

Connecticut Avenue Reversible Lanes and Multimodal Safety Improvement Project

ANC 3C SSETC (Safe, Sustainable, and Equitable Transportation Committee)

Cleveland Park Community Association

January 19, 2023

Meeting Goals

1. To understand the current status of the project and where the project is within the project lifecycle
2. To illustrate new traffic volumes taken on Connecticut Avenue NW
3. To provide answers to questions from ANC 3C SSETC (Safe, Sustainable, and Equitable Transportation Committee) and Cleveland Park Community Association (CPCA)

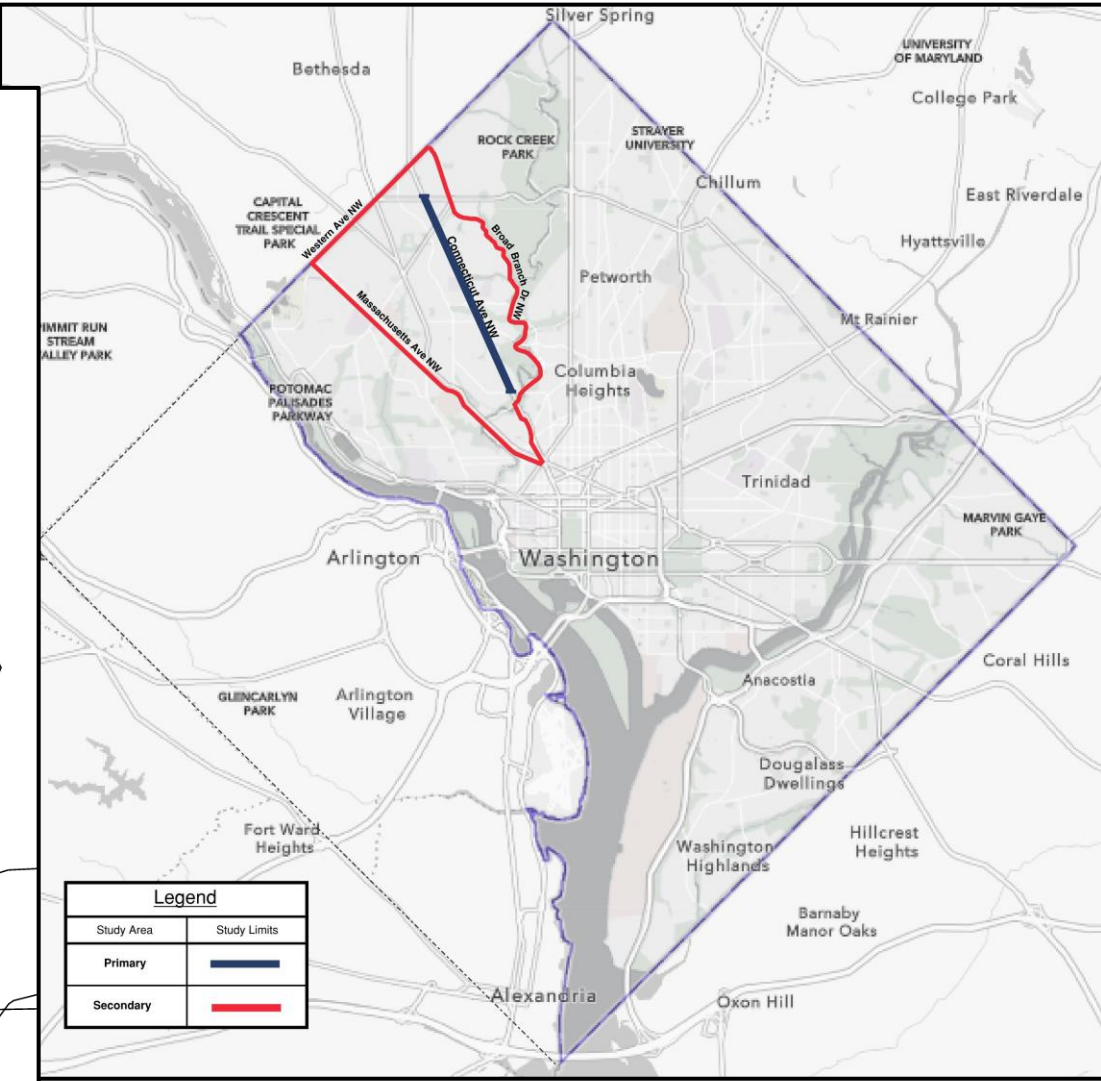
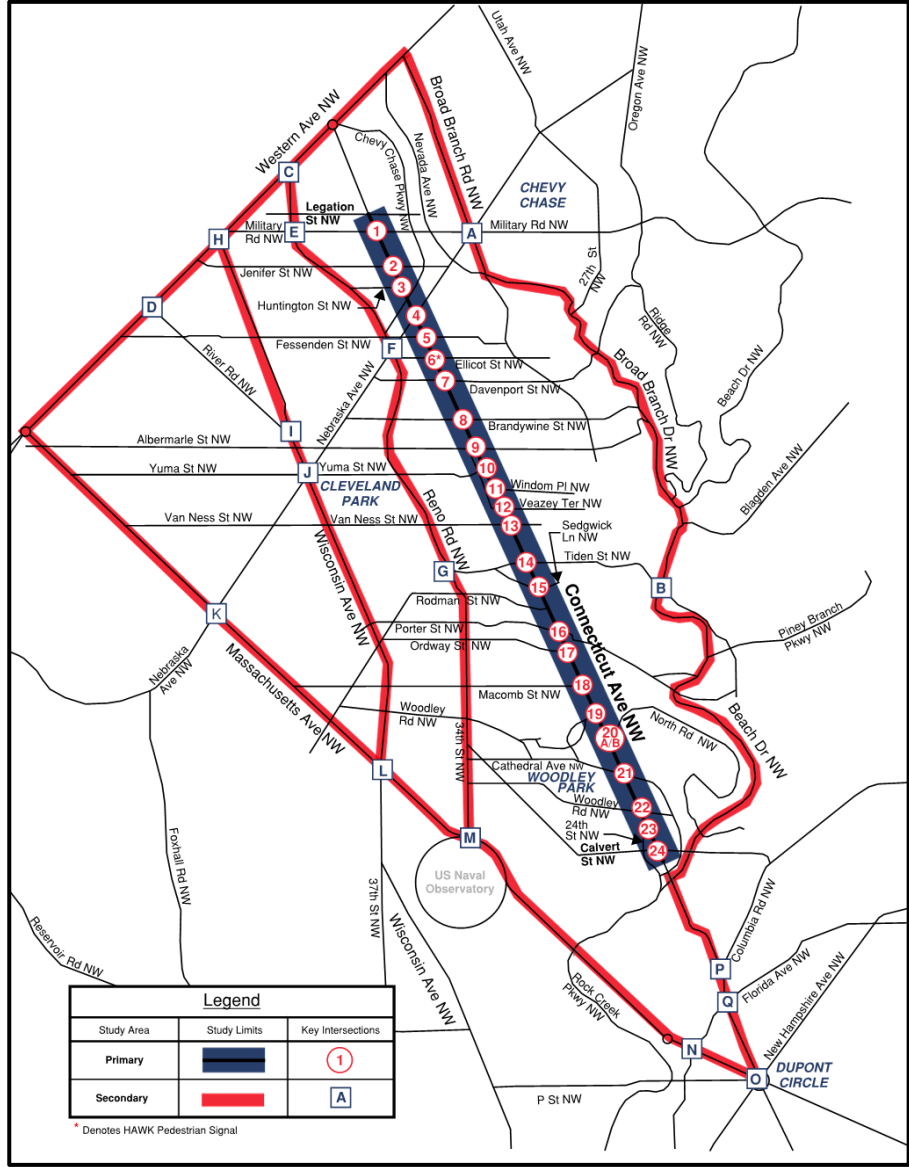
Meeting Agenda

1. Introduction (Barr Weiner, Sauleh Siddiqui)
2. Slide Presentation
 - Project Background
 - What is the Project?
 - Activities conducted to date
 - Community and Agency Engagement
 - Project Timeline
 - New Traffic Counts on Connecticut Avenue
 - Next Steps
 - Key Themes/Requested information from ANC 3C-CPCA meeting organizers
3. Moderated follow-up questions
4. Adjournment

Project Background

Primary and Secondary Study Area and Connecticut Avenue

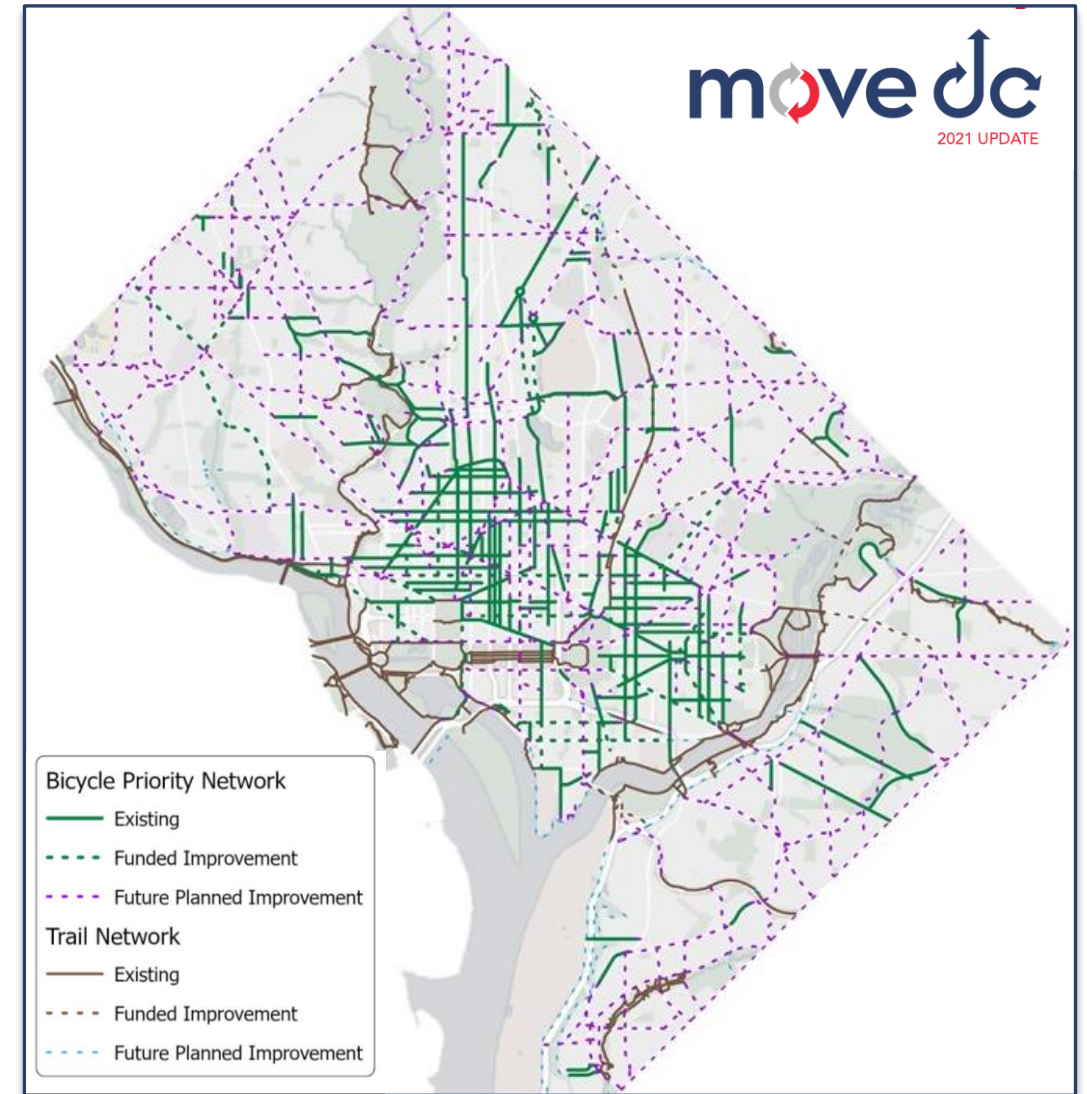
Regional Context



Legend	
Study Area	Study Limits
Primary	
Secondary	

Background

- 2014 moveDC and 2021 moveDC Update
Connecticut Avenue identified as a Bike Priority Corridor in moveDC
 - *Note: Connecticut Avenue is NOT identified as a transit priority corridor in moveDC.*
- Connecticut Avenue, NW Corridor Crosswalk Safety Project, (February 2015), ANC 3/4 G
- Cleveland Park Bicycle Analysis (2016)
- 2018 ANC Resolutions Requesting Study
 - ANC 3C (May 21, 2018)
 - ANC 3F (March 20, 2018)
 - ANC 3 /4 G (October 22, 2018)
- Community involvement in shaping RFQ



Project Goals



Reduce vehicle crashes; improve safety for all modes



Consider a Protected Bicycle Lane



Assess the feasibility of removing reversible lane operation



CONNECTICUT AVENUE NW

“The District Department of Transportation is studying the feasibility of removing the reversible lane system as part of the District of Columbia’s Vision Zero initiative, which aims to eliminate traffic deaths and serious injuries by 2024. The purpose of the Connecticut Avenue NW Reversible Lane Safety and Operations Study is to assess the multimodal (vehicular, transit, bicycle, and pedestrian) operational and safety impacts associated with removing or maintaining/ improving the existing reversible lane system.”



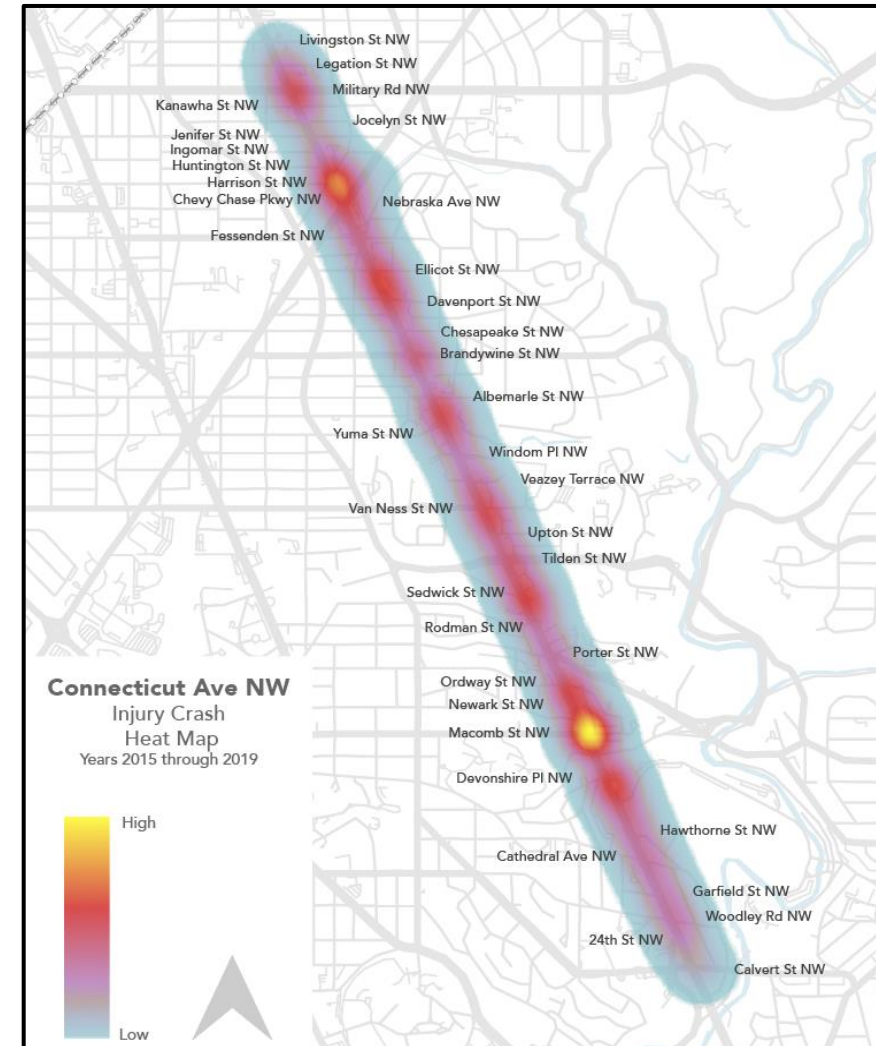
Safety is the #1 Reason for making Connecticut Avenue Improvements

1,507 police-reported crashes occurred during the five-year study period (2015-2019):

401 Vehicle Crashes Resulted in Injury (177 during reversible lane hours)

64 Involved Pedestrians (20 during reversible lane hours)

39 Involved Bicycles (11 during reversible lanes hours)

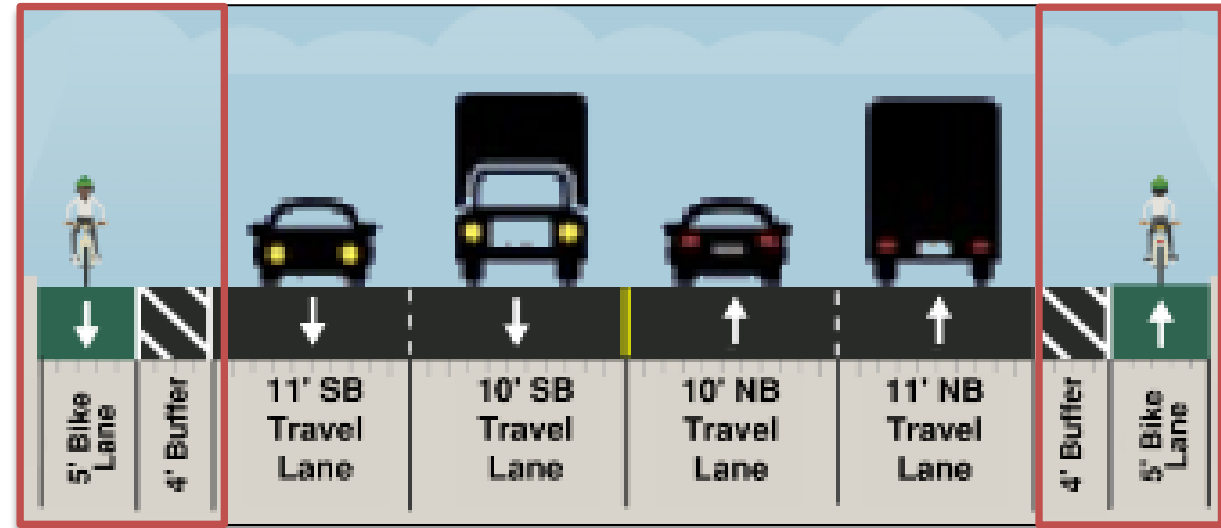


Connecticut Avenue Injury Crashes 2015-2019

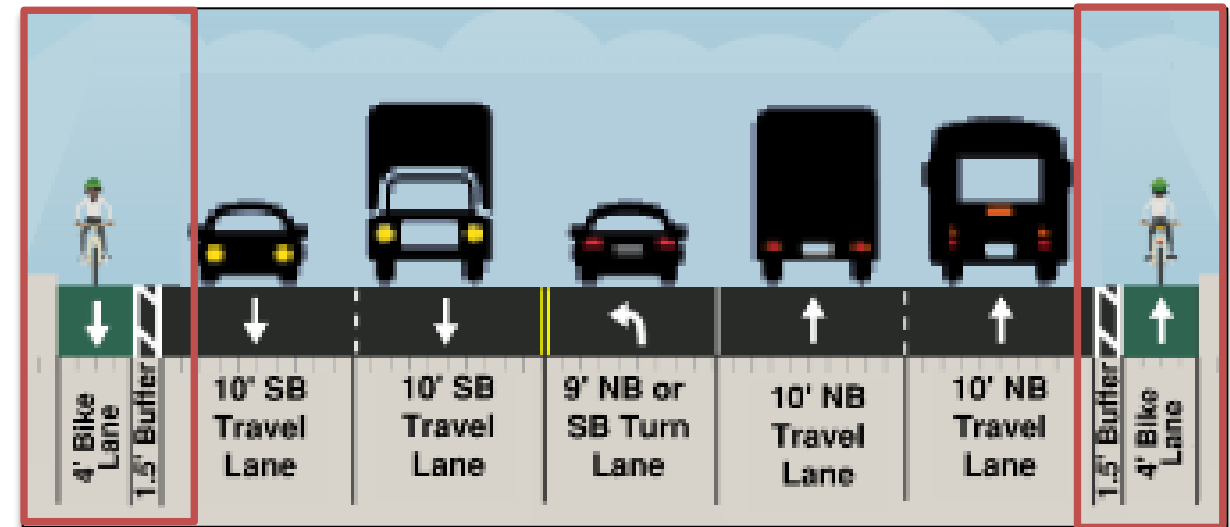
What is the Project?

CONCEPT C ELEMENTS

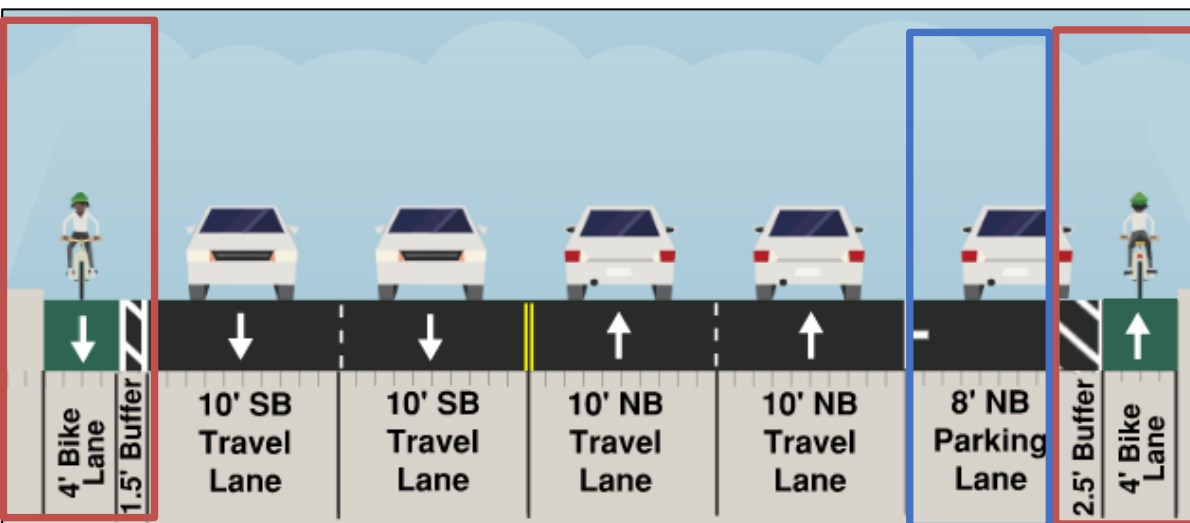
Mainline Option: All Periods: Spoiler Alert. In modified concept, this cross section is no longer being retained. The cross section will either have some type of parking or left turns throughout the Avenue.



With Left-turn Pocket: All Periods










Option: Where there is a NB or SB Parking & Loading Lane



- Reduce Connecticut Avenue posted speed limit from 30 mph to 25 mph
- Provide speed enforcement cameras
- Install dynamic speed feedback signs to provide drivers with visual speed warnings
- Bus Stop relocations. Consider far-side location/designs.

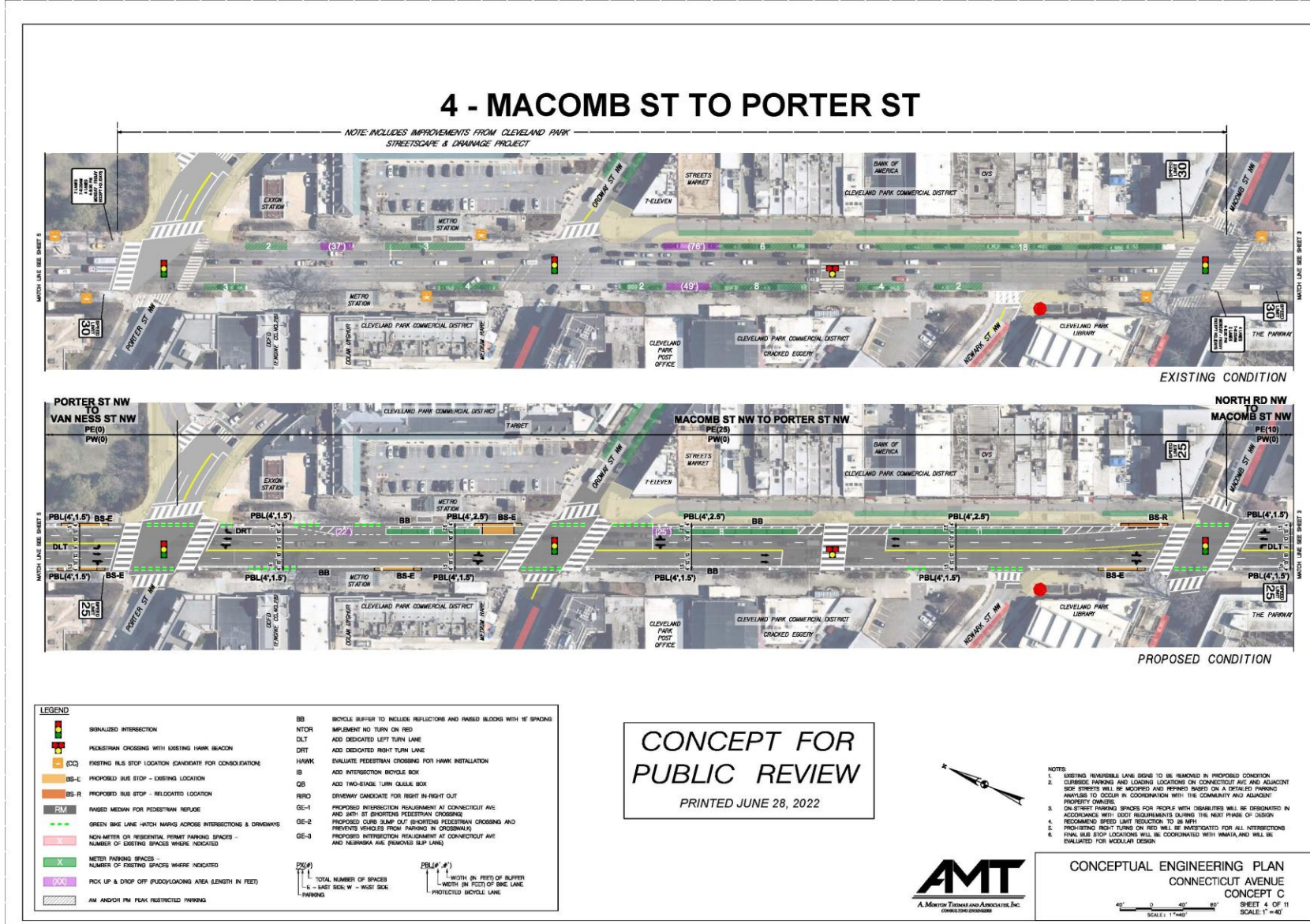
Concept C - Potential Safety and Mobility Improvements



-  Left Turn Lane (up to 17)
-  HAWK Signal (2, requires additional study)
-  Pedestrian Refuge Island (8)
-  Analyze intersection for approach realignment (3)
-  Right Turn Lane, (up to 5)
-  No Right Turn on Red (5)
-  Parking Clearance

Refinements: Some left turn locations and pedestrian refuge islands will be modified in the next iteration of design.

Sample Concept Map 4-Macomb Street NW to Porter Street NW



Activities Performed to Date

Activities Performed to Date



Activities Performed to Date



Implemented 2 Project Recommendations

3.



Reversible Lane Signs and Pavement Markings Removal



Speed Limit Reduced to 25 mph

Community and Agency Engagement

Community, Stakeholder and Agency Engagement

Community Advisory Committee (CAC) & Advisory Neighborhood Commissions (ANCs)

Stakeholder Meetings

Interagency Meetings

Public Meetings

Website



COMMUNITY ADVISORY COMMITTEE (CAC) MEMBERS (Rotated Off*)

~~Chas Cadwell, ANC 3G07~~

~~Connie Chang, ANC 3G05~~

~~David Cristeal, ANC 3F01~~

Robert Deyling, Chair, ANC 3F Streets and Sidewalks Committee

Beau Finley, ANC 3C04

~~Chris Fromboluti, ANC 3G07~~

Eileen McCarthy, Pedestrian Advisory Council (PAC) Representative

~~Lee Brian Reba, ANC 3C01~~

Josh Rising, W3BA

Steve Seelig, W3BA

~~Randy Speck, ANC 3G03~~

Sauleh Siddiqui, ANC 3C05

Tom Quinn, ANC 3E04

**There is an opportunity to modify CAC membership since a number of ANC Commissioners have changed.*

Stakeholder/Organization Meetings/Key Events

<u>ORGANIZATION</u>	<u>DATE</u>	<u>ORGANIZATION</u>	<u>DATE</u>
Montgomery County, MD Meeting	03-05-2020	Curbside Survey Update- Main Streets	09-17-2020
CAC Meeting No.1	04-30-2020	DPW	09-19-2020
CAC Meeting No. 2	06-11-2020	Cleveland Park Smart Growth (Alt E)	09-28-2020
Ward 3 Vision	06-22-2020	CAC Meeting No. 3	10-01-2020
Cleveland Park Main Street	06-25-2020	Woodley Park Main Street	11-12-2020
W3BA	06-29-2020	Van Ness Main Street	11-18-2020
ANC 3/4G	07-13-2020	WABA (ALT D-2) Meeting	12-02-2020
ANC 3E	07-16-2020	WABA and W3BA (Joint Meeting)	12-08-2020
Van Ness Main Street	07-17-2020	CFA	01-08-2021
ANC 3C	07-20-2020	CAC Meeting #4	01-13-2021
ANC 3F	07-21-2020	Smithsonian Zoo	01-21-2021
Interagency Meeting	07-22-2020	UDC	02-03-2021
Woodley Park Community Association	07-23-2020	ANC 3E	02-11-2021
Cleveland Park Citizens Association	07-29-2020	Combined Main Streets Presentation	02-16-2021
D.C. Office of Planning & DOEE	07-29-2020	SHPO/Andrew Lewis	02-17-2021
HSEMA, MOCRs	07-30-2020	ANC 3-4G	02-22-2021
Curbside Survey Meeting-Main Streets	08-21-2020	ANC 3C, Woodland-Normanstone, CPSG, CPCA	02-23-2021
Smithsonian Zoo	09-02-2020	Residential/Property Management	02-23-2021
Howard University School of Law	09-03-2020	ANC 3F	02-24-2021
		Woodley Park Citizens Association	02-25-2021

Additional Meetings/Key Events

<u>Meeting/Key Event</u>	<u>Date</u>
Public Meeting No. 1 (Day 1)	03-30-2021
Public Meeting No. 1 (Day 2)	04-01-2021
Eaton Elementary School	04-27-2021
DDOT-EOM/Office of Racial Equity Meeting	01-06-2022
CAC Meeting No. 5	03-01-2022
Distribute: Speed Limit NOI (ANC 3C, 3F, 3-4/G)	03-24-2022
CAC Meeting No. 6	04-06-2022
Due Date: Speed Limit NOI (ANC 3C, 3F, 3-4/G)	04-07-2022
Interagency Meeting	04-19-2022
Reversible Lane Eradication	06-30-2022
ANC 3-4/G Presentation	06-13-2022
ANC 3E Presentation	06-14-2022
ANC 3C Presentation	06-22-2022
ANC 3F Presentation	06-22-2022
MOCRS-Council Presentation	06-23-2022
Public Meeting No. 2 (Virtual, Morning)	06-28-2022
Public Meeting No. 2 (In-Person, Evening)	06-29-2022
CAC Meeting No. 7	09-14-2022

Additional Meetings/Key Events

<u>Meeting/Key Event</u>	<u>Date</u>
Parking/Loading Community Walk for Concept Maps 1, 2, 3 and 4	10-03-2022
Parking/Loading Community Walk for Concept Maps 5, 6, 7 and 8	10-11-2022
Parking/Loading Community Walk for Concept Maps 9, 10, and 11	10-17-2022
ANC 3F Presentation	10-18-2022
ANC 3C/Cleveland Park Citizen Association (planning session for meeting)	10-28-2022
Smithsonian Zoo	11-02-2022
ANC 3-4G Presentation	11-14-2022
Maryland State Highway Administration: Regional coordination for Connecticut Avenue project.	12-8-2022
ANC 3C-Cleveland Park Citizens Association, Planning Meeting for presentation in January.	12-9-2022 01-13-2023
ANC 3C-Cleveland Park Citizens Association Special Meeting on Connecticut Avenue	01-19-2023

Public Meeting No. 2



- Public Meeting No. 2
 - June 28th Virtual Meeting
 - June 29th In-Person meeting at UDC
 - Received comments, for and against project
 - Received over 150 design and operational suggestions
- Next Steps
 - Review and develop dispositions
 - Items that are deemed possible may be carried forward into subsequent design phases

Parking/Loading Community Walks

- Purpose is to refine June 2022 concept plans
- Conducted on October 3, 11th and 17th 2022
- Community feedback to be incorporated into next set of concept plans



Plans for Future Engagement

1. Community engagement will continue throughout the lifecycle of the project. That includes the design and construction phases.
2. The specific modes of community engagement have not yet been decided for the design and construction phases.
3. Typical modes of community engagement include:
 - ANC meetings
 - Public meetings at strategic points in the design and construction process
 - Special meetings with civic and other groups
 - Project walk-throughs
 - Continuation of Community Advisory Committee
 - *Review CAC members given ANC changes*
4. Update Project Website

Project Timeline

Design and Construction Timeline

CY 22					CY23										CY24										CY25													
FY 22					FY 23										FY 24										FY 25													
J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A

Concept Refinement

Traffic

Parking Refinements

Preliminary and Final Design

Design Procurement 

Construction Procurement

Construction 

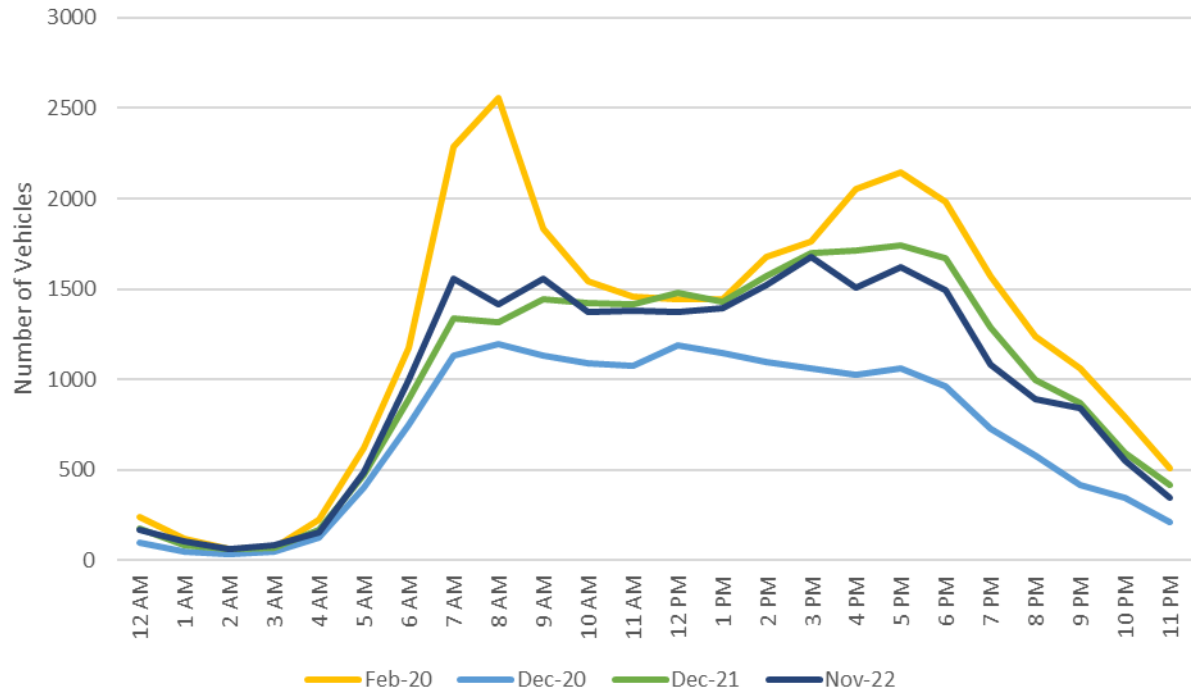
Public Engagement  

New Traffic Counts on Connecticut Avenue

Connecticut Avenue NW 48-Hour Volume Comparison

November 2022 versus December 2021 versus December 2020 versus February 2020 (Pre-COVID)

Between Military Rd NW and Nebraska Ave NW



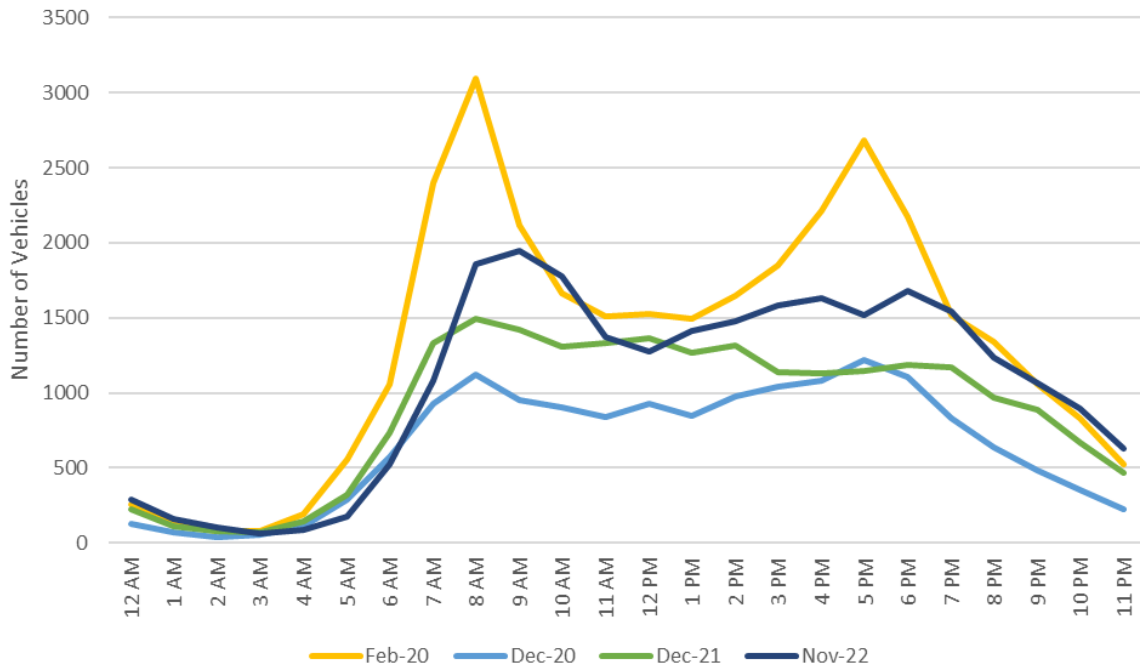
Conclusion: -6,243 vehicles per day (21%) between pre-pandemic and today.

Connecticut Avenue NW	Segment #1: Military Rd NW to Nebraska Ave NW	
	ADT	Change in ADT from Feb 2020
November 2022	23,655	-20.88%
December 2021	24,352	-18.55%
December 2020	16,969	-43.24%
February 2020 (Pre-COVID)	29,898	-

Connecticut Avenue NW	Segment #1: Military Rd NW to Nebraska Ave NW					
	ADT			Change in ADT from Feb 2020		
	Northbound	Southbound	Total	Northbound	Southbound	Total
November 2022	10,877	12,778	23,655	-26.44%	-15.44%	-20.88%
December 2021	12,216	12,136	24,352	-17.39%	-19.69%	-18.55%
December 2020	7,297	9,672	16,969	-50.65%	-35.99%	-43.24%
February 2020 (Pre-COVID)	14,787	15,111	29,898	-	-	-

Connecticut Avenue NW 48-Hour Volume Comparison

November 2022 versus December 2021 versus December 2020 versus February 2020 (Pre-COVID)
Between Van Ness St NW & Tilden St NW



**Conclusion: -6,599 vehicles per day (21%)
between pre-pandemic and today.**

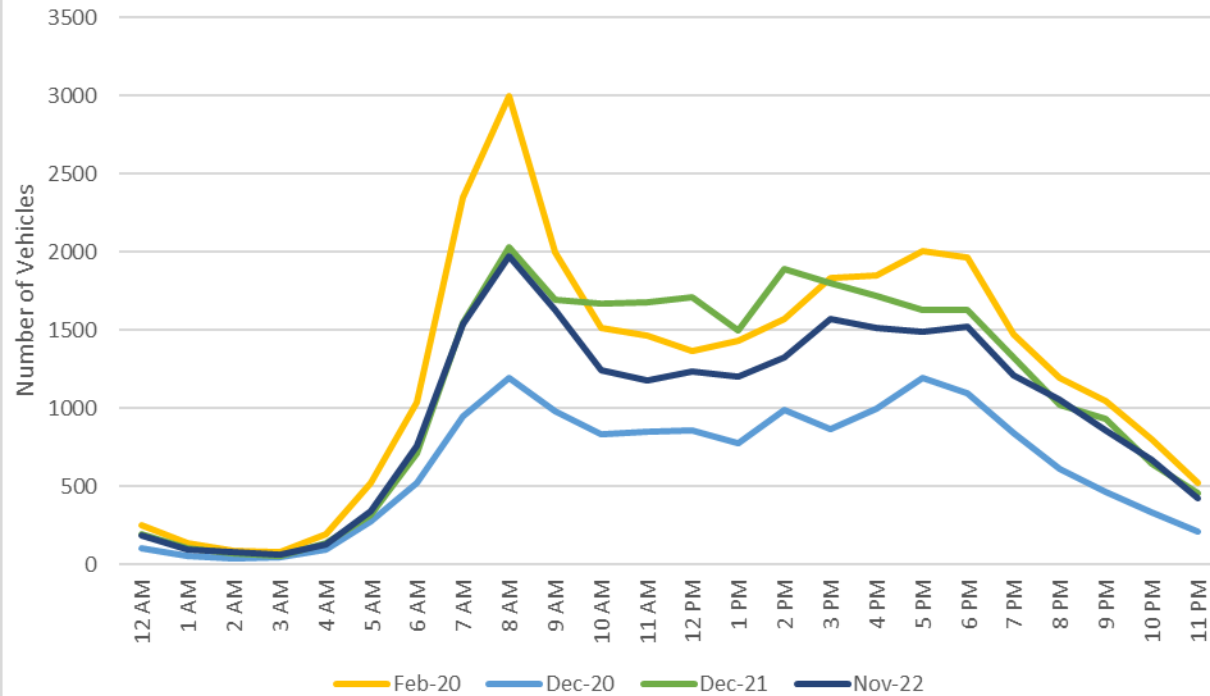
Connecticut Avenue NW	Segment #2: Van Ness Street NW to Tilden Street NW	
	ADT	Change in ADT from Feb 2020
November 2022	25,379	-20.64%
December 2021	21,269	-33.49%
December 2020	15,748	-50.75%
February 2020 (Pre-COVID)	31,978	-

Connecticut Avenue NW	Segment #2: Van Ness Street NW to Tilden Street NW					
	ADT			Change in ADT from Feb 2020		
	Northbound	Southbound	Total	Northbound	Southbound	Total
November 2022	11,955	13,424	25,379	-24.22%	-17.15%	-20.64%
December 2021	10,649	10,621	21,269	-32.50%	-34.45%	-33.49%
December 2020	6,916	8,833	15,748	-56.16%	-45.49%	-50.75%
February 2020 (Pre-COVID)	15,776	16,202	31,978	-	-	-

Connecticut Avenue NW 48-Hour Volume Comparison

November 2022 versus December 2021 versus December 2020 versus February 2020 (Pre-COVID)

Between Macomb St NW and Devonshire Pl NW



Conclusion: -6,375 vehicles per day (21.5%) between pre-pandemic and today.

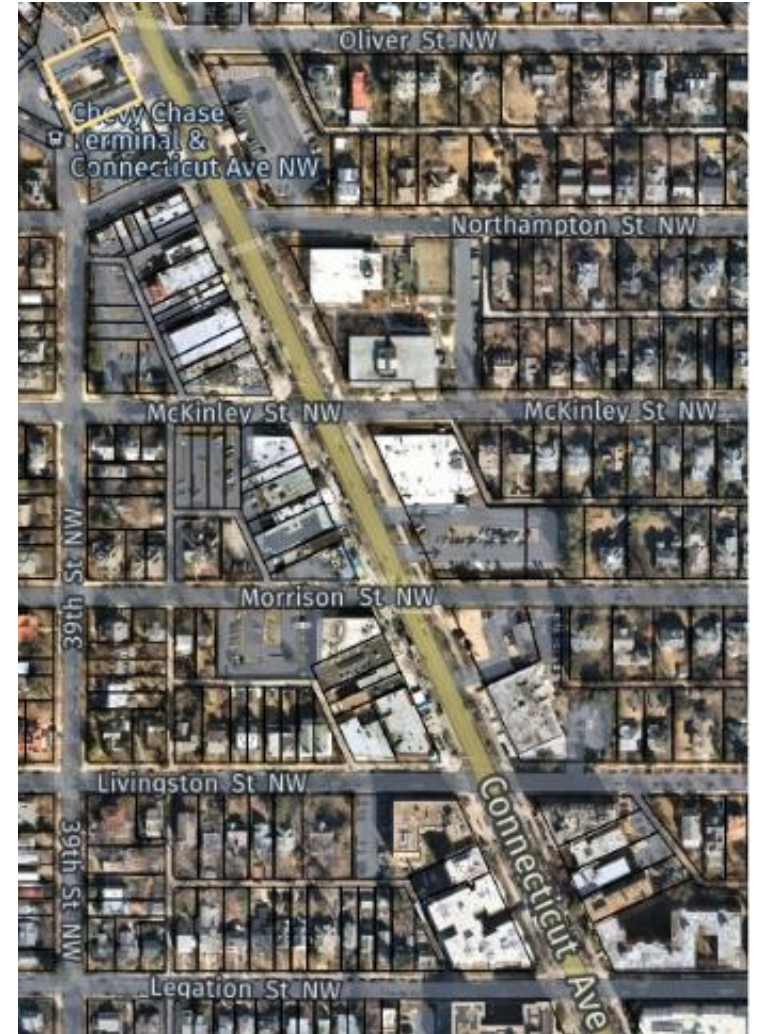
Connecticut Avenue NW	Segment #3: Macomb Street NW to Devonshire Place NW	
	ADT	Change in ADT from Feb 2020
November 2022	23,276	-21.50%
December 2021	26,433	-10.85%
December 2020	15,170	-48.84%
February 2020 (Pre-COVID)	29,651	-

Connecticut Avenue NW	Segment #3: Macomb Street NW to Devonshire Place NW					
	ADT			Change in ADT from Feb 2020		
	Northbound	Southbound	Total	Northbound	Southbound	Total
November 2022	11,107	12,169	23,276	-21.11%	-21.85%	-21.50%
December 2021	12,927	13,506	26,433	-8.18%	-13.26%	-10.85%
December 2020	6,542	8,628	15,170	-53.53%	-44.59%	-48.84%
February 2020 (Pre-COVID)	14,079	15,572	29,651	-	-	-

Next Steps

Potential PBL Extension from Legation Street to south of Chevy Chase Circle

- Original northern project limits were set because the limits of the RLs ended at Legation Street
- Suggestions by the public to extend the PBLs
- Analyze traffic, safety, parking, multimodal and environmental conditions
- DDOT will make a recommendation on whether to include, or not to include, the PBL extension in the project.
- DDOT will engage the community including residents, businesses, the ANCs, and other organizations throughout the study period.



Traffic Calming

1. Selecting roadways for traffic/speed study
2. Already completed one set of counts- Linnean Avenue. Data not reviewed yet.
3. Select other locations for study
4. Conduct study/counts. We can consider this “before” implementation of the protected bicycle lanes. The data will be useful for comparisons for “after” study once the PBLs are in place.
5. Recommend strategies/improvements based upon current data and potential diversions due to the project.
6. Desire is to have traffic calming improvements in place before PBLs are constructed.

Potential Traffic Calming Review Locations

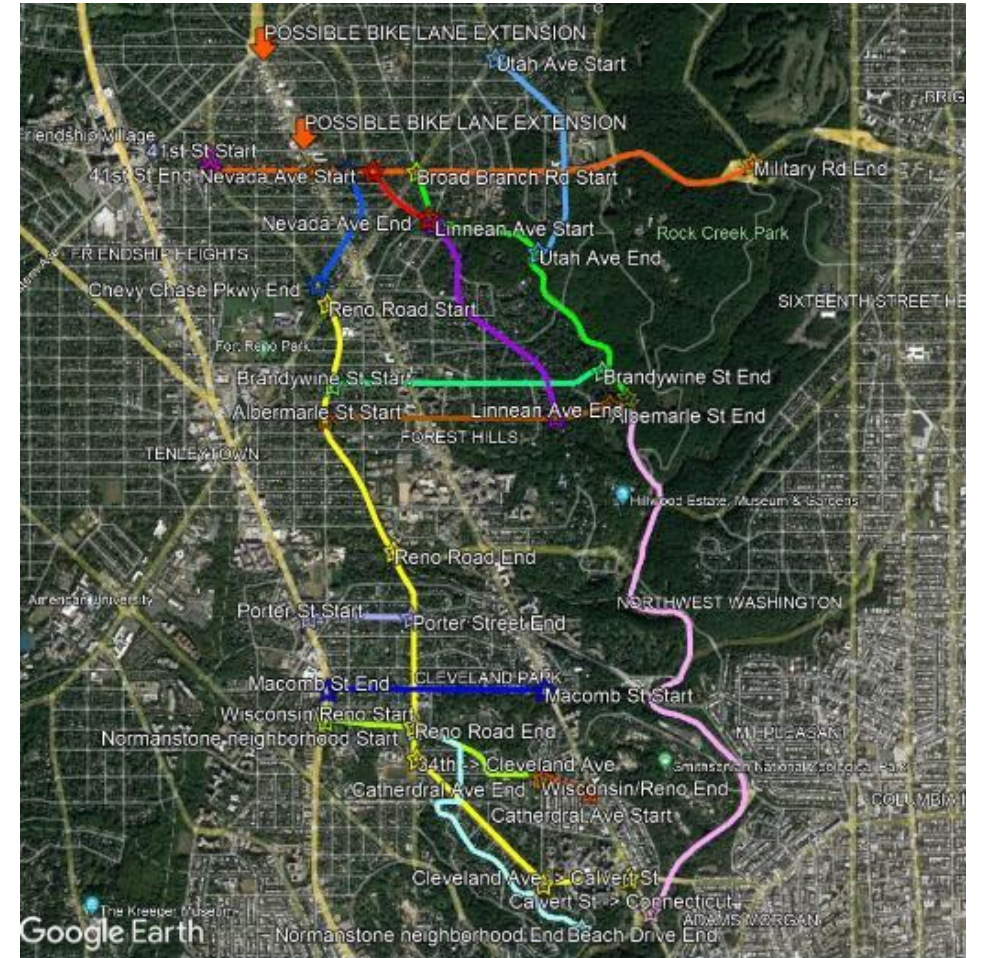
5.

Potential Locations

- Reno Road @ 41st Street
- 41st Street to Tilden Street
- Tilden Street to Cleveland to Calvert
- Chevy Chase Parkway (CCP)/CCP & Military Road
- Nevada Avenue
- Utah Avenue
- Military Road
- Broad Branch Road/Beach Drive
- Linnean Avenue (Nevada to Albemarle)
- Fulton/Normanstone Drive
- Albemarle (Reno to Broad Branch)
- Brandywine (Reno to Broad Branch)
- Macomb Street
- Other areas as identified by community members

Select locations based on technical criteria

- What is already in pipeline
- Traffic volumes
- Functional classification
- Crashes
- Other



Project Elements to be Included over the next 18 months of concept/preliminary design

1. ADA parking spaces including provisions for wheelchair access
2. Bus Stop locations
3. Intersection redesign
 - Slip lane removal
 - Left and right turn lane design
 - Traffic signal operations including pedestrian crossing times
 - Implement No Turn on Reds (NTOR)
4. Provisions for safe boarding of buses including platforms at the same level of sidewalks
5. Potential revisions to parking, loading and pick-up, drop-off (PUDO) allocations
6. Changes in parking durations, time-of-day usage and side street use recommendations

Project Elements to be Included over the next 18 months of concept/preliminary design

7. Design of new pedestrian refuge islands, medians and curb extensions
8. Integration with existing projects such as the Van Ness Streetscape project, and the Cleveland Park Streetscape and Drainage project.
8. Types of buffers and materials to be used for protected bicycle lanes
9. Pedestrian signals such as HAWKS
10. Signage design
11. Traffic signal operational changes
12. Implementation of traffic calming improvements at various locations

Key Themes

Key Themes

1. Buses
2. Protected Bike Lane/Pedestrian Safety
3. Parking/Loading
4. Alternative to consider center-running protected bicycle lane

Key Themes-Buses

1. Efficiency of buses

- Tools to be used may include stop relocation (e.g., near-side to far-side locations), stop rebalancing, transit signal priority and in-lane stops
- Other Bus Priority tools that will be considered are included in DDOT's Bus Priority Toolbox

2. Why is Connecticut Avenue not a bus priority route?

- Bus Priority corridors are based on the busiest corridors (ridership) in the District.
- Pre-pandemic, the Connecticut Avenue corridor had 4,500 boardings and alightings daily. Today, we have 2,700 which represents a 40 percent reduction from pre-pandemic volumes.
- We have three Metro stations along the corridor which represents some duplication of service.



Key Themes: Buses

WMATA Better Bus Network Redesign

1. Region's first network redesign since network was created in 1973 to rethink, redesign, and revitalize bus service.
2. Phase I: Data Collection, Analysis, Goals and Priorities (Through 12/2022)
3. Phase II: Network options and stakeholder engagement (Through 06/23)
4. Phase III: Stakeholder engagement, finalize options and approval (through 12/2023)



Key Theme: Pedestrian/Bicycle Safety

- All the District's PBL projects are designed within the "Safe Systems Approach". The Safe System Approach uses safety-focused design and engineering principles which assumes that **humans make mistakes**.
- To proactively maximize safety, DDOT's projects seek to **increase separation of travel modes**. This is what makes Protected Bike Lanes important.

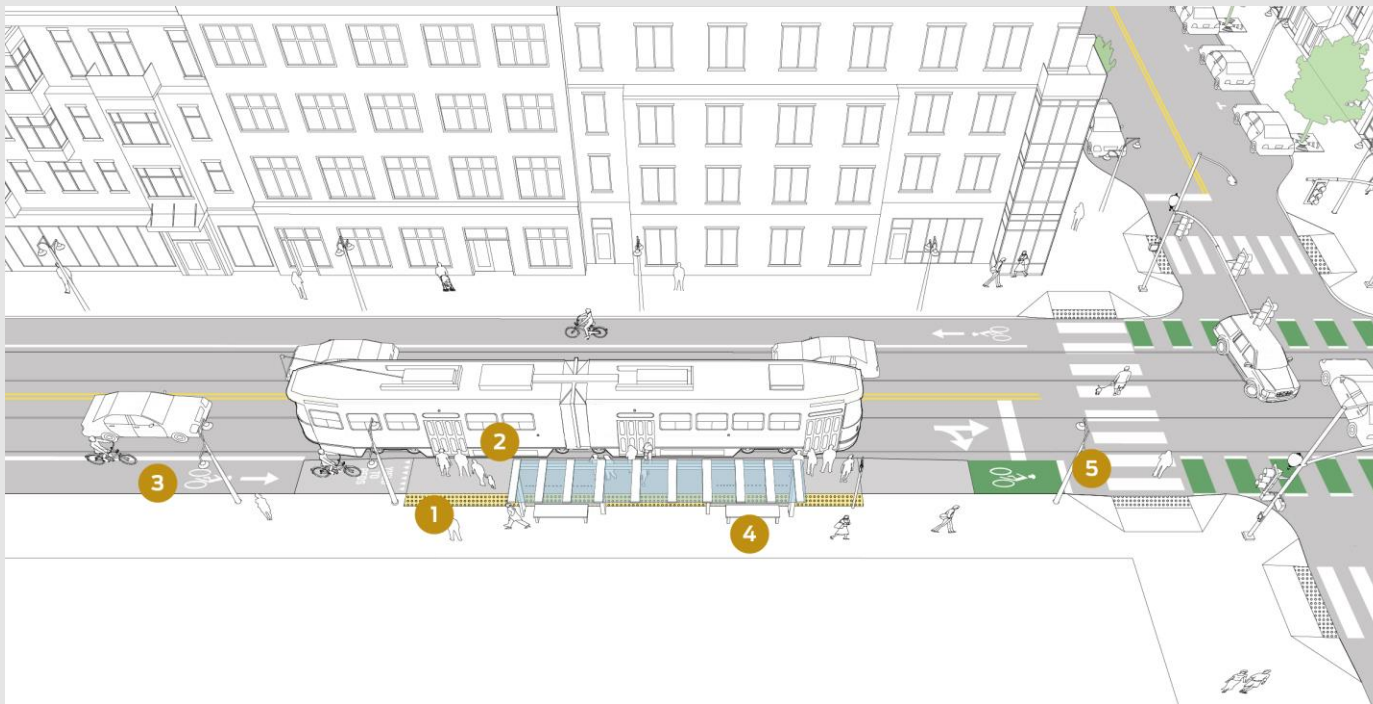
How Does DDOT Design Bike Infrastructure to Ensure Accessibility?

- DDOT has successfully integrated accessible parking into Protected bike lane projects.
- Implementing marked crosswalks at bicycle lanes at potential conflict zones, **using high visibility markings.**
- Utilizing **strategic signage** to alert cyclists to the presence of pedestrians.
- **Ensuring clear sight lines at accessible parking spaces** by meeting ADA aisle width requirements.
- Using **bicycle traffic calming** techniques.
- Some projects include **improved accessible curb access and reduced vertical delineation** to maximize ease of use.



Pictured: The 400 block of K St.

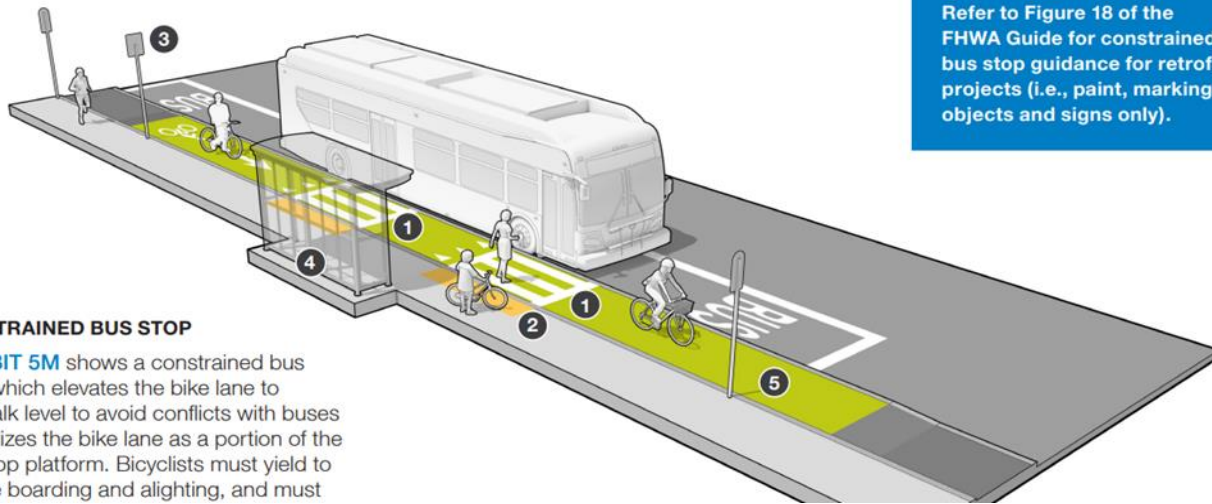
Maximizing Safety for Different Conflict Areas Along the Corridor



1. **Detectable Warning Strips** are located at each entry point into the shared Cycle Track Stop
2. Each shared stop can be utilized as an **accessible boarding area** due to its raised nature.
3. Early warning detection features include **signage and bike traffic calming** ensuring that pedestrians have the right-of-way.
4. Sidewalks and street furniture must retain full **ADA compliance**.
5. Boarding platform terminates 10 feet from crosswalks to **maximize visibility**.

Providing Different Treatments for Different Transportation Features of the Corridor

In-Lane Bus Stops, with or without parking lane



Refer to Figure 18 of the FHWA Guide for constrained bus stop guidance for retrofit projects (i.e., paint, markings, objects and signs only).



Figure 29. Pre-fabricated transit island that includes a raised cycle track crossing along the sidewalk curb.

Option 2: Prefabricated Transit Island

Implement elevated bike lane to sidewalk level for pedestrian crossing

- Option 1: “Permanent” construction considering drainage, roadway constraints
- Option 2: Prefabricated Transit Island

Providing Different Treatments for Different Transportation Features of the Corridor

1) Intersections, with or without parking lanes

Goal: Slow bicycles as they approach an area of expected pedestrian crossing. Possible techniques include:

- High visibility sawtooth or stop bar markings in advance of crosswalks
- Clear Warning Signage; Possible NTOR or R10-15 signage
- Rumble strips
- Speed hump



Figure 12. Rumble strips slow down bicyclists and alert riders to an upcoming pedestrian crossing.



Figure 13. Speed bumps with drainage strips.



Key Themes: Parking and Loading Update

- Key Takeaways from Walk Throughs:
 - Provide curbside uses on one side of the street for majority of project area
 - Reduce duration of meters in commercial areas
 - Create “flex zones” with change in usage by time of day
 - Evaluate block-by-block land uses to determine most appropriate mix of curbside uses and location on east or west side of the street
 - Strategically locate PUDO zones throughout corridor to serve passenger PUDO, food deliveries, and short-term delivery vehicles
 - Identify targeted area on side streets to add parking, create more turnover, and provide designations to better serve specific uses

Key Themes: Parking Curbside Modifications

- Parking, PUDO, or Commercial Loading Zones provided on one side of the street for the vast majority of the project area
- Variety of curbside strategies will be employed to address block-by-block needs:
 - Commercial areas characterized by:
 - ✓ 30-minute metered parking
 - ✓ Commercial Loading Zones
 - ✓ Pick-up/Drop-off Zones
 - Residential Areas are characterized by:
 - ✓ Longer term (2-hour) daytime parking
 - ✓ Strategically places PUDO zones to accommodate passenger pick-up/drop-off, food delivery services, and delivery vehicles

Key Themes: Parking Connecticut Ave. Flex Zones to Maximize Efficiency

Commercial Flex Zones

Daytime	Early Evening	Late Evening	Overnight
Commercial Loading Zones	PUDO Short-term Metered Parking	2-Hour Metered Parking PUDO	No Time Limit Parking
PUDO Zones	PUDO zones	PUDO zones	No Time Limit Parking
Short-term Metered Parking	Short-term Metered Parking	2-Hour Metered Parking	No Time Limit Parking

Residential Flex Zones

Daytime	Early Evening	Late Evening	Overnight
2-Hour Parking	2-Hour Parking	No Time Limit Parking	No Time Limit Parking
PUDO Zones	PUDO zones	PUDO zones	No Time Limit Parking

Key Themes: Parking

- Can there be loading on both sides of Connecticut Avenue simultaneously?
 - ✓ No
 - ✓ Parking and loading on the revised plan will switch between the east and west sides of the street in response to land use types, presence of off-street loading and off-street parking options.
- What can be done to ensure sufficient parking on or near the Avenue?
 - Provide some parking or loading spaces on one side of the street for the entire length of the project area.
 - Provide shorter duration parking in commercial areas to allow more patrons to be served by on-street parking throughout the day.
 - Add PUDO zones near Connecticut Avenue on side streets to serve pick-up, drop-off, food deliveries and parcel deliveries.

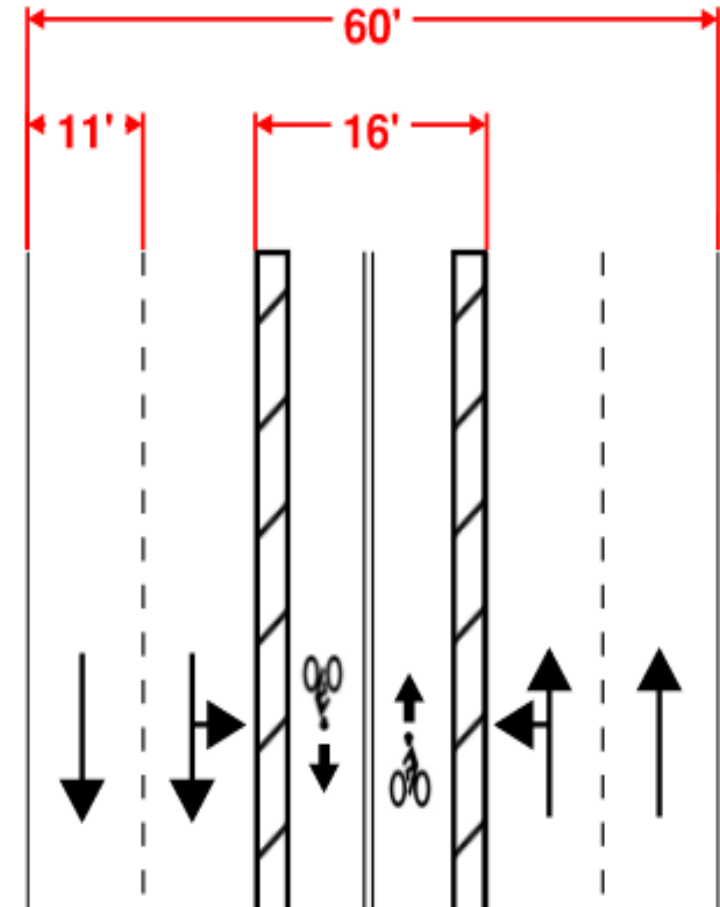
Key Themes: Parking Side Street Considerations

- Retaining vast majority of RPP spaces
 - Exceptions:
 - ✓ Tilden Street adjacent to non-residential use
 - ✓ Few spaces on Jenifer Street near church
- Retain existing pockets of unrestricted parking where appropriate
- Incorporation additional parking on:
 - Cathedral Avenue
 - Potentially Porter Street (requires further investigation)
- Convert previous carshare spaces to metered spaces
- Add select PUDO zones and commercial loading zones at strategic locations



Key Theme: Center Running Concept- Not Brought Forward

- Center-running protected bicycle lanes would consist of two, five-foot bicycle lanes and two three-foot buffers.
- All left turns from Connecticut Avenue NW to side streets must include protected signal phases
 - Significantly reduces vehicular capacity and increases travel times on Connecticut Avenue NW by effectively reducing through traffic to one lane in each direction.
- Difficult for cyclists to enter and exit the bike lanes.
- No parking permitted on either side of Connecticut Avenue
- No dedicated turn lanes
- Left turns may become “trap lanes” due to left-turning vehicles





District Department of Transportation

250 M St SE | Washington, DC 20003 | 202.673.6813

Adjournment

- Thank you for attendance this evening. Your comments and questions are very much appreciated!
- Community engagement will continue throughout the project lifecycle.
- We have worked with the community to incorporate compromises in the next design iteration.
- Regarding parking programmatic elements, the project team will continue to meet with the ANCs to make refinements during the next 1-2 years.