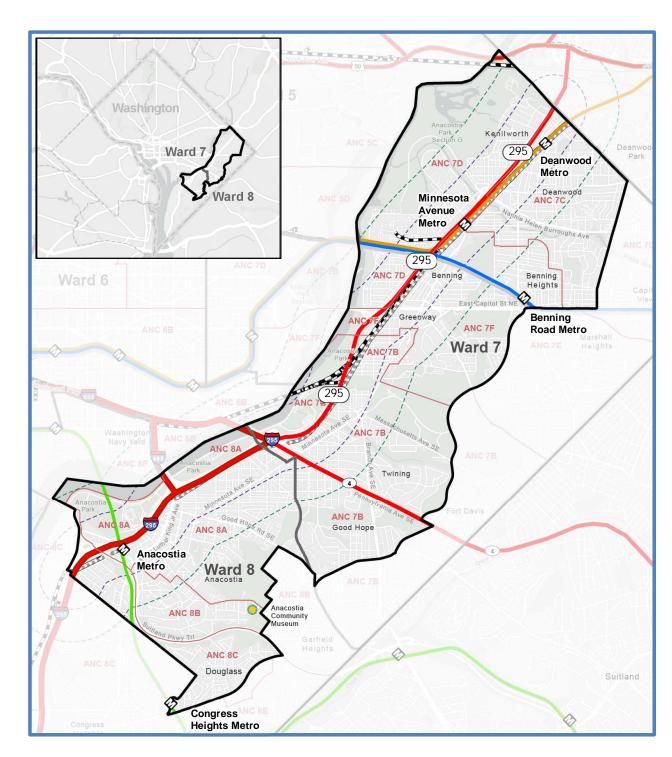
### Overall Intent & Approach

Overall, the area needs a holistic approach to plan and implement future improvements along the DC 295/I-295 corridor to connect communities.

PURPOSE

Conduct a planning study to identify potential infrastructure changes and multimodal transportation opportunities that will improve safety and connectivity within the neighborhoods along the DC 295/I-295 corridor.

Reconnecting neighborhoods in Wards 7 and 8 and promoting safe, healthy, inclusive, vibrant, and equitable communities.



### Project Overview



### Phase 1 Scope - Completed in June 2024

### **EXISTING CONDITIONS ASSESSMENT**

Documenting existing conditions and identifying major mobility barriers.

Provides a path forward for Phase 2 (Concepts Development) and future Phases.

MAIN FOCUS

Improvements/projects that will reconnect neighborhoods and promote safe, healthy, inclusive, vibrant, and equitable communities

5 Key Sub-Tasks

- Project Management
- Stakeholder & Public Outreach
- **S** Establishing the Existing Conditions

- Data Review and Analysis
- Existing Conditions Report

We are Here!

### Project Overview



Phase 2 Scope - Next phase (18 - 24 months, following Phase 1 and NTP)

### TIER 1 EIS PRE-SCOPING & CONCEPTS DEVELOPMENT

Focus on developing and analyzing concepts that will address mobility barriers and identifying objectives of completing a full Tier 1 EIS Scoping process.

The final deliverable, <u>Corridor Concepts</u>
<u>Alternatives Report</u>, will identify
conceptual projects costs and benefits,
and recommended path forward.

We are reviewing this SOW now; and coordinating FHWA Grant Agreement to include new Tier 1 EIS work.

4 Key Sub-Tasks

- Project Phase 2 Initiation towards Tier 1 EIS Objectives.
- Prepare Concepts & Refinements (Through S&PE Process)
- Conduct Pre-Scoping Level
  Stakeholder & Public Outreach
- Corridor Concept Alternatives Report
  (Identify additional NEPA documentation
  and analysis needed for specific projects)

### Project Overview



### Phase 3 Scope – Future phase (24 - 30 months, following Phase 2 and NTP)

### TIER 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Focus on commencing the formal Tier 1 EIS process by preparing required technical documentation and conducting meetings/review process.

The final deliverables will include technical reports for DEIS, circulation and reviews, meetings and publications, towards FEIS and ROD (Record of Decision).

10 Key Sub-Tasks

- 1 DEIS Process Initiation
- Prepare DEIS & Tech Reports
- 3 DEIS DDOT-FHWA-Agencies Reviews
- 4 DEIS Circulation & Public Reviews
- 5 DEIS DDOT-FHWA-Agencies Resolution

- 6 Final EIS (FEIS) Preparation
- FEIS DDOT-FHWA-Agencies Reviews
- 8 FEIS Publication
- FEIS Record of Decision (ROD) Prep & Review
- 10 FEIS Record of Decision (ROD) Publication

# DISTRICT DEPARTMENT OF TRANSPORTATION

DC 295/I-295 Corridor Improvement Study

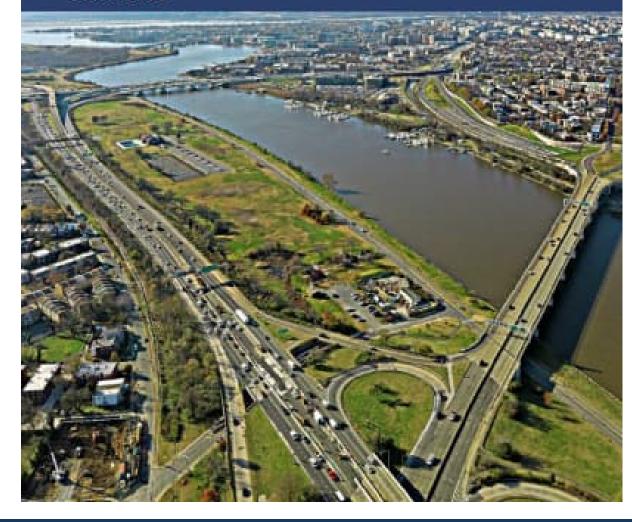
Existing Conditions Summary of Findings
Overlay Mapping Series

### **District Department of Transportation**

### DC 295 & I-295 Corridor Phase I Improvement Study

**Reconnecting Communities and Neighborhoods** 

June 2024



### Theme 1: Roadway Network

- 1. Vehicle Crashes
- 2. Existing Crossings
- 3. Intersections
- 4. No Direct Access to-from 1295
- 5. Missing Shoulder Lanes
- 6. Congestion AM
- 7. Congestion PM

#### Theme 2: Public Transit

- 1. MetroBus Stops
- 2. Walkshed High Frequency MetroBus Peak
- 3. Metro Bus Stations Walkshed Metrorail
- 4. Bikeshed (10 min from metro stations)
- 5. Public Transit Related Crashes

#### Theme 3: Bicycle Network

- 1. Bicycle Crashes
- 2. Walkshed Bikeshare
- 3. Bike Lanes Protected
- 4. Bike Trails
- 5. Bike Stress

#### Theme 4: Pedestrian Network

- 1. Pedestrian Crashes
- 2. Existing Crossings
- 3. Sidewalk Gaps One Side
- Sidewalk Gaps Both Sides
- 5. Pedestrian Bridge
- 6. Pedestrian Friendliness Index

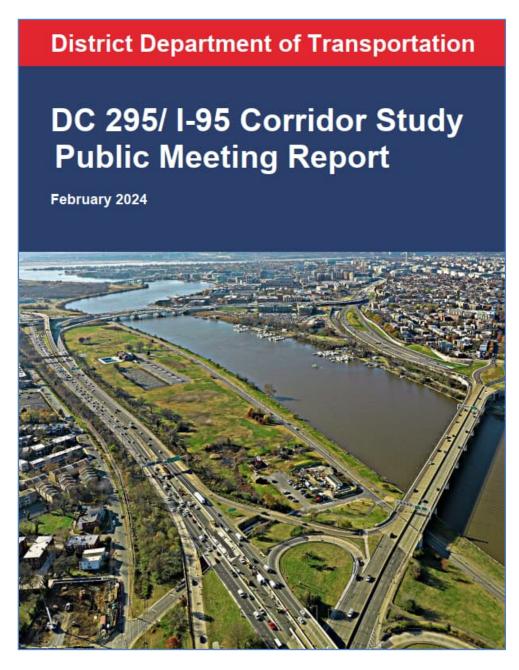
### Theme 5: Demographics

- 1. Homes without Private Vehicles
- 2. Transportation Dependency for Employment
- 3. Population Under 18
- 4. Population 65 years and over

#### Theme 6: Constraints

- 1. Floodplains (FEMA)
- 2. Proximity to Railroad (Metro and CSX)

### Stakeholders & Public Outreach Process



- Stakeholder Input:
  - A key group of public agencies were included in the existing conditions and data collection process.
  - Agencies include the DDOT, Other DC Government Departments, NPS, MDOT, DC Water and Sewer Authorities, Washington Gas, WMATA, CSX, and others.
- Process of input:
  - Project Monthly PM & WG meetings conducted to inform stakeholders of the project schedule, status reports of project activity.
  - Community Input Specific Mtgs
  - Stakeholder Input Specific Mtgs

#### 2. Outreach Efforts 2.1. Public Meeting Notice A formal public meeting notice was distributed by the DDOT Communications office to their media distribution list, residential list, and DDOT's Facebook, X, and Instagram postings, A full copy of the notice is posted below https://ddot.dc.gov/release/dc-295-i-295-corridorimprovement-study-virtual-public-meeting 2.2. Public Meeting Notice A postcard notifying residents of the virtual public meetings was mailed via USPS to the area codes 20019 and 20020 two weeks prior to the meeting to 47,222 addresses. 2.3. Stakeholders The project team contacted ANCs, institutions, civic associations, and interested stakeholders via Ward 7 ANCs Summary of Contents Ward 8 ANCs Washington Area Bicyclist Association Anacostia BID

3

Councilmember Trayon White and staff

Mayfair Civic Association

Engage DC: https://engage.dc.gov/x3780

Capital Project: DC295 I-295 Corrido

Deanwood Mainstreet

Capitol Riverfront BID

summary and key takeaway of the

questions and comments received

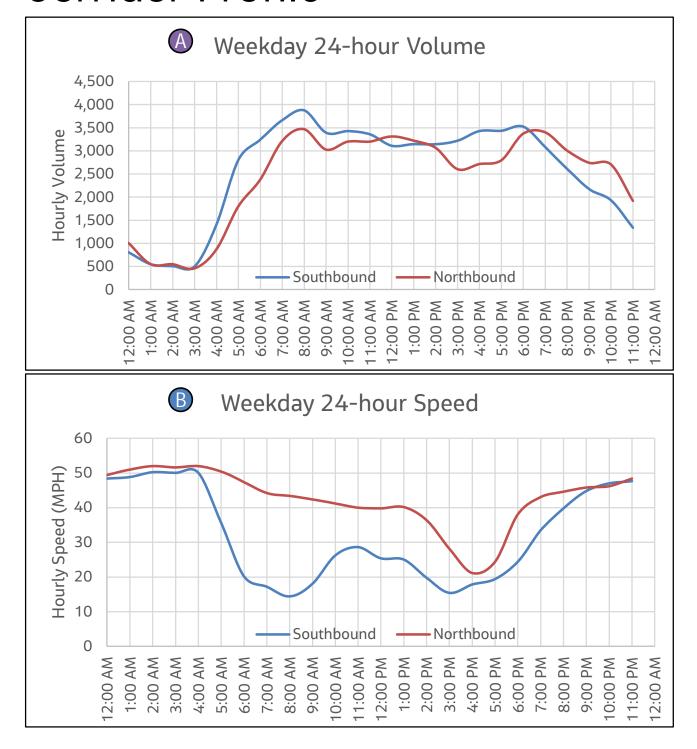
### Public Engagement / Outreach Meetings Outcome

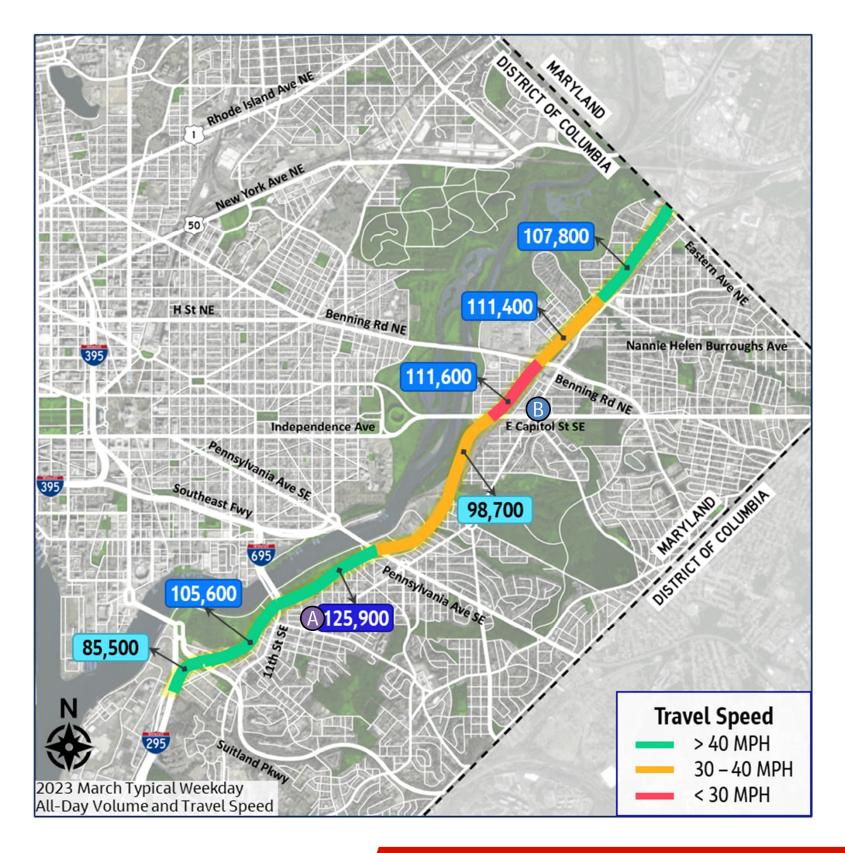
- Public Meetings Participation
  - Ward 7 January 23, 2024 (6:30-8:00pm)
    - Attendees 108
    - Comments 137 / Questions 25
    - Q&A Engagements 2
  - Ward 8 January 24, 2024 (6:30-8:00pm)
    - Attendees 42
    - o Comments 44 / Questions 16
    - Q&A Engagements 1
- Website Completed and live on Engage DC
  - Used for Public Mtg. & Continued engagement
  - 17 Comments received to date
  - Follow-up Postings:
    - Presentations & Map Series
    - Minutes & Recordings
    - Comments & Questions



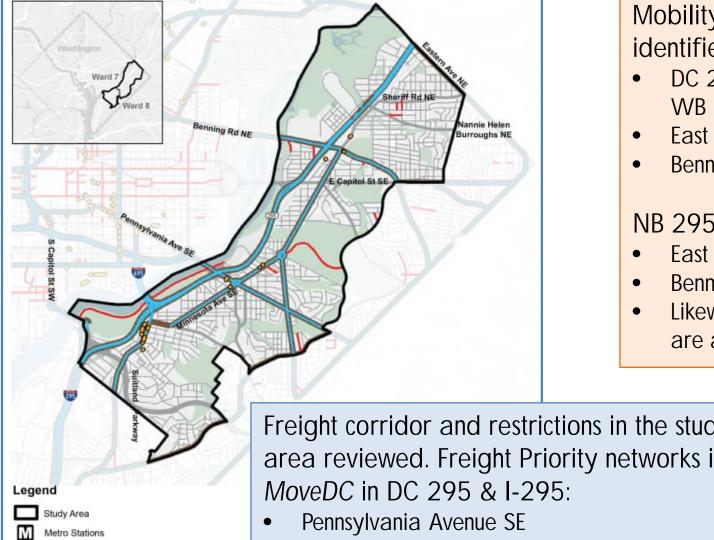


# Traffic Analysis & Data Collection Corridor Profile





### Corridor Freight and Mobility Deficiency Analysis



Mobility deficiencies in interchanges identified. Direct ramp connections missing:

- DC 295 SB to Pennsylvania Avenue SE -
- East Capitol Street SE EB
- Benning Road NE EB

NB 295 connections are not provided to:

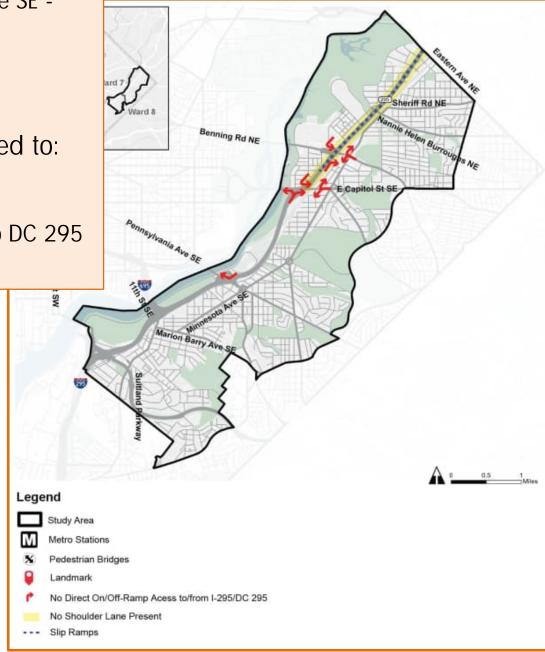
- East Capitol Street SE EB & WB
- Benning Road NE EB
- Likewise, access from the arterials to DC 295 are also limited.

Freight corridor and restrictions in the study area reviewed. Freight Priority networks in

- Benning Road SE
- Minnesota Avenue SE

Major routes to accommodate large vehicles or curbside loading best suited to routing goods and trucks.

Recognize Freight priority improves safety and operations for all modes of transportation.



Loading Zones

# Crash Heat Map (2018-2022)

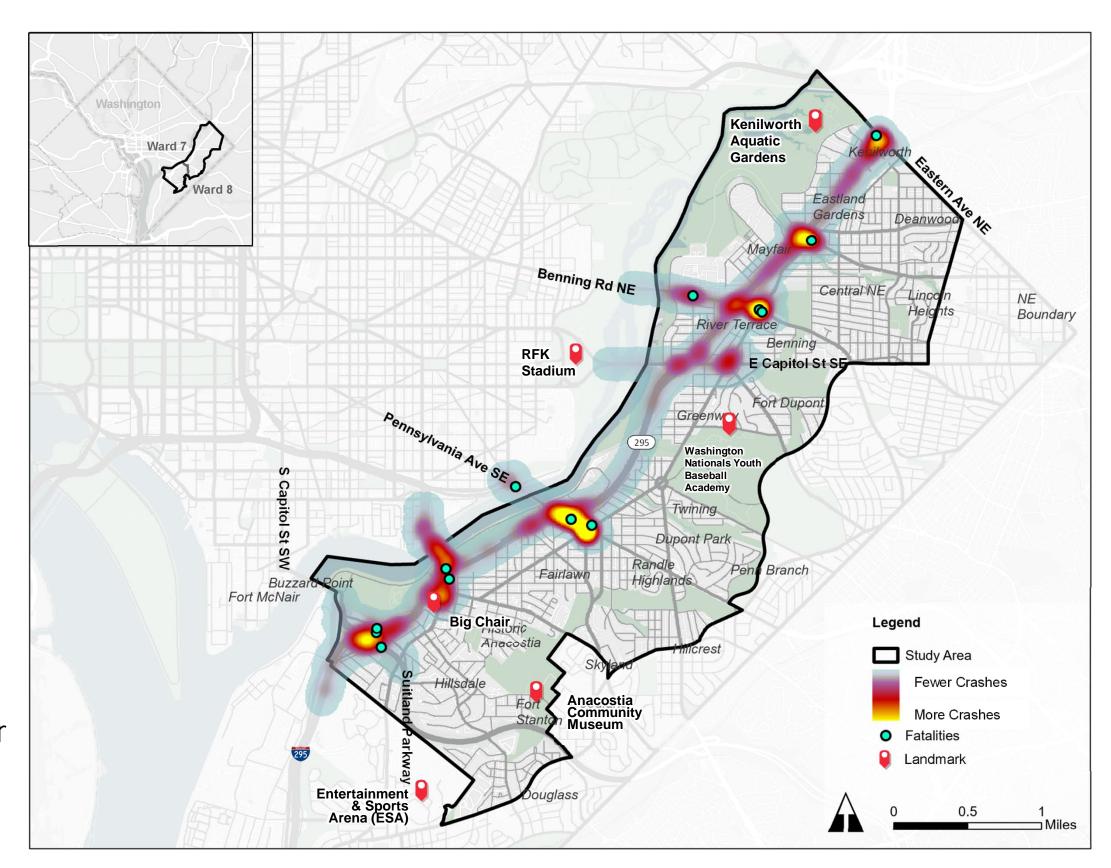
6608 Total Crashes\*
27% were injuries or fatalities
Higher than the District average

• 13 Fatal and 1781 Injury crashes

### **Crash Hot Spots**

- Pennsylvania Ave from DC 295 to Minnesota Ave
- Benning Rd from DC 295 to Minnesota Ave
- Suitland Pkwy from DC 295 to Firth Sterling Ave
- Nannie Helen Burroughs Ave from DC 295 to Minnesota Ave
- Eastern Ave and Kenilworth Ave
- 11<sup>th</sup> St Bridge / I-695 / Martin Luther King Jr Ave near DC 295

<sup>\*</sup> Includes I-295/DC 295 and all surface streets

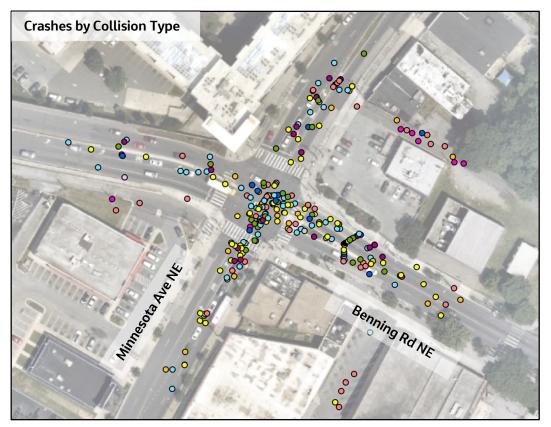


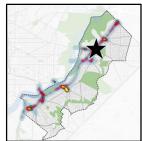
### Crash Analysis

Benning Rd NE & Minnesota Ave NE

276 Crashes at Benning Rd NE & Minnesota Ave NE (Tier 1 High Injury)

- 2 Fatal crash (pedestrian and Head on) and 8 disabling crashes
  - DUI, speeding, Not obeying traffic signal
- About half of the crashes are sideswipe or rear-end
  - Minnesota Ave NE NB
  - Benning Rd NE EB
- 25 Pedestrian/bike crashes
  - Drivers failed to yield or ran a red light while pedestrians are on the crosswalk
- Left turn crashes
  - Minnesota Ave NB left turn to Benning Rd WB
  - Benning Rd EB left turn to Minnesota Ave NB



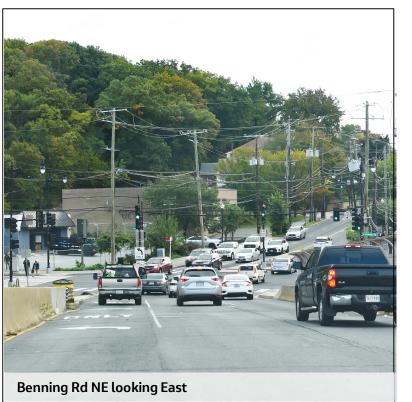


Collision Types

- Rear End
- Side Swipe
- Left Turn
- Right Turn
- Right Angle
- Fixed Object
- Backing
- O Head On
- O Non-Collision
- Pedestrian/Bike



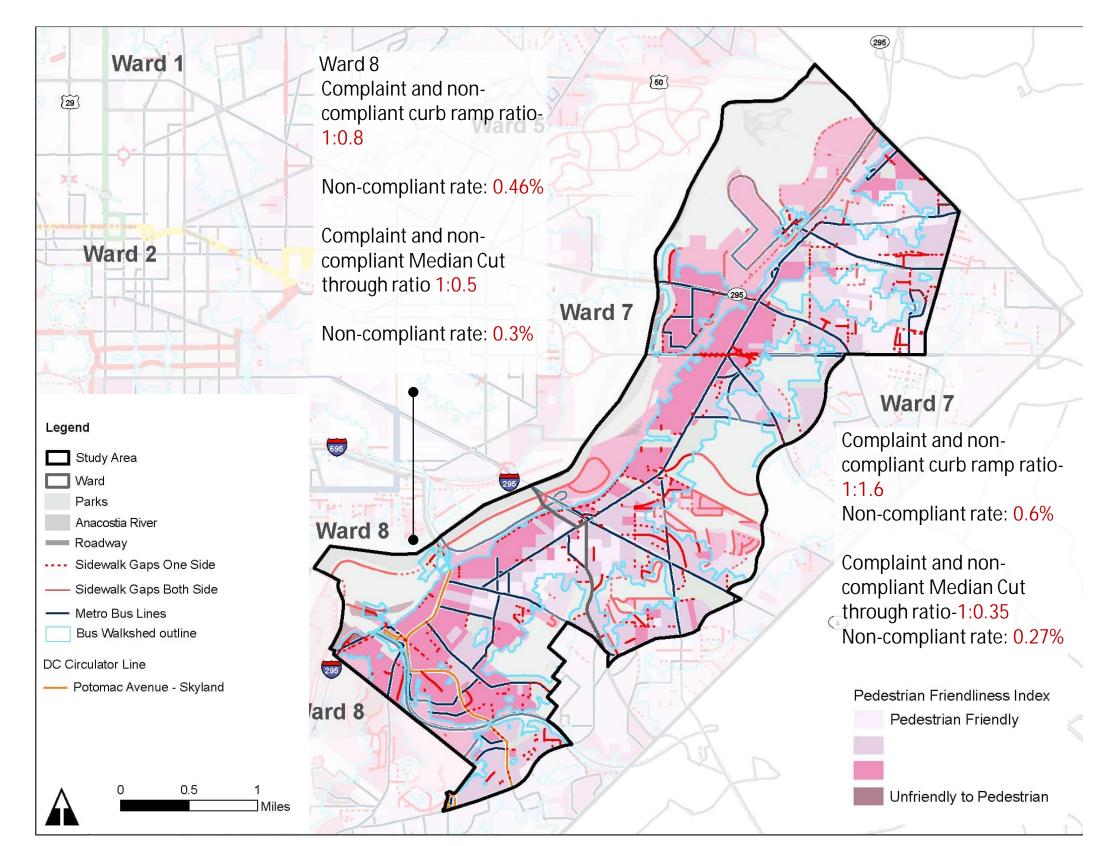






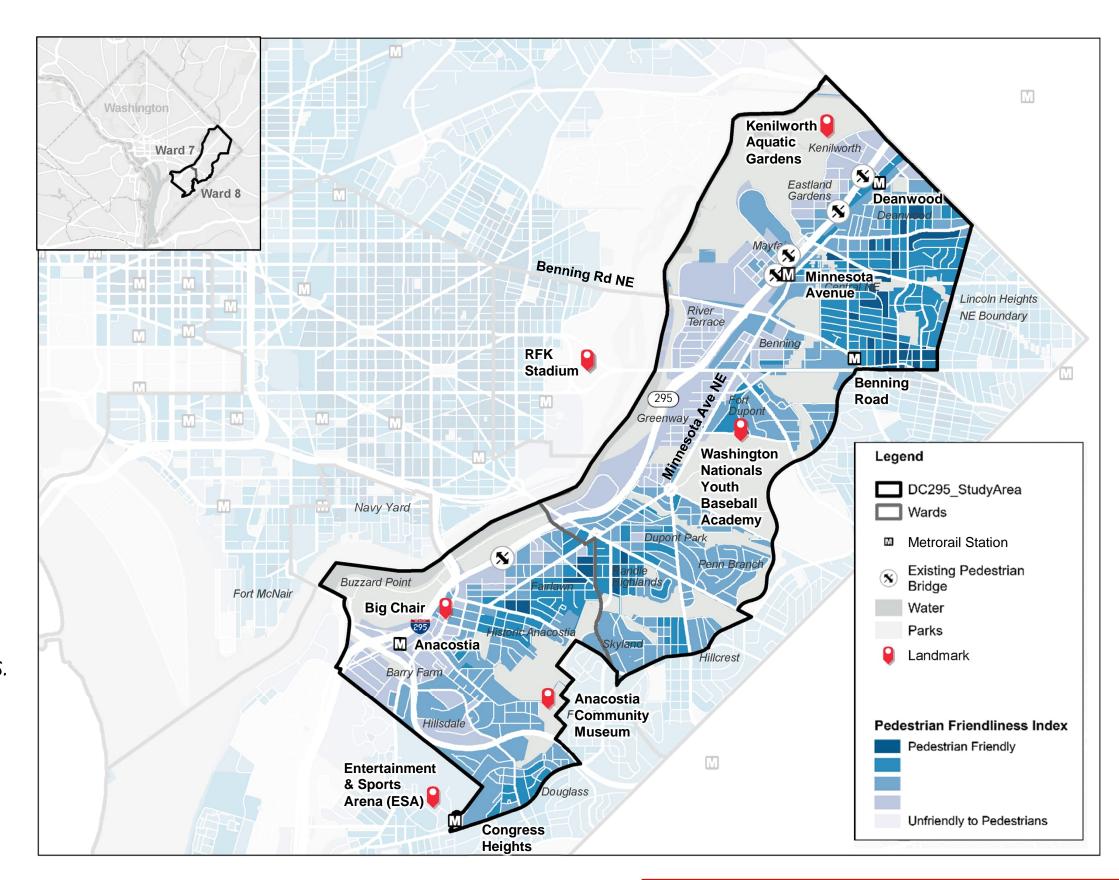
# ADA Assessment in Study Area

- There are Pedestrian gaps all throughout the Bus walkshed
- Most of the Curb Ramp and Median Cut throughs are not ADA Compliant
- Every non-ADA-compliant curb ramp vs. 0.8 compliant
- Every non-ADA-compliant Median Cut through vs. 0.8 ADA compliant one



# Accessibility and Pedestrian Friendliness Index\*

- Pedestrian accessibility throughout the study area is constrained by poor quality sidewalks.
- More than half of the curb ramps and median cut-throughs in the study area are not ADA-compliant
- \* Pedestrian Friendliness Index (PFI): is a specialized tool the city uses to assess whether the existing pedestrian circulation patterns are conducive to pedestrian access.



# Mobility Barriers 15 Min Walkshed Analysis

Metro Station Entrances

#### Legend

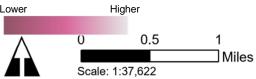
Metro Stations (Regional) Study Area

Sidewalk Gaps Both Sides

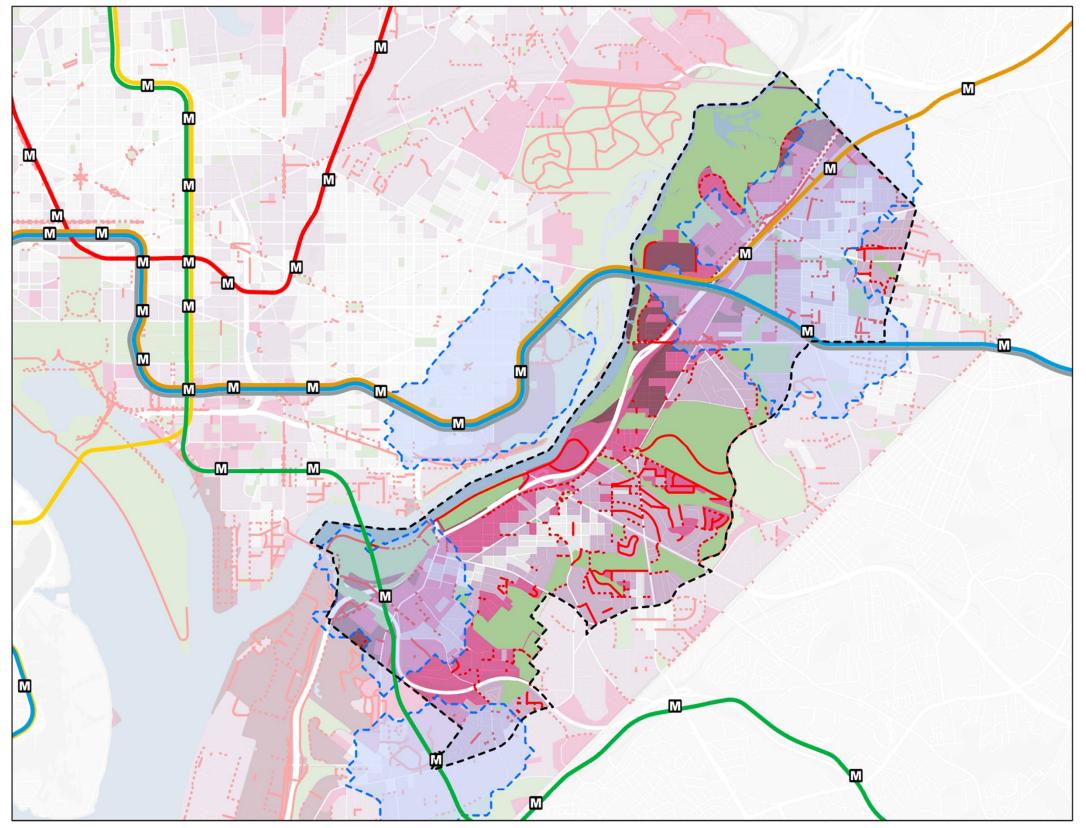
Sidewalk Gaps One Side

15 min walkshed

#### Pedestrian Friendliness Score









# Bicycle Level of Traffic Stress

- Relatively low-stress levels on neighborhood streets means most people can bike comfortably there.
- Generally high-stress levels on major roads makes them feel unsafe and isolates neighborhoods from each other.

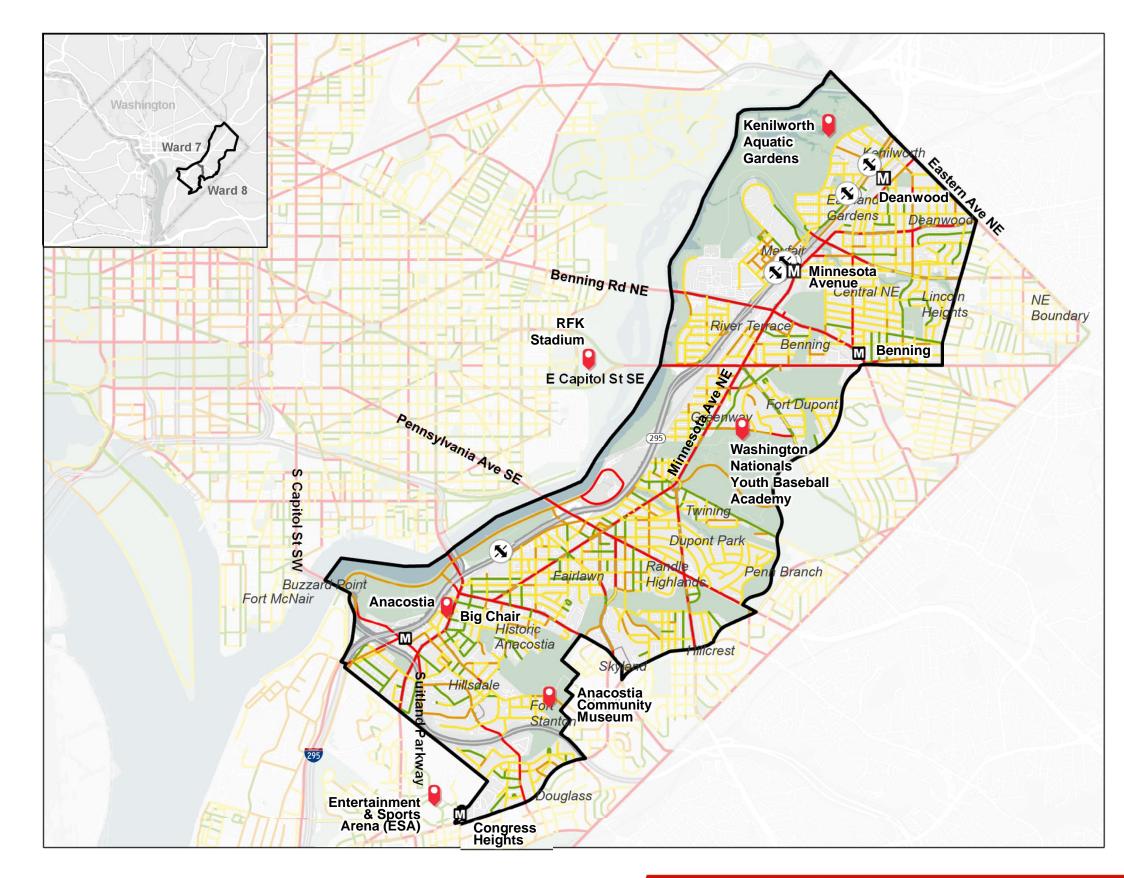
# Study Area Existing Pedestrian Bridge Metrorail Stations Bicycle Level of Traffic Stress Stress Level 1 Stress Level 2 Stress Level 3

Stress Level 4

Landmark

Legend





### How the Mapping was Generated?

- The project team collected a variety of previous planning studies and Geographic Information Systems (GIS) mapping materials provided by DDOT and other publicly available sources.
- An extensive review and analysis of the existing conditions materials that were collected revealed six overarching Themes that will serve as key design considerations for Phase 2, when concept development occurs.

Table 5-1. Indicators for Demographics

Indicator	Criteria	Scale	Priority Level	Reasoning
Population under 18	≤ 33%	2 or 3	High	Age demographic most likely to use bikes, walk, or use public transit systems
Population over 65	≤ 18%	2 or 3	High	Age demographics most likely to be dependent on public transit systems
Public Transit Users	≤ 35%	2 or 3	Mid	Overlaid with public transit indicates dependence for employment
Homes w/o Vehicles	≤ 39%	1 or 2	Low	Overlaid with public transit indicates dependence for mobility

Table 5-2. Indicators for Roadway Network

Indicator	Criteria	Scale	Priority Level	Reasoning
Vehicle Crashes	High-Low Concentration	3, 2 or 1	High	Crash Density indicates need for infrastructure improvements.
Existing Crossings	100'/300'/500'	3, 2 or 1	High	295 corridor east-west connection improvement needs.
Intersections	100'/200'/300'	3, 2 or 1	Mid	Higher density leads to more traffic stops and accidents.
AM Congestion	20/35/50 MPH	3, 2 or 1	Mid	Slower areas need improvements to address traffic flow efficiency.
PM Congestion	20/35/50 MPH	3, 2 or 1	Mid	Slower areas need improvements to address traffic flow efficiency.
Missing Shoulder Lane	Missing Area	3 or 1	Low	No recovery zone increases accident potential.
1-295 Access Ramps	500' Buffer Zone	3 or 1	Low	Access points provide better connectivity to trip destinations

### How the Mapping was Generated?

- Once the themes were defined, a series of Indicators were established to further define the specific elements that need to be considered for each theme.
- These indicators included such topics as safety, transit, accessibility, connectivity, and capacity for improvements that establish a baseline of existing physical attributes related to the built environment of the community.
- They help highlight (statistically evaluate) areas within the project that might need improvements or upgrades during the Conceptual Development Phase.

Table 5-3. Indicators for Public Transit

Indicator	Criteria	Scale	Priority Level	Reasoning
Walkshed to High Frequency Bus Stops	5 Minutes to Stop	1 or 3	High	Shows accessibility to the most frequent bus stops
Walkshed to Metrorail Stations	10 Minutes to Station	1 or 3	High	Shows accessibility to the neighborhood metrorail stations
Public Transit Related Crashes	High - Low Concentration	3, 2 or 1	Mid	Crash density indicates need to infrastructure improvements
Bikeshed to Metrorail station	10 Minutes to Metrorail Station	1 or 3	Mid	Shows average bicyclist riding for 10 minutes to metrorail station
Bus Stops	100'/500'/ 1000'	3, 2 or 1	Low	Distance to public transit indicates ease of access for community

Table 5-4. Indicators for Bicycle Network

Indicator	Criteria	Scale	Priority Level	Reasoning
Bicyclist Stress	# of Bicyclists	3 or 2	High	Map highlights high use zones, areas for development
Protected Lanes/Trails	300' Buffer Zones	1, 2,or 3	Mid	Where the paths are broken up on the map are zones for development
Walkshed to Bikeshare	1/4 Mile	3 or 1	Low	Shows ¼ mile walking distance to bikeshares, convenient to access

### How the Mapping was Generated?

- A matrix of the Themes and Indicators (Map Indicators Compiled) was then compiled that begins the mapping evaluation process based on the Theme Indicators prioritized as shown in these tables.
- Public input is critical to understanding existing conditions, and a continuous public interface has been conducted on-line (AWI & EngageDC) during the study process and during the public meetings.
- These valuable public comments will be considered during the upcoming Phase 2 work.

Table 5-5. Indicators for Pedestrian Network

Indicator	Criteria	Scale	Priority Level	Reasoning
Sidewalk Gaps Both Sides	300' Buffer Zones	3	High	Indicates less pedestrian friendly zones for potential development
Sidewalk Gaps One Side	150' Buffer Zones	3	High	Indicates less pedestrian friendly zones for potential development
Existing Surface Pedestrian X-ing	300'/600'/900'	1, 2,or 3	High	Overlapping zones indicate lower need for development
Pedestrian Volume	0-100 / 101-750 / 751+	1, 2,or 3	Mid	Indicates high use areas, potential areas for development
Pedestrian Accidents	High - Low Concentration	3, 2, or 1	Mid	Higher concentrations indicate the need to improve infrastructure
Pedestrian Friendliness Index	High - Low Concentration	1, 2,or 3	Low	Indicates zones where pedestrian friendliness could be improved
Pedestrian Bridges	1500' / 2000' / 2500'	1, 2,or 3	Low	Indicates existing bridges over roads, and lower need for development

Table 5-6. Indicators for Constraints

Indicator	Criteria	Scale	Priority Level	Reasoning
Public Owned Land	Public vs. Non- Public	1 or 3	High	Federal or District owned lands limit development within right of way
FEMA Floodplain	AE(100 yr)/x(500yr)	3 or 1	Mid	Indicate areas where preventative measures can be implemented
Proximity to Rail	300' / 600' Buffer Zones	2 or 1	Low	Development is restricted closer to the rail line

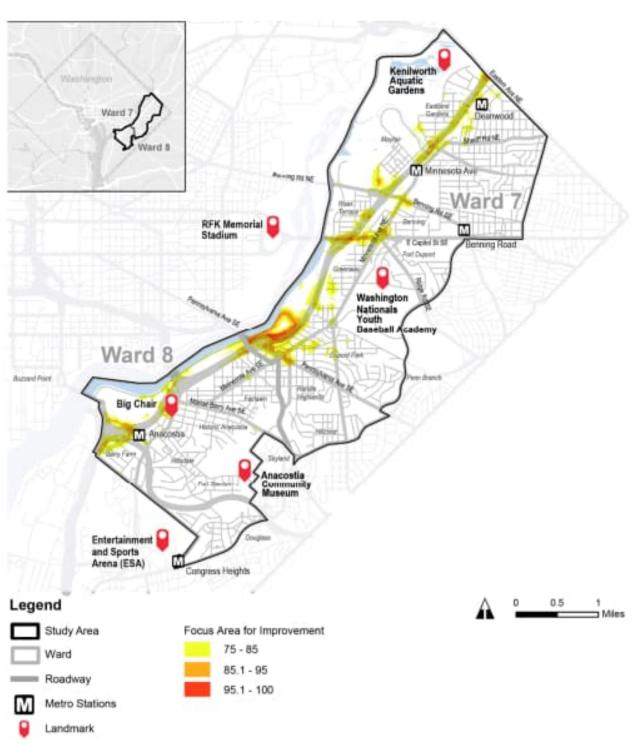
### What it Means?

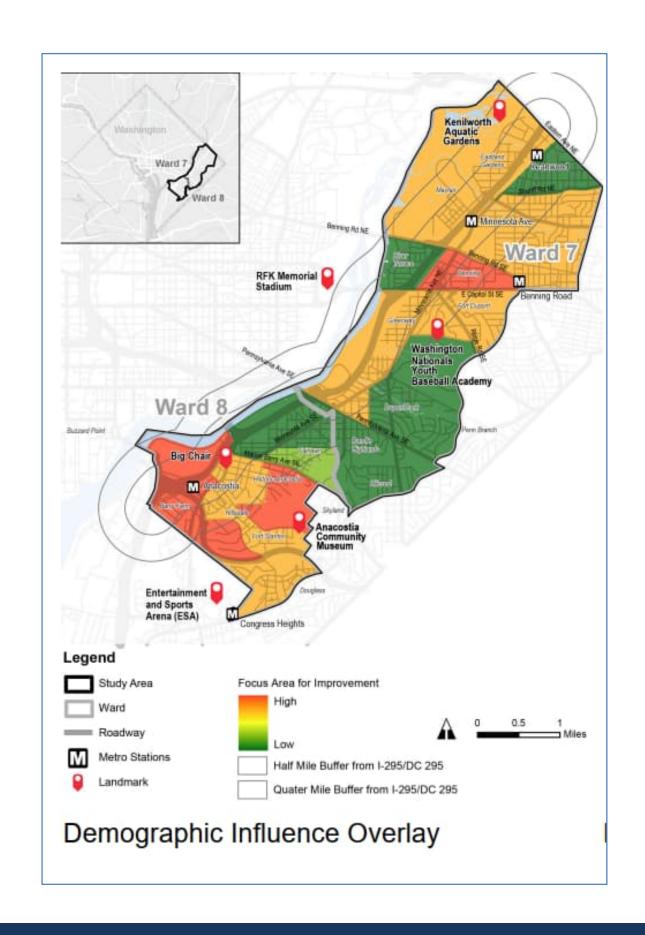
EVALUATION THEMES	PERCENT (WEIGHT)
DEMOGRAPHICS	25%
ROADWAY NETWORK	20%
PUBLIC TRANSIT	15%
BICYCLE NETWORK	15%
PEDESTRIAN NETWORK	20%
CONSTRAINTS	5%

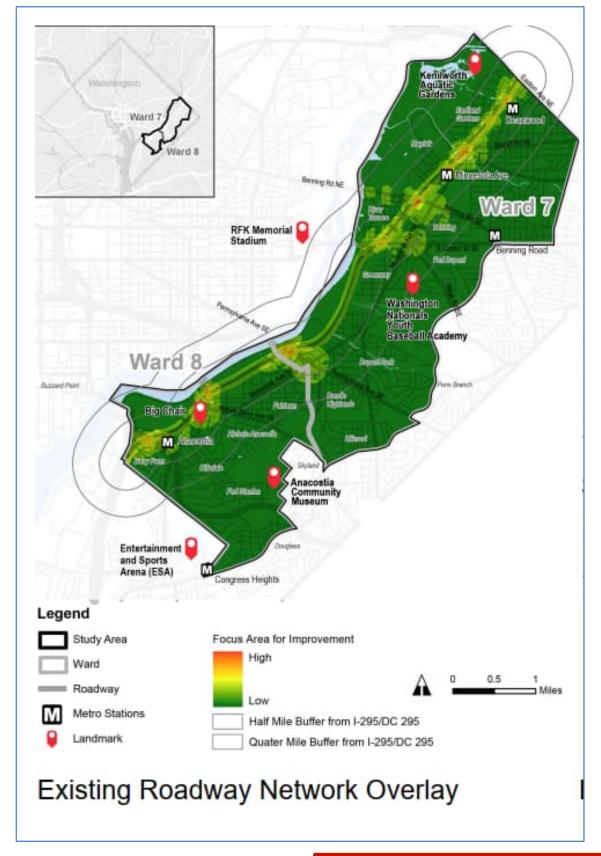
- A final map has been created that includes a composite of the Indicators and represents those areas of higher potential importance and consequently, areas of further investigation for improvements in Phase 2 Concept Development.
- This map is generally described as a "Heat Map" where color gradations indicate areas with statistically higher values of Indicator occurrences.
- The higher the value, the more intense the occurrence (from green, to yellow, to orange, and to red) with red areas being the most intense.
- This Heat Map allows the team to prioritize areas for future planned improvements and /or investments.

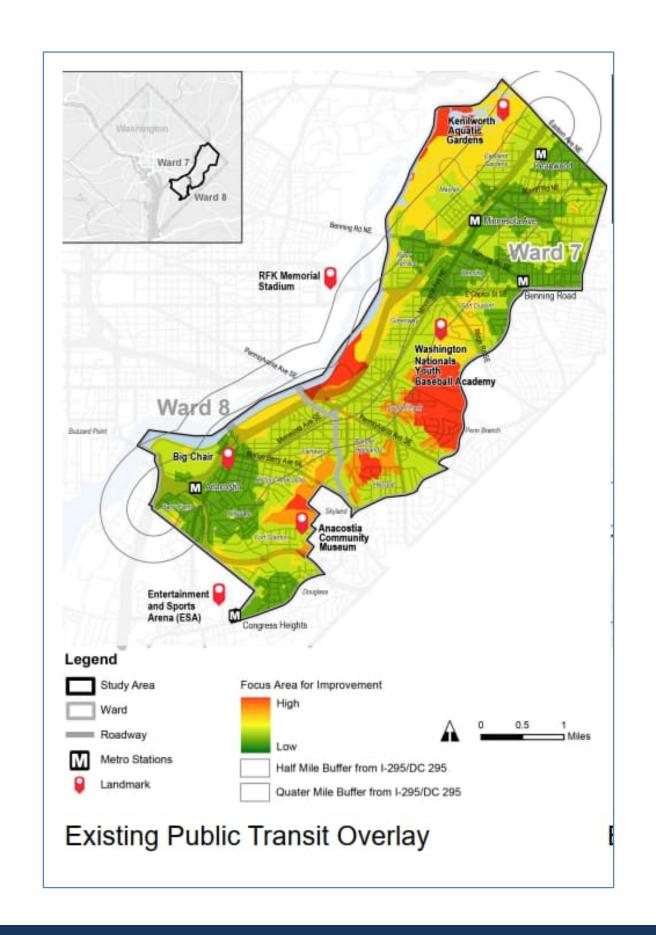
### What it Means?

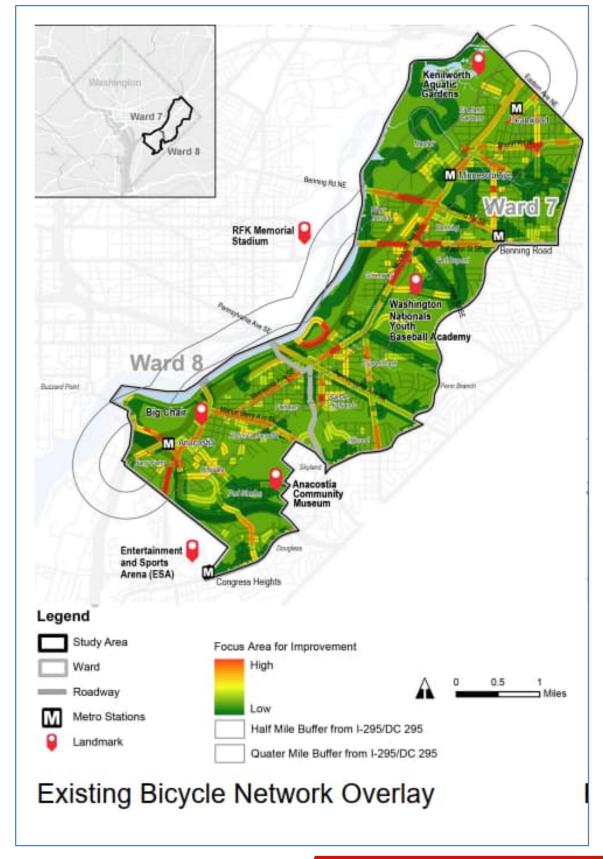
- All of the Themes are combined in a composite analysis with corresponding scoring and priority level to result in a Summary Findings of Existing Conditions.
- The composite map provides a statistical reference point for further investigation for potential physical improvements for the safety, connectivity, mobility, and accessibility of the citizens of Ward 7 and 8.
- NOW, lets review our Mapping Series for the Summary of Findings.

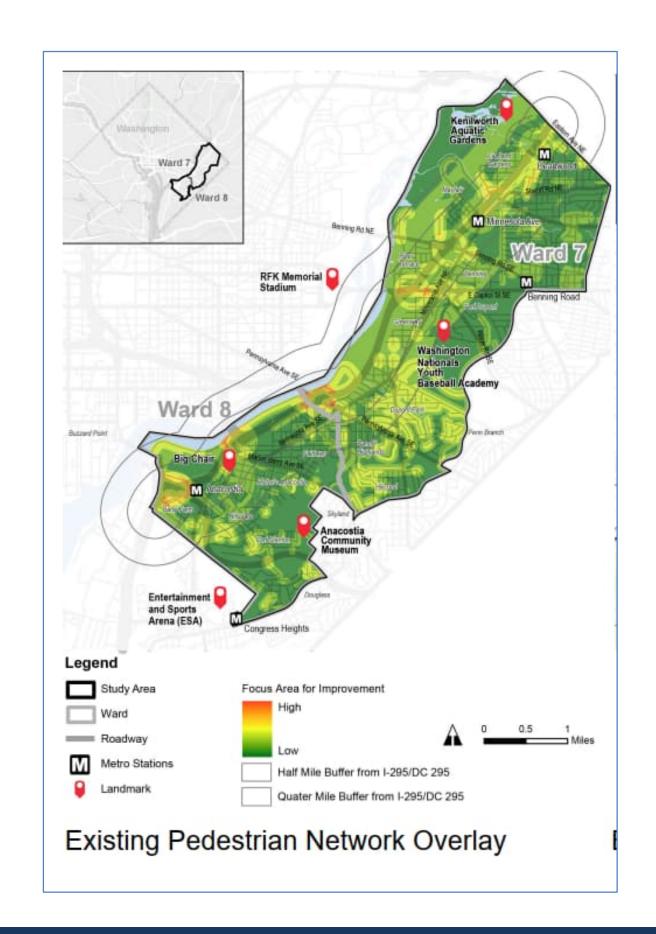


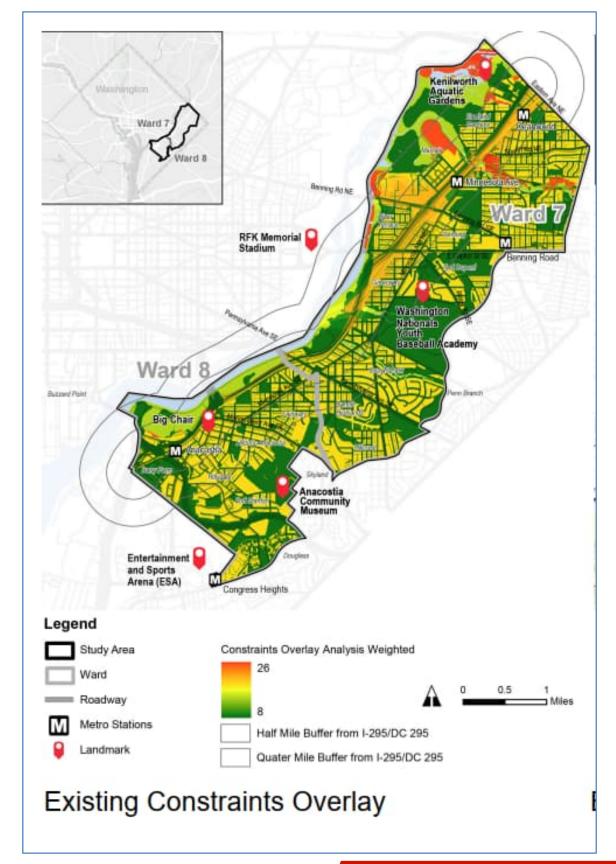






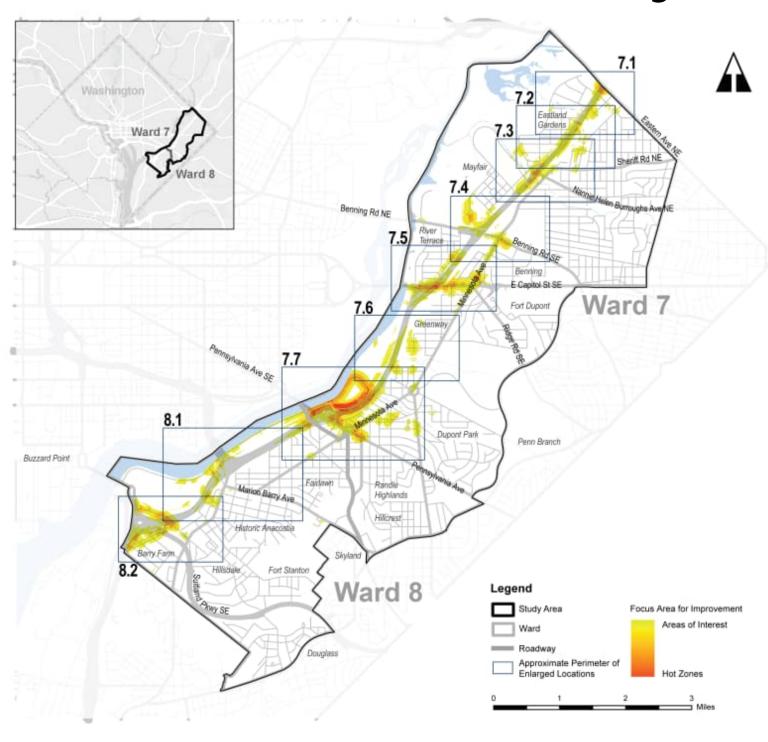






# RESULT - Final Combined Overlay Mapping of:

Existing
Conditions
Analysis
Composite



# KEY TO FOCUS AREA OF IMPROVEMENT MAPS

Map # Map Location Name

MAP 7.1 - NORTH KENILWORTH AVE

MAP 7.2 - SOUTH KENILWORTH AVE

MAP 7.3 - NANNIE HELEN BURROUGHS AVE

MAP 7.4 - BENNING ROAD

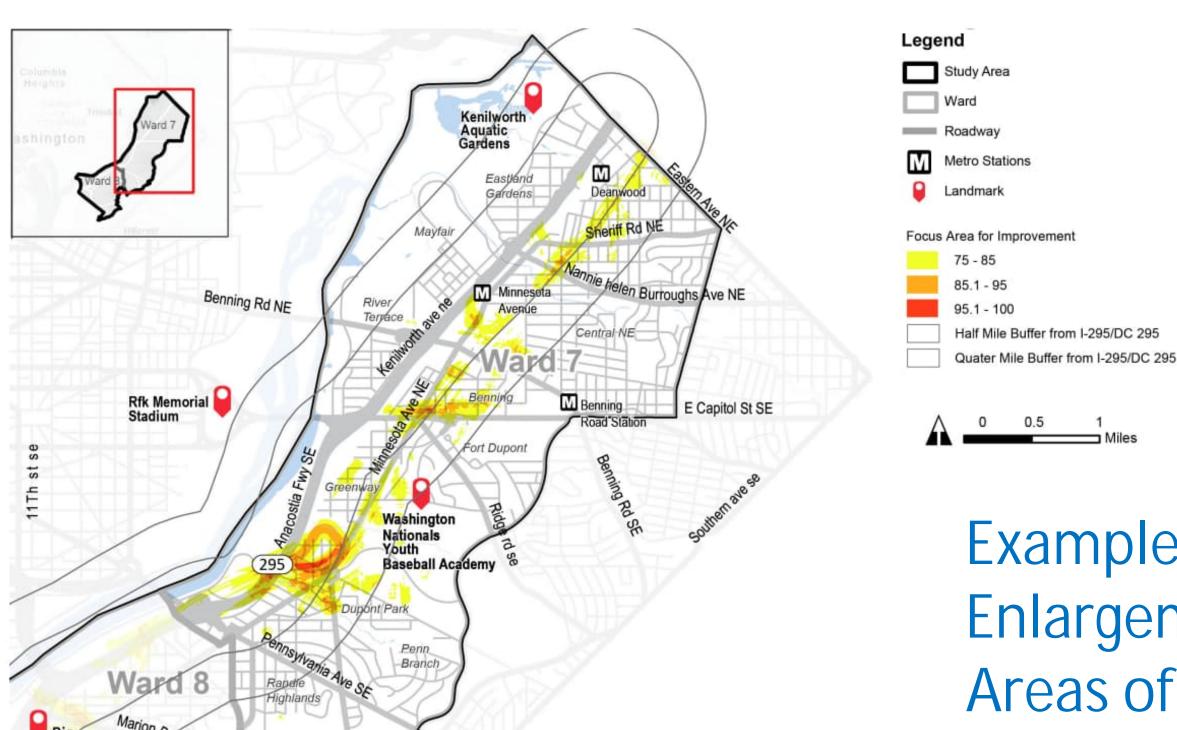
MAP 7.5 - EAST CAPITOL ST (NE & SE)

MAP 7.6 - FORT DUPONT PARK

MAP 7.7 - PENNSYLVANIA AVE SE

MAP 8.1 - JUNCTION I-295 / I 695

MAP 8.2 - SUITLAND PARKWAY



Example of Ward 7
Enlargement – Focus
Areas of Improvement

Summary of Findings Composite: Ward 7

# Example: Focus Zones for Phase 2



WARD 7 - MAP 5
EAST CAPITOL STREET (NE & SE)

PHASE 2 - PRIMARY IMPROVEMENTS ZONE

PHASE 2 - SECONDARY IMPROVEMENTS ZONE

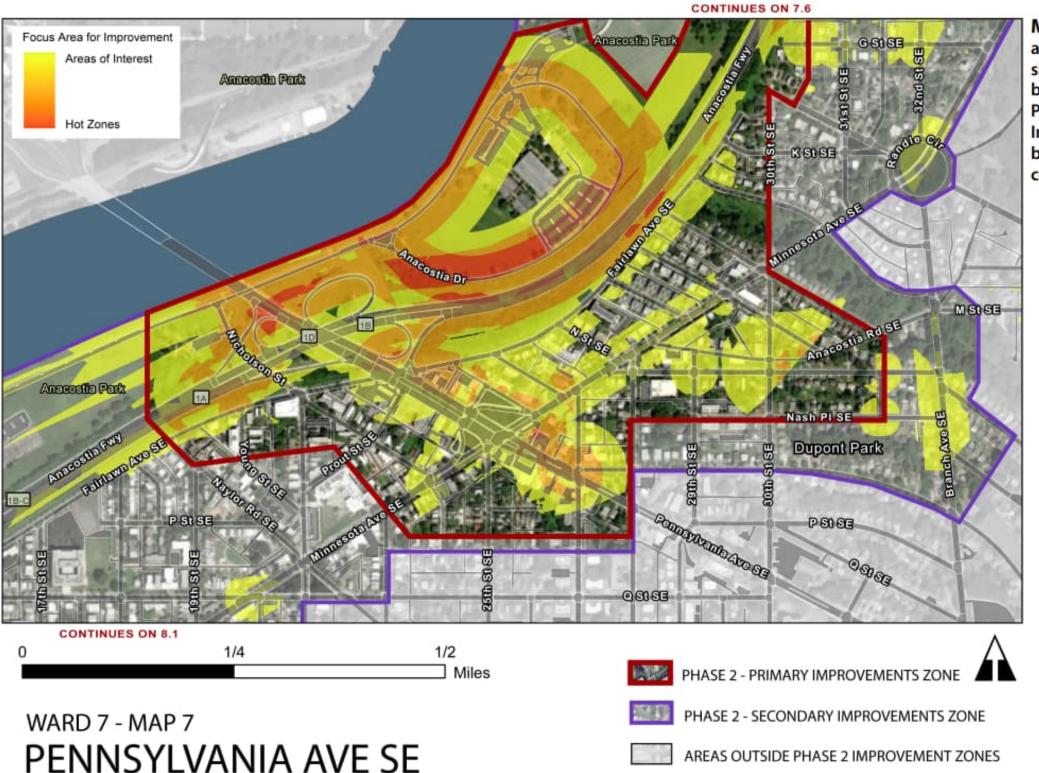
AREAS OUTSIDE PHASE 2 IMPROVEMENT ZONES

Map 7.5 - East Capitol Street
exhibits many of the same issues
as Benning Road (Map 7.4) and is a
significant arterial between Ward 7
and central DC. It's showing key
Primary and Secondary Focus Area
Improvement Zones around this
interchange for Phase 2 based on
the mapped existing conditions
criteria including:

- · A significant truck through route.
- · Impacted by almost day long congestion.
- Significant crash concentrations on 295 and East Capitol at Minnesota Ave.
- · High volume slip ramps.
- Missing shoulder lanes & virtually no sidewalks.
- Lacks direct access from 5 of the 8 typical full interchange connections/problematic impact on potential redevelopment of the RFK stadium.
- This entire interchange is challenging for both pedestrians and cyclists.
- · Over 20 minutes walkshed to the Metro station.
- · Insufficient bike lanes and trails.
- High bike and pedestrian crash incidents.
- Limited safe and usable corridor crossing available for crossing the high-volume highway and railroad corridors from the eastern Ward 7.
- All transportation improvement types should be considered in Phase 2.



# Example: Focus Zones for Phase 2



Map 7.7 - Pennsylvania Avenue a major corridor interchange and is a significant arterial for central DC for both Wards 7 & 8, showing key **Primary and Secondary Focus Area** Improvement Zones for Phase 2 based on the mapped existing conditions criteria including:

- · A significant truck through route.
- · Impacted by both AM and PM congestion.
- · Some of the highest crash concentrations along the study corridor.
- This interchange provides significant access to DC 295, but critically lacks direct access from SB 295 to WB Pennsylvania Avenue.
- Fairlawn Avenue SE connections on the east side is challenging for both pedestrians and cyclists.
- Very limited access to Metro stations.
- · Virtually no connections for the western areas in Anacostia Park to Metrobus local routes.
- · 40 60 minute walk to Metrorail, access to Metrobus routes along Minnesota Avenue SE need to be maintained and/or enhanced.
- Only 2 corridor crossing accesspoints to the Anacostia Park from the eastern neighborhoods.
- · All transportation improvement types should be considered in Phase 2.

AREAS OUTSIDE PHASE 2 IMPROVEMENT ZONES

# Phase 2 - Concepts Development Framework

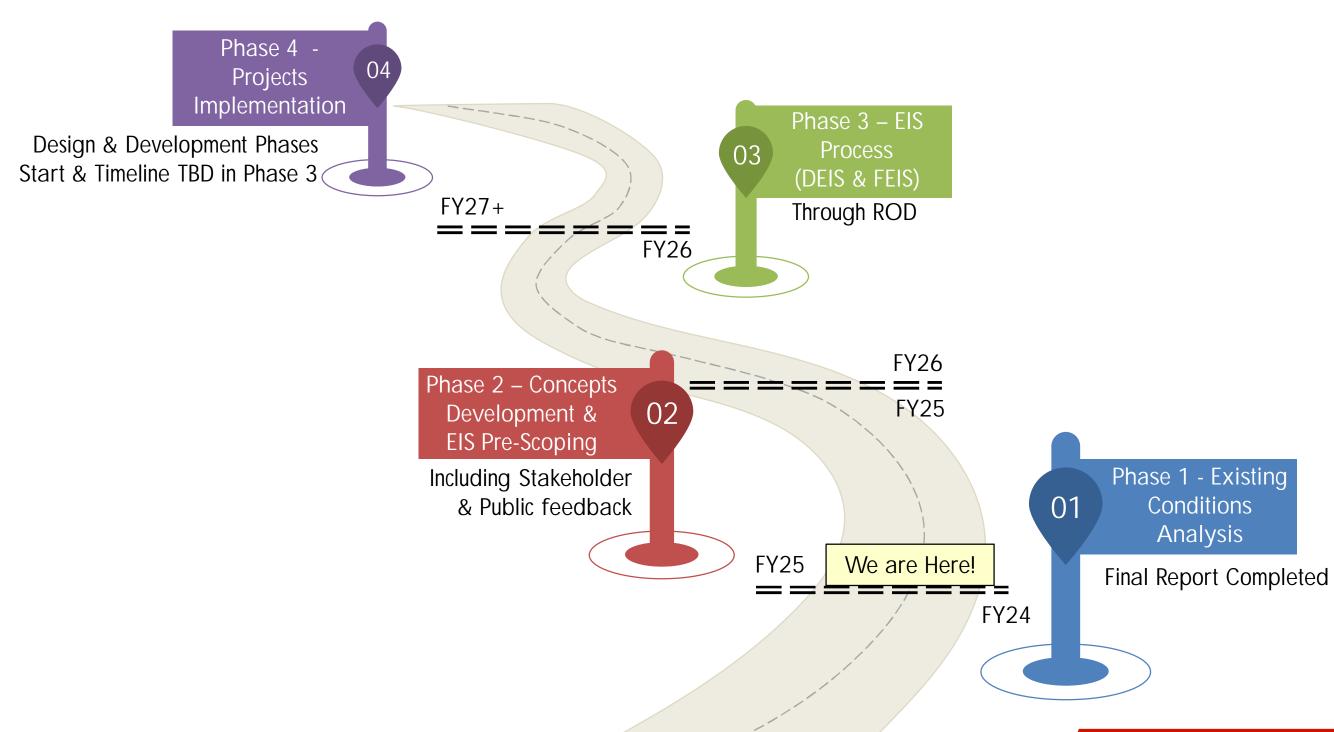
Initial concepts will include proposed improvements focused on:

- Pedestrian and bicycle connectivity across and along DC 295.
- Transit and active transportation improvements.
- Spot safety improvements.
- Interchange improvements including:
  - DC 295 and Eastern Ave
  - DC 295 and NHB Ave
  - o DC 295 and Benning Rd
  - o DC 295 and East Capitol St
  - o DC 295 and Pennsylvania Ave.
- Potential DECK-OVER or other crossing types/facilities locations.
- Complete streets conversions:
  - Non-freeway portions of the DC 295 classified ROW.

Final Concept 'projects' priority and evaluations for impacts to:

- Safety (HSM analysis).
- Active transportation (sidewalk and bike path connectivity improvements).
- Equity (DDOT equity tool).
- Transit access.
- Travel delays (Synchro, HCM analysis).

## Project Status and Next Phase Steps





# District Department of Transportation

250 M St SE | Washington, DC 20003 | 202.673.6813