WABA
WASHINGTON AREA
BICYCLIST ASSOCIATION

50 YEARS of SAFER STREETS and BETTER BIKING since 1972

March 15, 2023

Director Everett Lott
District Department of Transportation
250 M St. SE
Washington, DC 20001

Re: Bike Lane Design in Connecticut Avenue Deckover and Streetscape Project

Director Lott,

On behalf of the Washington Area Bicyclist Association, and its 6,000 members in the Washington Region, I am writing to repeat and emphasize an important concern in the Connecticut Avenue Streetscape and Deckover project's bike lane design that has not been addressed by the project team. At just 5 feet wide, the proposed protected bike lanes are too narrow for the context and expected user volume and will limit the usability of this link in the priority bicycle network. We believe that there is a straightforward solution; narrow some driving lanes from 11' to 10' and repurpose the road width to allow 7' bike lanes. This should not impact the project schedule or cost, but improve traffic safety and better future-proof the road's multimodal design.

In October 2020, DDOT shared the 65% design for the project. WABA and many community advocates raised concerns over the narrow width of the bike lanes. The official comment summary includes WABA's comment letter and notes that roughly 30% of comments made the case for wider bike lanes. So, in February 2023, when DDOT presented an update on this project at a community meeting, we were surprised that the proposed road cross-section was unchanged, still proposing two 5' bike lanes and six 11' driving lanes. When asked directly why this concern had not been addressed, DDOT staff seemed unfamiliar with the issue and offered only vague references to DDOT's design regulations and that the corridor is constrained.

We do not find these reasons convincing and believe that DDOT's Design and Engineering Manual (DEM) and federal guidance better supports wider (7') bike lanes and narrower (10') driving lanes here. We urge DDOT to make a modest design change. Reduce the width of two driving lanes in each direction from 11' to 10' and push the bike lane curbs 2' closer to the center line (see Figure 1 and 2 for illustration). This change allows for the recommended 7' bike lanes while maintaining an 11' outside lane for buses. 10' driving lanes are supported by the DDOT DEM and ubiquitous on multi-lane roads in DC, including on Connecticut Avenue, Research shows that narrower lanes lead to more careful driving, slower speeds, and fewer crashes. This change would not modify the planned curb line and should not impact drainage so is unlikely to increase cost or add delay.

Every protected bike lane standard and design guide published in the last 10 years, including DDOT's own, agrees that a 5’ wide bike lane between raised curbs is the minimum acceptable width and not recommended for high-volume corridors or on hills. Compared to a 6.5' - 7' protected bike lane, 5' bike lanes:

- Accommodate significantly lower volume of users during peak times,
- Are harder and more costly to maintain and keep clear of debris, snow and ice,
- Are more difficult to maneuver around debris, ice, or crossing pedestrians
- Do not allow riders traveling at different speeds to pass each other which is especially problematic on hills where speed differential can vary significantly (the corridor includes up to 5% slope) ,
- Prohibit side-by-side riding for conversation, and
- Restrict the maneuverability of larger bicycles like cargo bikes or adaptive bicycles which can have longer wheelbases, different turning characteristics and can easily reach 2.5 feet wide.

When it opens in 2026, this project should meet modern standards, not immediately disappoint. Connecticut Avenue will be a high-demand bikeway, part of a nearly 6 mile long

north-south, low-stress route from upper Ward 3, to destinations in Adams Morgan, Dupont Circle, Foggy Bottom and the National Mall via Connecticut Ave, Columbia Road, 20th St. and 21st. The facility should be designed to accommodate high user volumes, a variety of micro mobility vehicles, and e-cargo bikes, which are becoming increasingly popular for commercial uses. DDOT has proven that it can create world-class streetscapes with gold-standard bicycle and pedestrian facilities in other projects.

We urge DDOT to make this modest design change and request a response to this letter.

Sincerely,
Jeremiah Lowery
Advocacy Director, Washington Area Bicyclist Association

CC
Wayne Wilson, Project Manager
Huntae Kim, DDOT IMPA Program Manager
Sandra Marks, DDOT Chief Project Delivery Officer
George Branyon, Active Transportation Branch Manager
Brooke Pinto, Ward 2 Councilmember

## Relevant DDOT and Federal Design Guidance

DDOT roadway design follows the DDOT Design and Engineering Manual, last updated in 2019. Additionally, DDOT's MoveDC plan commits DDOT to following federal requirements for transportation facilities planning and design, along with national best practices established by the Federal Highway Administration (FHWA), and National Association of City Transportation Officials (NACTO). Relevant excerpts on this issue are below with underlines added for emphasis.

**DDOT Design and Engineering Manual** states "The minimum desired width for protected bicycle lanes (cycle tracks) is 5 feet. In areas with high bicyclist volumes or uphill sections, the minimum desired width is 7 feet to allow bicyclists to pass each other. Variations from these recommendations should be approved by DDOT." [1]

Regarding travel lane widths, it states "Lane widths on arterials, collectors and local streets are typically between 10 and 11 feet, inclusive of the gutter, and are based on the following:

- Design Speed. Lanes 10 feet wide may be considered on streets with design speeds of 40 mph or less. Use the wider end of the range (11 to 12 feet) at design speeds greater than 40 mph.
- Design Vehicle. Vehicles such as transit buses and large tractor-trailers require wider lanes, particularly in combination with higher design speeds if they frequently use the thoroughfare. Consider wider lanes only if appropriate for the frequency of the design vehicle.
- Right-of-Way. Balance the provision of the required design elements of the thoroughfare with the available right-of-way. This balance can mean reducing the width of all elements or eliminating lower-priority elements.
- Width of Adjacent Bicycle and Parking Lanes. The width of adjacent bicycle and parking lanes influences the selection of lane width. *If the adjacent bicycle or parking lane is narrower than recommended, first consider widening the bicycle lane.* If a design vehicle or design speed justifies it, provide a wider travel lane to better separate lanes. Where bike lanes are

[1] District Department of Transportation, *Design and Engineering Manual,* 2019, https://ddot.dc.gov/sites/default/files/dc/sites/ddot/page_content/attachments/DEM-2019-01-01_DDOT_DEM_Updates_FINAL.PDF p. 29-5

provided on multi-lane streets, the outside lane width should be 1 foot wider than the adjacent through lane width."[2]

**Federal Highway Administration's 2015 Separated Bike Lane Planning And Design Guide** provides the following guidance on width. "One-way separated bike lanes should have a minimum width of 5 ft. Wider separated bike lanes provide additional comfort and space for bicyclists and should be considered where a high volume of bicyclists is expected. Widths of 7 ft and greater are preferred as they allow for passing or side-by-side riding." [3]

**NACTO Urban Bikeway Design Guide**,recommends, "The minimum desired width for a cycle track should be 5 feet. In areas with high bicyclist volumes or uphill sections, the minimum desired width should be 7 feet to allow for bicyclists passing each other." It also references standards from the Netherlands which specify 6.5 ft for up to 150 bikes per hour and London which specify a preferred minimum of 2 meters (~6.5 ft).[4]

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[2] District Department of Transportation, *Design and Engineering Manual,* 2019 https://ddot.dc.gov/sites/default/files/dc/sites/ddot/page_content/attachments/DEM-2019-01-01_DDOT_DEM_Updates_FINAL.PDF, p. 30-19

[3] Federal Highway Administration, Separated Bike Lane Planning and Design Guide, 2015, https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/page00.cfm, p. 77

[4] National Association of City Transportation Officials, *Urban Bikeway Design Guide*, 2014, https://nacto.org/publication/urban-bikeway-design-guide/cycle-tracks/one-way-protected-cycle-tracks/

Figure 1 - DDOT Proposed Cross Section with 5' bike lanes

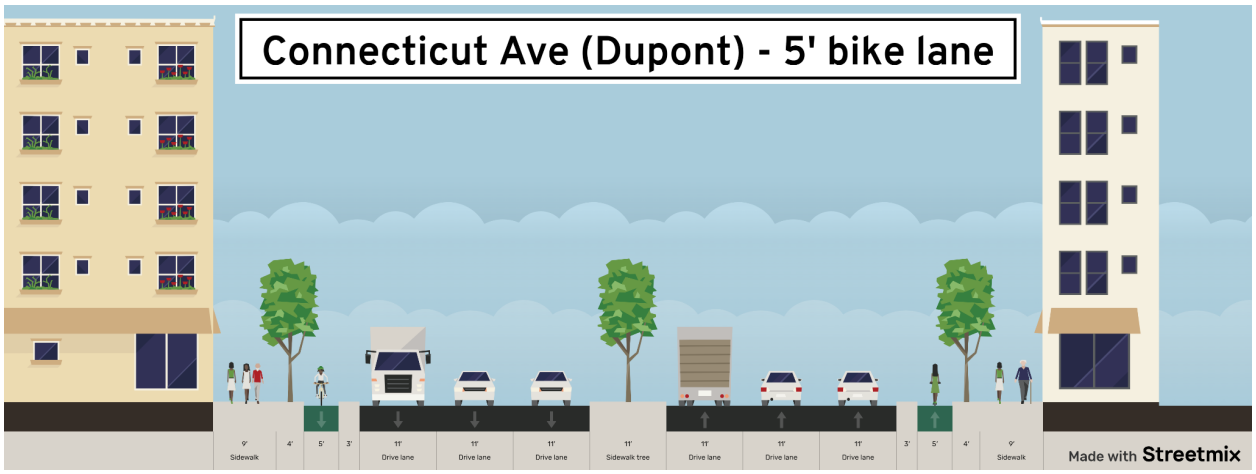


Figure 2 - WABA Proposed Cross Section with 7' bike lanes