PROPOSED
SECOND AVE/WAYNE AVE
SEPARATED BIKE LANES

Spring Street to Georgia Avenue
Vicinity Map
Project Background

- **Scope**
  - Construct bike lanes in accordance with Silver Spring CBD (2000) Master Plan recommendations for a bikeway along Second and Wayne Avenues between Spring Street and Georgia Avenue.

- **Why now?**
  - This project is being advanced now to build a protected bikeway network in Silver Spring. It will follow the Spring Street/Cedar Street Separated Bike Lanes project, which is being constructed in Spring 2017.
  - Second/Wayne is a good candidate for separated bike lanes because of excess lane capacity throughout the corridor.
BiPPA Program

- Bicycle and Pedestrian Priority Area Program.
- This project is funded through this program, which targets bicycle and pedestrian improvements in certain urban areas which have been designated as BiPPAs.

- 31 BiPPAs exist in Montgomery County.
  - Improvements are funded in Silver Spring and Grosvenor.
  - An additional 3 BiPPAs have been studied (Glenmont, Randolph/Veirs Mill, and Wheaton).
  - 3 new BiPPAs will be studied this year (Takoma-Langley, University/Piney Branch, & Flower/Piney Branch/Arliss).
Separated bike lane

A separated bike lane is a bike lane that includes a physical barrier between the bikeway and traffic. The barrier can be a curb, parked cars, flexposts, planters, or a similar object.

Separated bike lanes offer more protection and less stress for all types of cyclists than a traditional bike lane.
Montgomery County’s fifth cycletrack

- Woodglen Drive in White Flint was the first in 2014.
- In 2016, Nebel Street and Glenbrook Road.
- Spring Street construction upcoming.
Why Second & Wayne?

- Bicycling is becoming more popular as a mode of transportation, and offers a sustainable way for people to get around the County.

- Silver Spring is growing more urban, and new cycling facilities are needed to help residents, workers, and shoppers get around safely.

- Second and Wayne Avenues connect other cycling facilities and will help cyclists connect to Metro and many nearby dwellings, jobs, and recreational and entertainment venues.
Connections

- Second and Wayne Avenue Bikeway connects several existing or proposed cycling facilities, including:
  - Spring/Cedar separated bike lanes
  - Second Avenue bike route
  - Cameron St bike lanes
  - planned Dixon Ave bike lanes
  - future Capital Crescent Trail
  - future Metropolitan Branch Trail
  - future Silver Spring Green Trail

Existing and planned bikeways. Map from Montgomery County Planning Dept.
Existing Conditions

- Conditions along Second Avenue and Wayne Avenue vary greatly throughout the corridor
- Number of Lanes:
  - 2 from Spring St to Fenwick Ln with two-way left turn lane
  - 4 from Fenwick Ln to Colesville Rd (MD 384)
  - 6 from Colesville Rd to Ramsey Av
  - 4 (+2 former bus lanes) from Ramsey to Georgia Av
- Parking: Spring St to Fenwick Ln
- Median: Fenwick Ln to Colesville Rd and Ramsey Av to Georgia Av
Existing Typical Sections

- **Second Av at Spring St**
  - Two-way left turn lane is not necessary for traffic flow.
  - Driveways are low-volume, and some have been removed over time.

Example only. Conditions may vary.
Existing Typical Sections

- Second Av at Cameron St
  - Excess capacity.

Example only. Conditions may vary.
Existing Typical Sections

- **Wayne Av at Colesville Rd**
  - No excess space or capacity.
  - This is the most constrained part of the corridor.

Example only. Conditions may vary.
Existing Typical Sections

- Wayne Av at Dixon Av
  - Bus layover areas are now unused
Proposed Conditions

- **Spring St – Fenwick Ln:**
  - Conventional bike lanes.
  - Bike lanes are 5’ in width on either side.

- **Fenwick Ln – Colesville Rd:**
  - One-way separated bike lanes on each side of the street.
  - Each lane is 6’ in width with a 6’ buffer.

- **Colesville Rd – Georgia Av:**
  - Two-way separated bike lane (cycletrack) on the north (Discovery Channel) side of the street.
  - Cycletrack is 8’ wide with a 2’ to 3’ buffer.
Proposed Typical Sections

- **Second Av at Fenwick Ln**
  - Two-way left turn lane removed
  - Parking is retained

Example only. Conditions may vary.
Proposed Typical Sections

- Second Av at Cameron St
  - Right lane is removed and converted to bike lane + buffer
Proposed Typical Sections

- Wayne Av at Colesville Rd
  - Roadway is constrained here.
  - Accommodate bike lanes by relocating curb.

Example only. Conditions may vary.
Proposed Typical Sections

- Wayne Av at Dixon Av
  - Use former bus layover locations for bikeway on north (Discovery) side of Wayne.
Intersections

- Two-stage queue box pavement marking
Intersections

- Two-stage queue boxes
  - Most signalized intersections will get two-stage queue boxes.
  - Benefits of two-stage queue boxes:
    - Allows safer/more comfortable left turns for cyclists off of the cycletrack.
    - Separates turning cyclists from through cyclists.
    - Reduces turning conflicts between cyclists and motorists.
Intersections

- Colored conflict area
Intersections

- Colored conflict areas
  - Signalized and unsignalized crossings and driveways will be marked with colored pavement.
  
- Benefits of colored conflict areas:
  - Increases the visibility of cyclists
  - Raises awareness of conflict areas to both cyclists and motorists.
  - Reinforces cyclist priority over turning vehicles.
  - Guides cyclists through the intersection.
  - Makes bicycle movements more predictable.
Intersections

- Floating bus stop
Floating bus stop

A floating transit stop avoids requiring buses to pull into the bike lane to discharge passengers.

Benefits:
- Avoids buses pinching cyclists against curb.
- Transit patrons have exclusive waiting area.
Intersections

- Protected Intersection
Intersections

- Protected Intersection
  - A protected intersection provides an additional level of safety for cyclists at intersections.

- Benefits:
  - Slows cyclists
  - Slows turning vehicles
  - Improves driver view of cyclists
  - Provides better pedestrian visibility
Intersections

- Bike Signals
  - Bike signals are signals that specifically govern the movement of cyclists in an intersection.

- Benefits
  - May allow a protected movement for cyclists
  - May limit cyclist exposure to turning traffic
  - Can be better timed to suit cyclists than pedestrian and motorist signals
Colesville Transition

- Second Ave has a pair of one-way separated bike lanes.
- Wayne Ave has a two-way cycletrack on the north side.
- This will require a transition between the two types.

Design treatment:

- Signal phase protection using bike signals.
- Eastbound cyclists first cross Second with bike signal, then immediately cross Colesville with bike signal.
- Cyclists bound for Metro can cross in southern crosswalk.
Intersections

- Colesville Transition

- Eastbound cyclists approach along Second
- Cyclists wait briefly for signal
- Cyclists cross Second with bike signal
- Cyclists wait for signal
- Cyclists cross Colesville with bike signal

- Westbound cyclists approach along Wayne
- NO TURN ON RED

Bicycle and Pedestrian Priority Areas
Intersections

- Colesville Transition

NO TURN ON RED
Intersections

☐ Colesville Transition

Colesville Road Thru Movement

NO TURN ON RED
Colesville Transition

Transit Left
WB Wayne Right

Cyclists cross Second with bike signal

NO TURN ON RED
Intersections

- Colesville Transition

Cyclists cross Colesville with bike signal

NO TURN ON RED

WB Wayne Thru & Left

NO TURN ON RED
Intersections

- Colesville Transition

EB Second Thru, Right, Left
Schedule

- Final design complete Summer 2017.
- MCDOT hopes to construct the Second/Wanye Avenue separated bike lanes in Fall 2017 or Spring 2018.
- Schedule dependent on permitting and other approvals.
- Construction duration approximately 3-4 months.
Comment Period

Public comment period closes
Wednesday, December 21

Send comments to
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