

# Government of the District of Columbia

## Department of Transportation



**d.** Planning & Sustainability Division

June 5, 2019

Mr. Dave Kirschner  
Office of Transportation Operations (HOTO)  
Federal Highway Administration, Mail Stop: E84-402  
1200 New Jersey Avenue, S.E.  
Washington, DC 20590  
david.kirschner@dot.gov

Dear Mr. Kirschner,

The District of Columbia has a Vision Zero policy, multi-modal approach to street design, and has established a citywide bicycle network master plan as part of moveDC, the District's long-range transportation plan. Enhancing bicycle infrastructure to help manage and balance transportation mobility and safety for all users is a high priority for the District. To implement these goals, the District has been installing bicycle lanes, bicycle parking, and has deployed bicycle sharing stations (as part of the Capital Bikeshare program). The District is requesting permission to experiment with a variation of the standard longitudinal markings for a bicycle lane. This strategy is meant to convey a permissive message in a low speed environment and would consist of replacing the inside solid line defining the bicycle lane to a modified dotted line pattern, also known as Advisory Bike Lane. The proposed corridors, E Street Southeast, Kentucky Ave SE, 12<sup>th</sup> St SE, North Carolina Ave SE and Tennessee Ave NE in the Capitol Hill neighborhood, are in a high ridership area for cyclists. Additionally, the local Advisory Neighborhood Commissions, ANC 6B and 6A, have requested improved cycling infrastructure along this route. The surrounding neighborhood is the subject of multiple new residential and mixed-use developments, and supporting this density with improved cycling infrastructure along these corridors, which all are slightly too narrow for traditional bike lanes, has been identified as a priority by the ANCs.

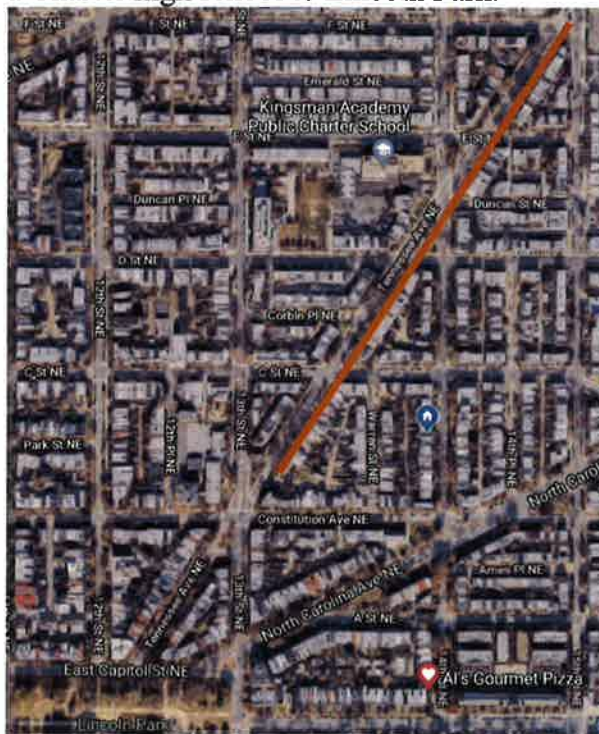
While sharrows are an alternative to the advisory bike lane, the visibility and conspicuity of sharrows is a concern. Due to the width of the proposed corridors, a standard bike lane is not

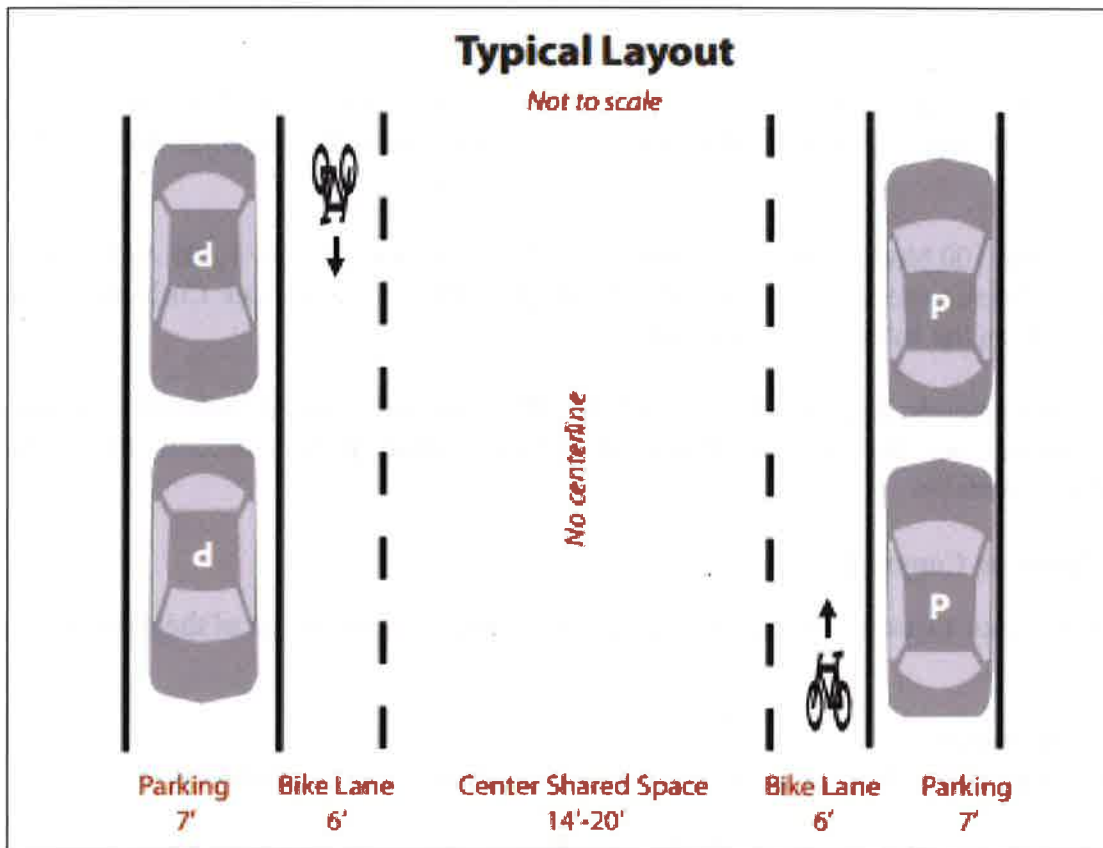
- 100 block of North Carolina Avenue, a segment of low volume roadway connecting to the existing bike lanes on the 100 block of E St SE and the bike lanes on the 500 block of New Jersey Ave is the correct width and volume for advisory bike lane treatment.



Source: ESRI

- 200 – 500 blocks of Tennessee Avenue NE, this street will include other bike lane treatments on the 100 block due to varying cross sectional widths and travel lane configurations along this segment. This segment will connect two elementary schools and a Charter high school to Lincoln Park.





### C. Supporting Data for Advisory Bike Lanes

Advisory bike lane experiments have been successfully implemented in cities across the United States and elsewhere. Alta Planning and Design assembled a report in August 2017 detailing the efforts of ten U.S. and Canadian cities who have implemented the design, and generated some basic design recommendations based on their findings. Those recommendations were:

- High curbside utilization
- Low traffic volumes (Maximum 6,000 AADT, preferably lower than 4,000 AADT)
- Minimum of 14-16 feet between advisory lane stripes

The volumes on E Street SE are currently 2,700 AADT (1) with 85<sup>th</sup> percentile speeds of 26.5 mph. Width of the roadway is between 36 or 40 feet, depending on the block. Speed bumps are in place along the corridor as a traffic calming measure. Curbside parking is continuous along the entire project corridor.

Volumes on Kentucky Avenue SE are 1,200 AADT (2) with 85<sup>th</sup> percentile speeds of 26.5 mph. Roadway width is 44 to 48 feet. Curbside parking is continuous along the entire project corridor.

1 Derived from intersection counts in Capitol Hill Safeway Redevelopment - Comprehensive Transportation Review, Aug 2017, Foulger Pratt – Prepared by Wells & Associates

2 Counts from same study

- Intersection crash data for the entire roadway (before and after)
- Observations along the corridor (after only)
  - Where do bicyclists tend to ride? Does this vary by the presence of parked vehicles or oncoming vehicles?
  - Where do motorists tend to drive? Does this vary by the presence of bicycles or oncoming vehicles?
  - Are motorists yielding to bicyclists before merging into the advisory bike lane?
  - When a motorist overtakes a bicyclist, are they leaving a safe passing distance?
  - Do the advisory bike lanes and lack of centerline appear to create conflicts among bicyclists and motorists?
  - Are bicyclists using the treatment as intended?
  - Are motorists using the treatment as intended?
- Survey of users (after only)
  - Do bicyclists feel safer with the addition of the advisory bike lanes?
  - Do motorists understand the purpose of the advisory bike lanes?

Observations will be made once a year after implementation.

A final consideration on this approval is the close proximity to the USDOT headquarters. In prior advisory bike lane installations, the applicants have not always been diligent about the after-installation data collection, leading to inconclusive results on the efficacy of this treatment. In this case, DDOT seeks not just a one-off lane, but three corridors which have interconnections with our existing bike network, and in a location where FHWA staff can personally visit and observe behavior on this facility type. The scale of this installation will also help with the evaluation as it will be a common striping pattern to encounter for daily travelers in this section of Southeast DC.

### **G. Agreements**

If it is determined that this proposed change does not meet the goals outlined within this document, the District will restore the sites of the experiment to a condition that complies with the provisions in the MUTCD within 3 months following the end of the time period of the experiment. Should significant safety concerns arise that are directly or indirectly attributable to the experimentation, the District agrees to terminate the experiment and restore the sites to their original conditions.

### **H. Submissions to FHWA**

Semi-annual progress reports will be provided throughout the experimentation and a copy of the final results of the experimentation will be provided to the FHWA's Office of Transportation Operations within three months following completion of the experimentation.

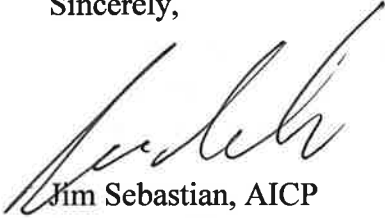
### **I. Conclusion**

These advisory bike lanes are important to implement in order to create a safe and

comprehensive bicycle network for the residents and visitors.

Please follow up with us directly regarding this request. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Sebastian".

Jim Sebastian, AICP  
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Planning & Sustainability Division  
District Department of Transportation  
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CC: Mike Hicks, FHWA DC Division Office