

Planning Board Work Session #5
October 4, 2018









⊕-Ճ-֍-ভ VEIRS MILL CORRIDOR MASTER PLAN

WORK SESSION #4 SUMMARY

- Overview of Vision Zero
- Strategies to Improve Roadway Safety
- Street Network Recommendations to Advance Vision Zero

WORK SESSION #5 OVERVIEW

- Pedestrian, Bicycle and Transit Recommendations
- Pedestrian Level of Comfort Analysis
- Next Steps

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TRANSPORTATION GOAL

 Transform Veirs Mill Road from a motor vehicle-dominated corridor to a safe, efficient and comfortable complete street that serves pedestrians, bicyclists, transit users and motorists.



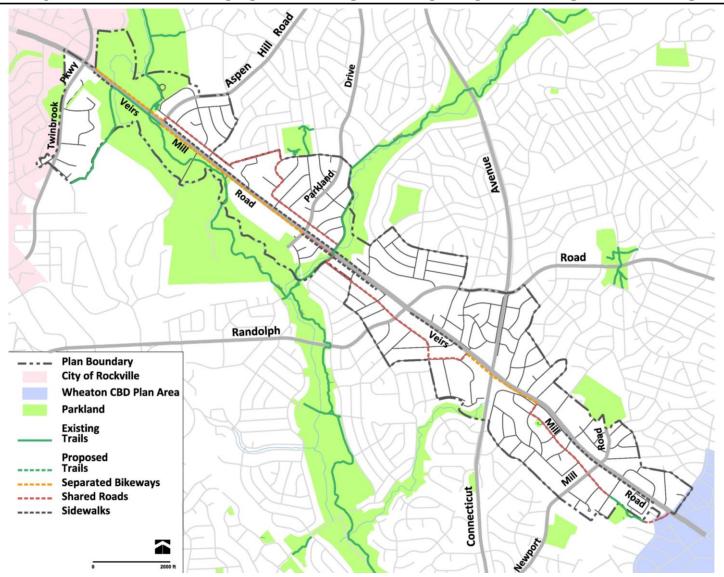
Transform Veirs Mill Road to a Complete Street

(a)-(a)-(b)-(b)-(c) VEIRS MILL CORRIDOR MASTER PLAN



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SHORT TERM SIDEWALK AND BICYCLE NETWORK – PUBLIC HEARING DRAFT PAGE 42





PEDESTRIAN AND BICYCLE NETWORK - SHORT-TERM RECOMMENDATIONS

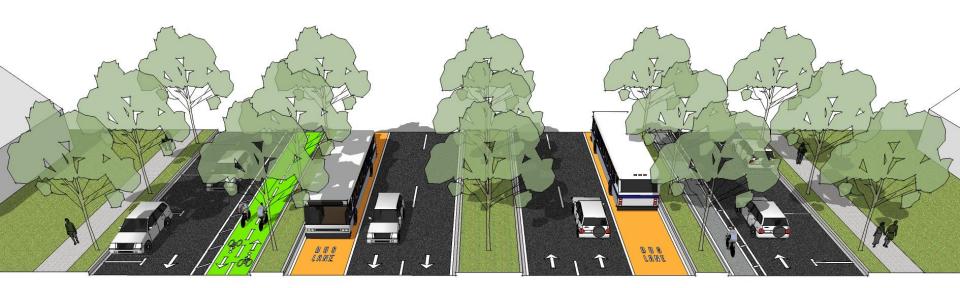
Public Hearing Draft, Pages 8, 37 and 40

- Improve pedestrian infrastructure for the length of Veirs Mill Road and on residential streets that provide a connection between existing and proposed transit and to schools, parks and community facilities.
- Develop an interim continuous bicycle network along Veirs Mill Road and parallel streets to provide a connection between existing transit and community uses.

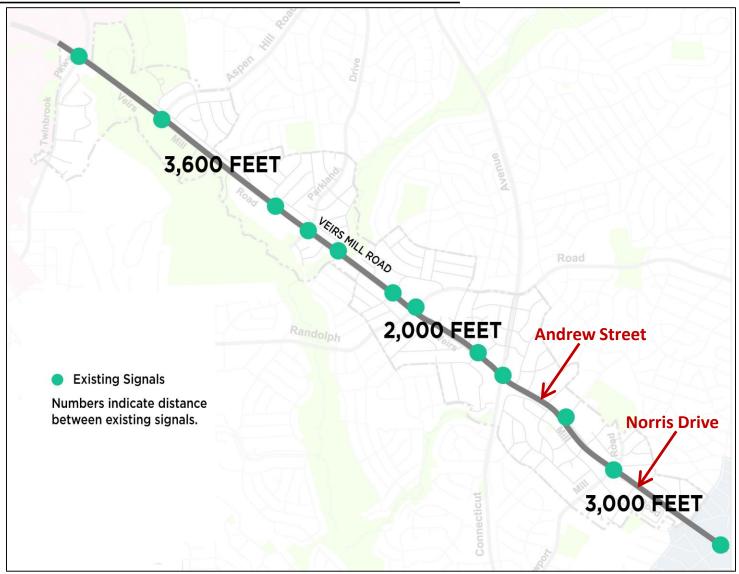
BICYCLE NETWORK – LONG TERM RECOMMENDATIONS

Public Hearing Draft, Page 40

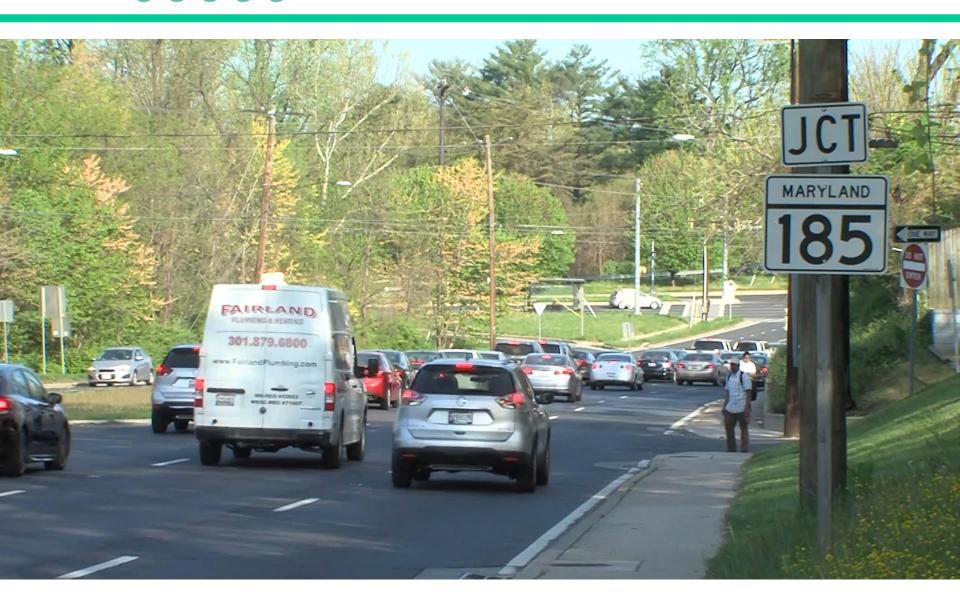
 With the design and implementation of long-term redevelopment or infrastructure projects, such as bus rapid transit, provide a combination of dedicated bicycle facilities on Veirs Mill Road and select intersecting streets to align with the 2018 Bicycle Master Plan network.



<u>PEDESTRIAN RECOMMENDATIONS – EXISTING SIGNALS</u>



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<u>PEDESTRIAN RECOMMENDATIONS – EXISTING AND PROPOSED PROTECTED CROSSINGS</u>

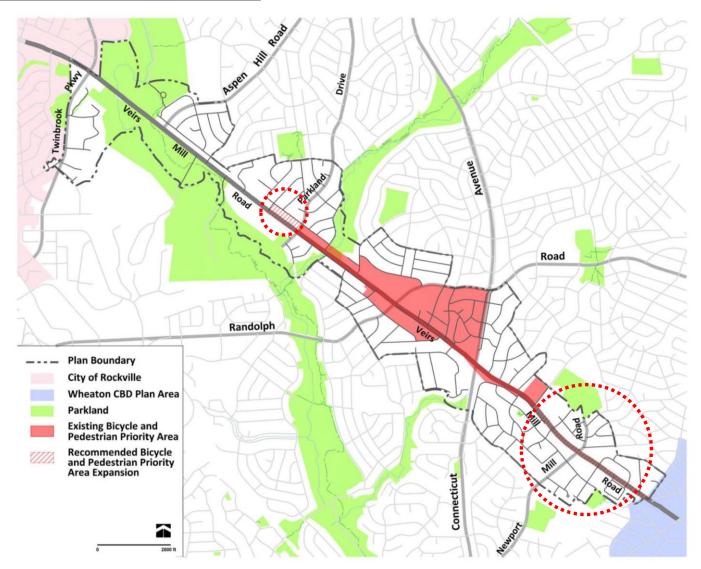


MATTHEW HENSON TRAIL CROSSING



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BICYCLE PEDESTRIAN PRIORITY AREA



PEDESTRIAN NETWORK RECOMMENDATIONS – SUGGESTED REVISIONS

- Provide the following improvements for the Matthew Henson Trail crossing of Veirs Mill Road:
 - Provide a protected crossing that eliminates conflicts and has a high rate of compliance. A first step is a full traffic signal or similar device, but additional enforcement such as red-light cameras may be needed. Install a full traffic signal to improve safety for pedestrians, bicycles, transit users and motorists. This is the highest priority protected crossing signal recommended by this master plan.
 - Introduce additional <u>pedestrian-scale</u> lighting to improve visibility at the crosswalk and within the pedestrian refuge island.
 - In the long-term, provide a grade separated crossing of Veirs Mill Road in the long term for users of the Matthew Henson Trail and preserve a protected at-grade crossing.

PEDESTRIAN NETWORK RECOMMENDATIONS – SUGGESTED REVISIONS

- Introduce additional protected crossings at the following locations that
 eliminate conflicts and have high rates of compliance. The first recommended
 step is a traffic control device, including a full traffic signal, hybrid pedestrian
 beacon or similar device, but other changes such as red-light enforcement may
 be needed. signalized intersections with pedestrian activated signals at the
 following locations to provide additional safe crossing opportunities for
 pedestrians, bicyclists and transit users. These locations intersections are listed
 in order of priority, following the signal at the Matthew Henson Trail crossing.
 - Veirs Mill Road and Andrew Street Valleywood Drive.
 - Veirs Mill Road and Norris Drive.
 - Veirs Mill Road and Arbutus Avenue.
 - Veirs Mill Road and Pendleton Drive.
 - <u>Twinbrook Parkway and Halpine Road.</u>
 - <u>Twinbrook Parkway and Vandegrift Avenue.</u>



PURPOSE

- Identify inadequate locations in the walking network.
- Quantify how different investment increase pedestrian connectivity.

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High-Quality



Acceptable



Unacceptable

WALKWAY FACTORS

- Volume of traffic
- Posted speed limit
- Presence and width of a walkway
- Presence and width of a buffer with traffic

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CROSSING FACTORS

- Number of lanes to cross
- Posted speed limit of cross street
- Channelized right turn lanes
- Presence of pedestrian refuge island
- Presence of a traffic signal
- Presence of marked crosswalk
- Right turn on red restrictions



Channelized Right Turn



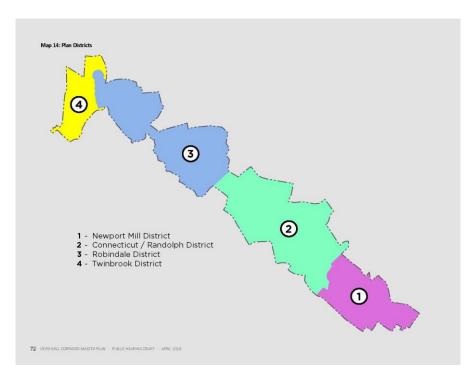
Pedestrian Refuge Island

METHODOLOGY COMPONENTS

- Developed by UMD National Center for Smart Growth
- Estimation of Walking Trips
 - Land Use
 - Trip Distance

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CONNECTIVITY ANALYSES





Areawide Analysis

Bus Stop Analysis

MASTER PLAN PHASES

- Existing
- Short-Term
- Long-Term

AREAWIDE PEDESTRIAN CONNECTIVITY

District	Existing	Short Term	Long Term
Twinbrook	54%	50%	66%
Robindale	61%	80%	95%
Connecticut/Randolph	49%	67%	97%
Newport Mill	49%	49%	86%
Overall	52%	59%	84%

BUS STOP CONNECTIVITY

Bus Stop Location	Existing	Short Term	Long Term
Overall	0%	5%	74%

BUS STOP CONNECTIVITY: EXISTING



BUS STOP CONNECTIVITY: SHORT TERM



BUS STOP CONNECTIVITY: LONG TERM



BUS STOP CONNECTIVITY

Bus Stop Location	Existing	Short Term	Long Term
Twinbrook Pkwy	0%	0%	0%
Turkey Branch Pkwy	0%	83%	83%
Havard St	0%	0%	41%
Randolph Rd	0%	0%	65%
Bushey Dr	0%	0%	43%
Ferrara Ave	0%	0%	78%
Connecticut Ave	0%	0%	81%
Galt Ave / College View Dr	0%	0%	0%

TRANSIT NETWORK RECOMMENDATIONS

- Improve the quality of and access to existing bus stops and future BRT stations.
- Support the alignment and implementation of the short-term BRT alternative.
- Evaluate proposed BRT station locations to prioritize those that have proximity to higher density land uses and community facilities and potential for near-term redevelopment.







TRANSIT NETWORK RECOMMENDATIONS – SUGGESTED REVISIONS

- Improve the quality of and access to existing bus stops and future BRT stations.
 - Install continuous sidewalks and new signalized pedestrian protected crossings on Veirs Mill Road to reduce distance between existing crossings.
 - Locate existing bus stops at <u>signalized</u> <u>protected</u> crossings to improve safety <u>and simplify access</u> for transit riders.
- Implement the short-term BRT alternative identified through the 2016 Veirs Mill Road Bus Rapid Transit Study to provide improved transit service to residents and employees of the plan area. With the implementation of the short-term BRT alternative, construct all sidewalks and interim bikeways to provide safe and convenient access to BRT stations.

TRANSIT NETWORK RECOMMENDATIONS – SUGGESTED REVISIONS

- Advance planning and design for the long-term BRT alternative identified through the 2016 Veirs Mill Road Bus Rapid Transit Study.
- Evaluate proposed BRT station locations to prioritize those that have proximity to higher density land uses, have potential for near-term redevelopment and provide improved access to community facilities.
 - Future planning and design studies should relocate the proposed BRT station from Parkland Drive to Robindale Drive. For example, Also, if the existing garden-style apartments on Twinbrook Parkway or the Twinbrook Center in the City of Rockville is redeveloped, future planning and design studies for the long-term BRT alternative should evaluate the appropriate location relocation of the BRT station from at Twinbrook Parkway Road to Atlantic Avenue in the City of Rockville. Likewise future planning and design studies should evaluate the connectivity, accessibility and ridership benefits of relocating the BRT station from Parkland Drive to Robindale Drive.

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NEXT STEPS

- Work Session #6 November 29
 - Transportation Modeling Update







