Corridor Safety Assessment
K Street NE

January 24, 2019
Overview

• Study Background – *What brought us here?*
• Road Diet – *What are the plans for the road diet?*
• Next Steps – *Where do we go from here?*
STUDY BACKGROUND
Study Background

What brought us here?

• April 2016 – ANC 6C passed resolution to request corridor study of K Street NE from North Capitol Street to Florida Avenue NE.
  – Based on this resolution, DDOT initiated Corridor Safety Assessment to provide comprehensive analysis of safety concerns. Assessment also included focus on two additional intersections (K Street/8th Street/West Virginia Avenue NE and of K Street/12th Street/Florida Avenue NE) due to concerns regarding traffic control and intersection geometry.
• February 2017 – DDOT presented initial results of study to ANC 6C TPS Committee.
• May 2017 – DDOT presented results of study at ANC 6A and 6C TPS Committee meetings.
• August 2017 – DDOT presented refined corridor and intersection alternatives at joint meeting between ANC 6A and 6C.
• October 2017 – Notice of Intent issued by DDOT for improvements at K Street/8th Street/West Virginia Avenue NE and at K Street/12th Street/Florida Avenue NE.
• April 2018 – Improvements installed at K Street/8th Street/West Virginia Avenue NE and at K Street/12th Street/Florida Avenue NE. Additional improvements at K Street/12th Street/Florida Avenue NE installed in November 2018.
• October 2018 – DDOT presented alternatives for potential improvements at intersection of West Virginia Avenue/9th Street/L Street NE to ANC 6A Transportation and Public Space Committee.
Study Area

- Study Area Boundary

**Focused Intersection Investigation**

1. K St/8th St/West Virginia Ave NE
2. K St/12th St/Florida Ave NE
3. West Virginia Ave/L St/9th St NE
NoMa Bike Study

NoMa/Mount Vernon Triangle Bicycle Network Study

• Study examined the recommendations for the NoMa area in moveDC (DDOT’s 2014 long-range multimodal transportation plan), along with other studies and development, to create a new refined and feasible bicycle facility plan for the NoMa area.

• Study recommendations included:
  – Top priority is K Street between 6th Street NW and 1st Street NE, following the 1st Street NE cycle track to L Street, and then taking the low-traffic and low-speed option of L Street NE eastward to 6th Street NE. K Street NE east of 1st Street NE will be further studied by DDOT.
  – Second priority is low-traffic and low-speed section of N Street NW between 6th Street NW and 1st Street NW, following 1st Street NW to M Street, and then following M Street to the eastern edge of the study area.

• “Further study” of K Street NE east of 1st Street NE included in Corridor Safety Assessment, combining effort of community-requested road diet and bike network study.
NoMa Bike Study

[Map of NoMa Bike Study Area with various bike lanes and options marked.]

DDOT will continue to study options for including designated bicycle facilities along K Street NE between 1st Street NE and 6th Street NE.

Date Created: 04/27/2018
Existing Conditions

- K Street NE is classified as a minor arterial in DDOT’s Functional Classification System.
- The roadway serves an average daily traffic of 12,000 vehicles.
- The posted speed limit is 25 mph, with a School Zone of 15 mph between 5th Street NE and West Virginia Avenue NE.
- The curb-to-curb width is 40 feet, with 10-foot lanes in most locations and an average sidewalk width of 5-6 feet.

DC’s functional classification system is based on guidelines provided by the Federal Highway Administration.

- **Primary Arterials** serve to connect major activity centers. They are the highest traffic volume corridors and serve the greatest proportion of urban travel demand. In an urban area, primary arterials typically carry 7,000-27,000 vehicles per day.

- **Minor Arterials** serve to connect and augment the network of primary arterials and to provide intra-community connectivity. In an urban area, they typically carry 3,000-14,000 vehicles per day.

- **Collector Roadways** serve to gather local traffic and funnel trips to the arterial roadway network. In an urban area, they typically carry 1,100-6,300 vehicles per day.

- **Local Roadways** serve to provide access to the adjacent land use. While they are often designed to discourage through traffic, they are accessible for public use. In an urban area, local roadways typically 80-700 vehicles per day.
Classification & Traffic Control
ROAD DIET PLANS
Corridor Recommendations

*What are the proposed improvements for the K Street NE corridor?*

- **Goals:** to slow vehicle speeds, reduce aggressive driving behaviors, reduce pedestrian crossing distance where feasible, and connect bicycle network along K Street NE.
- **Previous alternatives** refined to minimize parking impacts along the corridor and provide on-street parking on south side of K Street NE.
- **Corridor split into 3 sections:**
  1. 1st Street NE to 2nd Street NE (railway bridge section)
  2. 2nd Street NE to 6th Street NE (bike lanes)
  3. 6th Street NE to 12th Street NE (full-time parking)
- **DDOT also investigated feasibility of installing a cycle-track between 2nd and 6th Streets NE**
  - Cycle track not feasible within existing cross-section due to conflicts with turning vehicles and existing bus stops.
Section 1: 1st St to 2nd St NE

• Existing conditions:
  – 2 eastbound travel lanes, 2 westbound travel lanes
• Four options to connect bike facilities under railway bridge:
  A. North-side cycle track
  B. South-side cycle track
  C. Protected bike lanes (PBL) on both sides of the street
  D. Sharrows
• Cycle track and PBL options require closure of one or both portals to vehicular traffic. These options require further study due to impacts to vehicular capacity.
• DDOT will move forward with “test” portal closure(s) in Spring 2019 to determine real-time impacts.
Section 1: 1\textsuperscript{st} St to 2\textsuperscript{nd} St NE

- **Option A: North-side cycle track**
  - 2 eastbound travel lanes, 1 westbound travel lane
  - Eastbound drivers must select a lane before entering the tunnel. Eastbound left-turns at 2\textsuperscript{nd} Street NE may be prohibited.
  - Westbound left-turn storage insufficient for queuing.
  - Exclusive bicycle phase necessary at 2\textsuperscript{nd}/K Street NE to allow cyclists to cross the intersection without conflicting with through vehicles
Section 1: 1<sup>st</sup> St to 2<sup>nd</sup> St NE

- Option B: South-side cycle track
  - 1 eastbound travel lane, 2 westbound travel lanes
  - Eastbound right-turns at 2<sup>nd</sup> Street NE would be prohibited.
  - Two-stage turn box would be provided at 2<sup>nd</sup>/K Street NE to allow westbound cyclists to transition from bike lane to cycle track.
Section 1: 1st St to 2nd St NE

• Option C: Protected bike lanes
  – 1 eastbound lane, 1 westbound lane
  – Turns at 1st Street NE and 2nd Street NE may need to be restricted due to capacity constraints and turning vehicle conflicts

• Option D: Sharrows
  – 2 eastbound lanes, 2 westbound lanes
  – Bikes would transition to/from bike lanes on K Street NE and ride with traffic under the railway bridge
Section 2: 2\textsuperscript{nd} St to 6\textsuperscript{th} St NE

- Existing conditions:
  - AM peak period has 1 eastbound travel lane, 2 westbound travel lanes
    \textit{(north side of K Street NE is signed as “No Standing or Parking” from 7AM to 9:30AM)}
  - PM peak period has 2 eastbound travel lanes, 1 westbound travel lane
    \textit{(south side of K Street NE is signed as “No Standing or Parking” from 4PM to 6:30PM)}
  - Off-peak period has 1 eastbound travel lane, 1 westbound travel lane
Section 2: 2\textsuperscript{nd} St to 6\textsuperscript{th} St NE

- Proposed cross-section includes 1 travel lane in each direction, bike lanes, and full-time parking on the south side of the street.
  - Curb extensions proposed along south side of street except at bus stop and turn lane locations
  - Eastbound left-turn lane proposed at 6\textsuperscript{th} Street due to volume of turning vehicles
### Section 2: 2nd St to 6th St NE

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<th>Proposed 24-Hr Parking</th>
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Section 3: 6th St to 12th St NE

- Proposed cross-section includes 1 travel lane in each direction, with full-time parking and curb extensions on both sides of the street.
  - Curb extensions proposed on both sides of street, except at bus stop and turn lane locations
  - Eastbound left-turn lane proposed at 8th Street due to volume of turning vehicles
  - North side of 600 block of K Street NE would remain restricted as “No Parking” from 7AM to 4PM due to school activity
## Section 3: 6<sup>th</sup> St to 12<sup>th</sup> St NE

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NEXT STEPS
Next Steps

Where do we go from here?

- DDOT will advance 65% design plans to 100% for bike lanes between 2nd Street and 6th Street NE and road diet concept east of 6th Street NE. Completion likely in Spring 2019.
- Additional study and “test” closure of railway bridge portals in Spring 2019. Short-term implementation will likely include sharrow under railway bridge.
- Notice of Intent (NOI) required for any changes to traffic control and/or parking. NOI opens 30 business-day public comment period. NOI to be issued in Spring 2019.
- Implementation proposed for Summer 2019.
- DDOT will present refined alternatives for West Virginia Avenue/9th Street/L Street NE to ANC 6A Transportation Committee in February 2019.

Questions? Contact:

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