



Veirs Mill Corridor Master Plan: Work Session #5

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SUMMARY

During the fifth work session, staff will continue discussions with the Planning Board on the transportation recommendations in the Veirs Mill Corridor Master Plan Public Hearing Draft. The Veirs Mill Corridor Master Plan envisions the transformation of Veirs Mill Road from a motor-vehicle dominated street to a safe, efficient and comfortable “complete street” that serves pedestrians, bicyclists, transit users and motorists and connects communities to transit, neighborhood uses and community facilities. The master plan’s transportation recommendations seek to increase safety for all road users and prioritize improvements for pedestrians, bicyclists and transit users. In developing the plan’s transportation recommendations, staff applied the principles of Vision Zero, which is an international movement to eliminate traffic-related fatalities and severe injuries.

SCHEDULE

The Planning Board’s public hearing on the Veirs Mill Corridor Master Plan was held on April 26, 2018 and the Board held three work sessions focused on the land use and zoning recommendations in the public hearing draft on May 17, June 7 and July 12. The fourth work session, held on September 20, initiated discussion on the transportation recommendations.

On October 4, staff will continue discussions with the Planning Board on this master plan’s transportation recommendations. Additional work sessions are tentatively scheduled for November 8, 15 and 29.

Key milestones in the Veirs Mill Corridor Master Plan process include the following:

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| January 11, 2018 | Preliminary Recommendations presented to the Planning Board; Presentation on Vision Zero by Kittelson and Associates, Inc. |
| March 8, 2018 | Working Draft presented to the Planning Board |
| March 22, 2018 | Public Hearing Draft available |
| April 26, 2018 | Planning Board Public Hearing |
| May 17, 2018 | Planning Board Work Session #1 |
| June 7, 2018 | Planning Board Work Session #2 |
| July 12, 2018 | Planning Board Work Session #3 |
| September 20, 2018 | Planning Board Work Session #4 |
| October 4, 2018 | Planning Board Work Session #5 |

November 8, 2018 Planning Board Work Session #6 (Tentative)
November 15, 2018 Planning Board Work Session #7 (Tentative)
November 29, 2018 Planning Board Work Session #8 (Tentative)

WORK SESSION PURPOSE

The purpose of the fifth work session is to continue discussions on the transportation recommendations in the Veirs Mill Corridor Master Plan Public Hearing Draft. The work session will focus on the pedestrian, bicycle and transit recommendations, as discussed in greater detail in the following paragraphs.

PEDESTRIAN AND BICYCLE INFRASTRUCTURE

Veirs Mill Road currently lacks basic pedestrian and bicycle facilities. A primary focus of this master plan is to develop a well-connected network of convenient and safe pedestrian and bicycle facilities to improve safety, enhance connectivity and further support alternatives to traveling by motor vehicles. The Public Hearing Draft of the Veirs Mill Corridor Master Plan proposes a combination of short-term and long-term recommendations, discussed in greater detail on pages 37-44 of the draft plan, to provide this essential infrastructure, including sidewalks, bikeways and safe crossing opportunities.

This master plan recommends prioritizing pedestrian and bicycle infrastructure that provides connectivity to Veirs Mill Road from area schools, parks and other community facilities, as well as improved connectivity to existing bus stops and future transit stops. While a well-connected network of sidewalks, bikeways and safe crossing opportunities are desired throughout the plan area, this master plan acknowledges the need to prioritize this infrastructure for project planning and funding purposes.

The priorities for sidewalk and bikeway installation are locations where pedestrian and bicycle infrastructure do not currently exist on either side of Veirs Mill Road, such as between Gridley Road and Gaynor Road, and locations that provide improved access to transit and community uses, such as between Ferrara Avenue and Randolph Road or between Schoolhouse Circle and Glorus Place.

Priorities for New Protected Crossings

Crossing Veirs Mill Road is challenging for pedestrians and bicyclists for several reasons, including the lack of continuous sidewalks and bikeways, high traffic volumes, high vehicle travel speeds, long distances between signalized crossings, and wide crossings that cause pedestrians to traverse several vehicle travel lanes. Some of the pedestrian crossings on Veirs Mill Road are located at signalized intersections aided by pedestrian-activated traffic signals. However, signalized intersections along the corridor are spaced at wide intervals (some as much as 3,000 feet, a walk of over 10 minutes), which is a concern because there are many intersections that pedestrians utilize to connect to the bus stops and other uses along the corridor.

The Veirs Mill Corridor Master Plan Public Hearing Draft includes recommendations for new protected crossings. A protected crossing is a treatment, or a combination of treatments, designed to improve the safety and comfort of pedestrians and bicyclists crossing the street, typically at a protected intersection or mid-block crossing. Protected crossing treatments include elements such as traffic signals, pedestrian beacons, medians and raised, textured or painted crosswalks designed to provide an increased level of visibility, protection and comfort for pedestrians and bicyclists and increase predictability for motorists.

The recommendations for new protected crossings, included on page 38 of the draft plan, are prioritized based on several factors, including the distance between existing signalized crossings, proximity to community uses and transit stops, existing transit ridership (boarding and alighting), and limited crash data. The recommended protected crossing locations and overall prioritization are summarized in Table 1 and discussed in greater detail in the following paragraphs.

Table 1: Prioritization of New Protected Crossings

<u>Priority</u>	<u>Location</u>
1	Turkey Branch Parkway / Matthew Henson Trail Crossing
2	Valleywood Drive
3	Norris Drive
4	Arbutus Avenue

Turkey Branch Parkway (Matthew Henson Trail Crossing)

The Matthew Henson Trail Crossing is in the Turkey Branch stream valley at the base of two hills along Veirs Mill Road. The existing crossing is characterized by a switchback design to emphasize the visibility of pedestrians, bicyclists and motorists. According to the Maryland State Police, there were 45 crashes at this location between January 2015 and December 2017, including four crashes involving bicycles, two of which were fatal.

Following the two bicycle fatalities, the Montgomery County Department of Parks formed an interagency work group to evaluate, recommend and implement additional safety measures at the trail crossing. The work group included representatives of the Maryland-National Capital Park and Planning Commission, Maryland Department of Transportation State Highway Administration (MDOT SHA), Montgomery County Department of Transportation (MCDOT) and Montgomery County Police.

Simultaneously, MDOT SHA upgraded the existing trail crossing from a pedestrian beacon to a pedestrian-activated signal. Despite the installation of the pedestrian-activated signal, challenges remain. For example, the existing signal poles reduce visibility, making it difficult for pedestrians to see oncoming traffic and for traffic to see pedestrians.

According to data provided by MDOT SHA, compliance with the pedestrian-activated signal is also a challenge. Observations in May 2018 indicated that 71 percent of pedestrians and bicyclists pushed the button to activate the signal, but 46 percent proceeded into the crossing before the signal was activated. Only 30 percent of motorists complied with the traffic control. These rates of compliance represent a failure to address the safety issues at the crossing.

Based on the number of traffic-related severe injuries and fatalities, limited compliance with the existing pedestrian-activated signal and the vulnerability of pedestrians and bicyclists crossing in this location, additional refinements are necessary. The Veirs Mill Corridor Master Plan recommends the installation of a full traffic signal to improve safety. The Plan further recommends the relocation of the existing

crosswalk to provide a direct connection across Veirs Mill Road to reduce the crossing distance and delay for motorists. In the long-term, consistent with the recommendations of the Bicycle Master Plan, the Veirs Mill Corridor Master Plan recommends a grade-separated crossing.

The MDOT SHA District 3 Traffic and Travel Forecasting and Analysis Division recently recommended the conversion of the existing pedestrian beacon to a full traffic signal at the Matthew Henson Trail Crossing, consistent with the recommendations of this master plan. While the commitment to convert the existing beacon to a full traffic signal demonstrates progress, staff encourages MDOT SHA to consider implementation of the master plan's short-term recommendations for the crossing, including the realignment of the existing crosswalk to provide a direct connection across Veirs Mill Road.

Valleywood Drive

The intersection of Veirs Mill Road with Valleywood Drive and Gail Street includes a high-visibility marked crosswalk with pedestrian-warning signs. The westbound bus stop on Veirs Mill Road between Valleywood Drive and Andrew Street is heavily used, as are the eastbound bus stops located on Veirs Mill Road at Centerhill Street and Gail Street. While the marked crosswalk and warning signs provide some protection for pedestrians and bicyclists to access the bus stop at Gail Street, field observations and worn pedestrian paths in the median of Veirs Mill Road suggest that pedestrians are crossing Veirs Mill Road outside the marked crosswalk to access the bus stop at Centerhill Street.

A traffic study conducted in coordination with the Veirs Mill Corridor Master Plan recommends the consolidation of bus stops, the relocation of the existing marked crosswalk and the installation of a pedestrian-activated signal at Andrew Street to improve the safety for pedestrians, bicyclists and transit users. The Veirs Mill Corridor Master Plan recommends a protected crossing at this location, which may include a full traffic signal or a pedestrian-activated signal.

Norris Drive

Norris Drive provides a direct connection between Veirs Mill Road and two Montgomery County Public Schools: Newport Mill Middle School and Albert Einstein High School. In addition, eastbound and westbound bus stops are also located at the intersection of Veirs Mill Road and Norris Drive. As witnessed during field observations, school-aged children regularly cross Veirs Mill Road at this intersection to access the middle school and high school. As Norris Drive is located between the signalized crossings of Veirs Mill Road at University Boulevard (approximately 2500 feet to the east) and Veirs Mill Road at Newport Mill Road (approximately 650 feet to the west), many pedestrians elect to cross outside a marked crosswalk. Due to the distance between signalized crossings and the proximity to the schools, the Veirs Mill Corridor Master Plan recommends a protected crossing at the intersection of Veirs Mill Road and Norris Drive, which may include a full traffic signal or a pedestrian-activated signal.

Arbutus Avenue

Arbutus Avenue provides a connection between the Aspen Hill community, Parklawn Local Park and the Rock Creek Trail. However, the nearest protected crossing opportunities of Veirs Mill Road are approximately 1,500 feet west of Arbutus Avenue at Aspen Hill Road and approximately 2,100 feet east of Arbutus Avenue at Robindale Drive. This represents a total distance of approximately 3,600 feet between protected crossings on a heavily used transit corridor.

This location does not meet the existing warrants for a traffic signal, but a protected crossing should be considered to increase connectivity between the community, transit and community facilities including Parklawn Local Park and the Rock Creek Trail. The existing distance between protected crossing opportunities encourages pedestrians, bicyclists and transit users to cross at unsignalized locations, which is life-threatening on a corridor with the high volume, high-speed traffic of Veirs Mill Road. For this reason, the Veirs Mill Corridor Master Plan recommends a protected crossing at the intersection of Arbutus Avenue and Veirs Mill Road. A protected crossing could be integrated with the redesign of Parklawn Local Park to provide improved access for pedestrians, bicyclists and motorists.

Vehicle Travel Times with New Traffic Signals

The Veirs Mill Corridor Master Plan recognizes that vehicular mobility is critical along Veirs Mill Road. For this reason, the vehicle travel times were analyzed to provide a comparison between existing conditions and a future with four new full traffic signals at the above referenced locations. The existing and future vehicle travel times, which are inclusive of the time spent at a red light, are outlined in Table 2.

Table 2: Vehicle Travel Times with New Traffic Signals

Peak Hour	Scenario	Travel Time (minutes)	
		Eastbound	Westbound
AM	Existing	18.1 min	17.9 min
	Future with Four New Signals	19.8 min	18.5 min
PM	Existing	19.3 min	18.8 min
	Future with Four New Signals	19.4 min	21.9 min

The vehicle travel times remain largely consistent with the introduction of four new traffic signals, suggesting that vehicular mobility is maintained even with the introduction of protected crossings which improve connectivity and safety for pedestrians, bicyclists and transit users.

Pedestrian Level of Comfort

The pedestrian level of comfort analysis was initiated by staff to identify locations in the walking network that are uncomfortable due to inadequate or incomplete sidewalks and crossings and to quantify how different investments will increase connectivity. The analysis was inspired by the Bicycle Level of Traffic Stress analysis conducted for the 2018 *Bicycle Master Plan*.

The pedestrian level of comfort analysis is a work in progress that is being applied to the short-term and long-term pedestrian network recommendations of the Veirs Mill Corridor Master Plan. The short-term recommendations include the installation of walkways on Veirs Mill Road and on residential streets that provide a connection between existing and proposed transit and schools, parks and community facilities. The long-term recommendations include improvements such as pedestrian refuge islands, elimination of dual left-turn lanes, channelized right-turn lanes and additional protected crossing opportunities.

The analysis evaluates pedestrian connectivity for the master plan’s districts as well as the degree to which residential units are connected to specific locations such as schools and transit stops. Table 3 identifies the pedestrian connectivity associated with the short-term and long-term recommendations

for each of the districts identified in the Veirs Mill Corridor Master Plan as well as the overall connectivity for the plan area. Under existing conditions, overall connectivity is 49 percent. This grows to 59 percent with the short-term recommendations in the plan and to 85 percent with the plan’s long-term recommendations. The greatest pedestrian connectivity improvements occur in the Connecticut / Randolph District, which shows a pedestrian connectivity increase of 51 percent. While the Robindale, Connecticut / Randolph and Newport Mill districts all reach connectivity rates of nearly 90 percent or greater in the long-term scenario, the Twinbrook District only reaches 66 percent connectivity. This is because many of the pedestrian trips that start or end in the Twinbrook District are traveling to and from nearby areas of the City of Rockville and Twinbrook that are outside of the plan area, where pedestrian connectivity is not improved by the Veirs Mill Corridor Master Plan.

While Table 3 suggests that connectivity declines in the Twinbrook District and remains constant in the Newport Mill District with the short-term recommendations, it is important to note that this is a result of improved connectivity to other districts within the master plan area. Pedestrians are dispersed to other districts in the master plan area because of improved connectivity and additional options.

Table 3: Areawide Pedestrian Connectivity Analysis

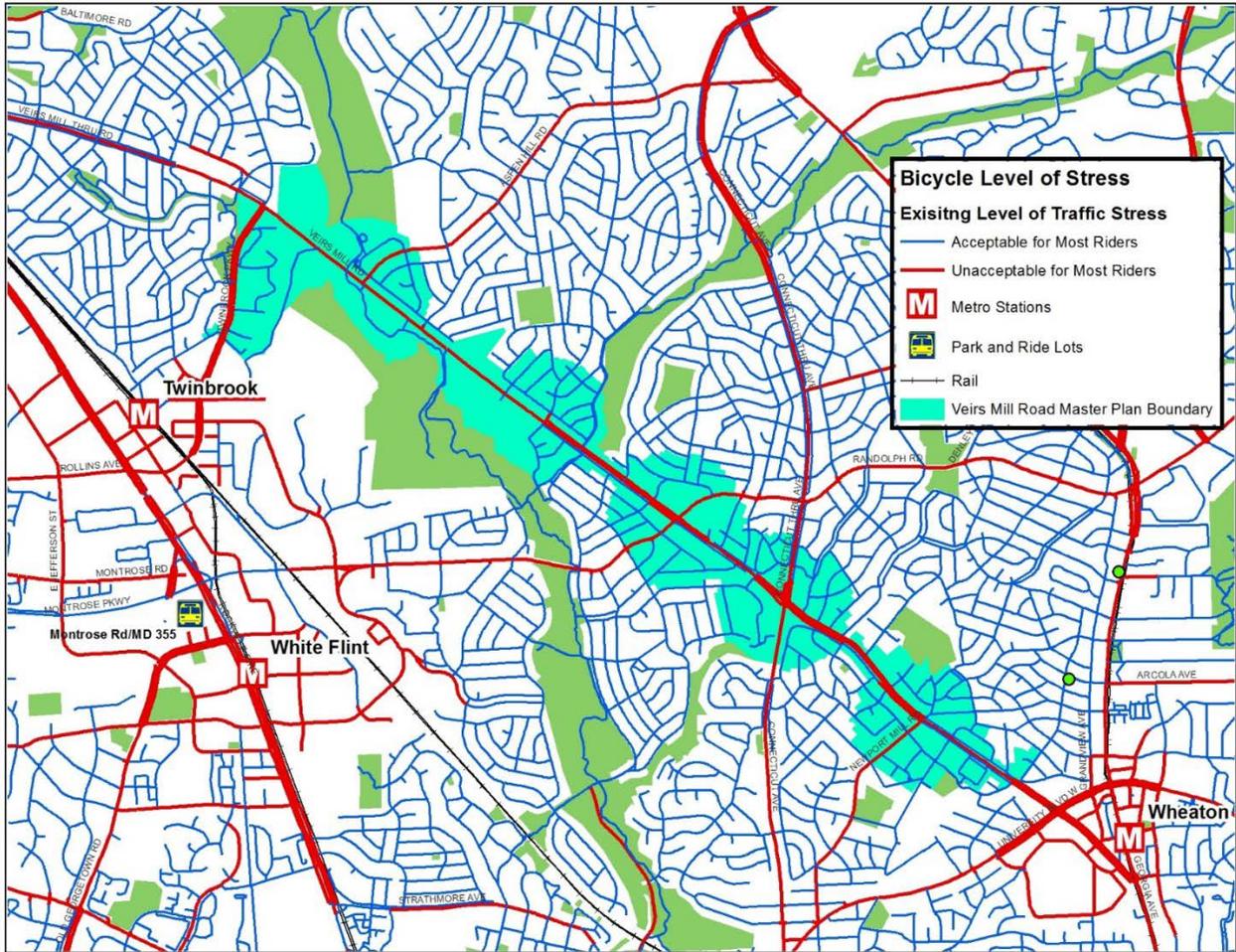
District	Existing	Short Term	Long Term
Twinbrook	54%	50%	66%
Robindale	61%	80%	95%
Connecticut/Randolph	49%	67%	97%
Newport Mill	49%	49%	86%
Overall	52%	59%	84%

Bicycle Level of Traffic Stress

The Veirs Mill Corridor Master Plan recommends a bicycle network that enables people of all ages and bicycling abilities to ride to school, run errands, and commute to work on a network that is safe, comfortable, and accessible. The plan creates this environment by connecting the existing low-stress bicycling network, composed of trails and residential streets, with interim and long-term bicycle improvements on higher-volume and high-speed roads. The interim and long-term bicycle recommendations are discussed in greater detail on pages 40 – 43 of the draft plan.

As shown by the blue lines in Figure 3, most of the streets within the plan area are considered low-stress today as they are characterized by an environment in which people of all ages and abilities feel comfortable and safe bicycling. However, Veirs Mill Road, Aspen Hill Road, Randolph Road, Connecticut Avenue and Newport Mill Road, shown in red in Figure 1, interrupt the low-stress network and deter bicycling as a safe, convenient mode of transportation. Only 15 percent of the potential bike trips in the plan area are possible on a low-stress network today due to these high-volume, high-speed roads which bisect the low-stress network.

Figure 1: Bicycle Level of Stress



The Veirs Mill Corridor Master Plan recommends interim improvements to provide a continuous low-stress connection for the length of the plan area and encourage bicycle use. The interim improvements include a combination of facilities, such as neighborhood greenways, sidepaths and improved trail connections to provide critical connections for a parallel interim network.

With the design and implementation of long-term redevelopment or infrastructure projects, such as bus rapid transit, the Veirs Mill Corridor Master Plan recommends dedicated bikeways on Veirs Mill Road and select intersecting streets to align with the 2018 *Bicycle Master Plan*. The long-term recommendations include a sidepath on the north side of Veirs Mill Road that transitions to a two-way separated bike lane and sidewalk at areas with commercial land use, including the Stonemill Square Shopping Center. In addition, the plan recommends two-way separated bicycle lanes and a sidewalk on the south side of Veirs Mill Road. The two-way separated bike lanes and sidewalk are recommended to transition to a sidepath between the future Montrose Parkway and the western plan boundary. With the implementation of the long-term recommendations, approximately 77 percent of the potential bike trips in the plan area will be possible on a low-stress network.

Bicycle Pedestrian Priority Area

To further prioritize the bicycle and pedestrian enhancements along Veirs Mill Road, the Public Hearing Draft of the Veirs Mill Corridor Master Plan recommends the expansion of the current Veirs Mill Road and Randolph Road Bicycle and Pedestrian Priority Area (BiPPA), designated by the 2013 *Countywide Transit Corridors Functional Master Plan*. The intersection of Veirs Mill Road and Randolph Road experiences substantial pedestrian volumes. The 2017 *Mobility Assessment Report* ranked the intersection as one of the highest pedestrian counts in the county (24 out of 50). These volumes are anticipated to grow with the implementation of BRT proposed on both Veirs Mill Road and Randolph Road, as well as the potential for walkable, transit-oriented development.

The Veirs Mill Corridor Master Plan recommends an expansion of the existing BiPPA area to include the area between Robindale Drive and Parkland Drive, as well as the area between Claridge Road and the Wheaton Central Business District, due to the higher amount of walking and bicycling in these areas today and due to the growth in walking and bicycling that is anticipated with the implementation of BRT in the corridor. The BiPPA expansion is discussed in greater detail on pages 50-51 of the draft plan.

Transit

Existing Transit Services

Local bus service along Veirs Mill Road is currently provided by the Washington Metropolitan Area Transit Authority's (WMATA) Metrobus and Montgomery County's Ride On. Veirs Mill Road is included in WMATA's Priority Corridor Network, as the Veirs Mill routes (C4 and Q routes) have some of the highest ridership in the Metrobus system. According to the Priority Corridor Network Plan, Veirs Mill Road is the largest bus transit market in Montgomery County, serving as a critical cross-county connection that links two ends of the Metrorail Red Line. Approximately 13,000 passengers ride these Metrobus bus routes along Veirs Mill Road each weekday. Ride On bus routes 26, 34, 38, 44, and 48 travel on a segment of Veirs Mill Road within the plan area and serve approximately 8,000 passengers each weekday.

Planned Bus Rapid Transit (BRT)

Veirs Mill Road experiences some of the highest transit volumes in Montgomery County, but bus service is often unreliable and low performing. For these reasons, Montgomery County and WMATA are actively working to improve bus service in the Veirs Mill corridor. Montgomery County and the City of Rockville have studied and supported BRT and traditional bus routes on Veirs Mill Road for nearly two decades.

The 2013 *Countywide Transit Corridors Functional Master Plan* recommends enhanced transit opportunities, including a network of 11 BRT corridors and the designation of bicycle-pedestrian priority areas. The plan identifies Veirs Mill Road as an appropriate corridor for BRT due to the volume of existing transit ridership and the desire to increase transit reliability and service for existing residents and transit-dependent populations.

As shown in Figure 2, the Veirs Mill Road Corridor (Corridor 10) connects with several other corridors, including Georgia Avenue (Corridors 1 and 2), Rockville Pike (Corridors 3 and 4), Randolph Road (Corridor 7), and University Boulevard (Corridor 8), facilitating movement by transit to much of the eastern portion of the county.

Figure 2: 2013 Countywide Transit Corridors Functional Master Plan – BRT Corridors



- Corridor 1: Georgia Avenue North**
- Corridor 2: Georgia Avenue South**
- Corridor 3: MD 355 North**
- Corridor 4: MD 355 South**
- Corridor 5: New Hampshire Avenue**
- Corridor 6: North Bethesda Transitway**
- Corridor 7: Randolph Road**
- Corridor 8: University Boulevard**
- Corridor 9: US 29**
- Corridor 10: Veirs Mill Road**

Veirs Mill Road Bus Rapid Transit Study

In 2016, the MDOT SHA and the Maryland Transit Administration (MTA), in cooperation with MCDOT, released the Draft Corridor Study Report titled the *MD 586 / Veirs Mill Road Bus Rapid Transit Study* to document the evaluation of alternatives for BRT along Veirs Mill Road. The draft report identifies BRT as a solution for the corridor that could increase transit reliability and provide access to a larger supply of affordable housing. Enhanced transit access could also play a role in revitalizing adjacent neighborhoods, relieving congestion, supporting land conservation, and improving safety for bicyclists and pedestrians.

The draft report analyzes several alternatives to improve transit on Veirs Mill Road, including a “no build” alternative (no improvements in infrastructure or service) and three “build” alternatives including:

Alternative 2 (Transportation System Management with Intersection Queue Jumps and Enhanced Bus Service): consists of minor infrastructure improvements at select intersections and the implementation of a limited-stop, enhanced bus service. Minor infrastructure improvements include: enhanced bus stops with shelters, real time information, off-board fare collection, transit signal priority and intersection widening for queue jump installation.

Alternative 3 (New BRT Service in Dedicated Curb Lanes): consists of widening or repurposing existing travel lanes and shoulders to provide dedicated, curb-running bus lanes and BRT service; dedicated lanes proposed in areas where the improvements would result in minor right-of-way impacts and result in increased travel speeds.

Alternative 5B (New BRT Service in the Median): consists of new BRT service in a dedicated, bi-directional median lane or two dedicated median lanes.

The alternatives were presented to the Montgomery County Planning Board on November 3, 2016, and the Board expressed support for Alternative 3. The Montgomery County Council's Transportation, Infrastructure, Energy and Environment (T&E) Committee reviewed the draft report on December 1, 2016 and eliminated alternative 5B from further consideration due to the cost and marginal improvement in travel times when compared to other build alternatives. The committee also requested the evaluation of an additional alternative that combined elements of Alternatives 2 and 3. The hybrid alternative, termed Alternative 2.5, included BRT buses, larger stations, level boarding, real-time information, off-board fare collection, transit signal priority, and queue jump lanes at the corridor's busiest intersections – rather than a continuous dedicated transit lane.

MDOT SHA and MCDOT analyzed Alternative 2.5 and determined that it would achieve similar travel times to Alternative 3 but would cost significantly less. The committee proposed to proceed with Alternative 2.5 into preliminary design but retained Alternative 3 as the long-term vision. The County Council concurred with the recommendations of the committee and adopted a resolution on June 13, 2017, which stated:

“The Council selects Alternative 2.5 as the recommended option to carry forward into preliminary design and identifies Alternative 3 to be retained as the master plan option, protecting the right-of-way for a potential upgrade to a continuous dedicated lane in the long term, if it is eventually warranted.”

As discussed on pages 47-49 of the draft plan, the Veirs Mill Corridor Master Plan Public Hearing Draft recommends the implementation of the short-term BRT alternative, Alternative 2.5, to provide improved transit service to residents and employees of the plan area. The master plan also recommends the long-term implementation of Alternative 3, BRT in dedicated curb lanes. With the implementation of BRT, the plan recommends further evaluation of the BRT station locations to prioritize locations that have proximity to higher density land uses, have potential for near-term redevelopment and provide improved access to community facilities. Specifically, the plan recommends the relocation of the BRT station from Parkland Drive to Robindale Drive.

While the Veirs Mill Corridor Master Plan Public Hearing Draft fully supports the implementation of BRT, it is important to note that the plan also recommends improvements to the existing local bus service. These recommendations include:

- Improve the quality of and access to existing bus stops and future BRT stations.

- Locate existing bus stops at signalized crossings to improve safety for transit riders.
- Provide passenger amenities, such as lighting, benches, shelters and trash receptacles.

SUGGESTED REVISIONS TO PEDESTRIAN AND TRANSIT RECOMMENDATIONS

To address comments received from MCDOT, staff recommends that the Planning Board consider minor revisions to select pedestrian and transit recommendations included on pages 38 and 47 of the Veirs Mill Corridor Master Plan Public Hearing Draft. The select recommendations and the suggested revisions are included below for the Planning Board’s consideration. (The underlined text represents additions and the strike through text represents deletions.)

Pedestrian Network Recommendations – Public Hearing Draft Page 38

- 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.
 - Relocate the existing high-visibility crosswalk to provide a direct connection across Veirs Mill Road to reduce crossing distance and reduce delay for motorists.
 - Introduce additional pedestrian-scale 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.

- 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.
 - Twinbrook Parkway and Halpine Road.
 - Twinbrook Parkway and Vandegrift Avenue.

- ~~▪ Introduce pedestrian hybrid beacons at the following unsignalized pedestrian crossings:~~
 - ~~○ Veirs Mill Road and Pendleton Drive.~~
 - ~~○ Twinbrook Parkway and Halpine Road.~~
 - ~~○ Twinbrook Parkway and Vandegrift Avenue.~~

Transit Network Recommendations – Public Hearing Draft Page 47

- 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 ~~signalized~~ protected crossings to improve safety and simplify access for transit riders.
 - Provide passenger amenities, such as lighting, benches, shelters and trash receptacles.
- 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.
 - 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.

CONCLUSION

During the fifth work session, staff will discuss the plan's pedestrian, bicycle and transit recommendations in greater detail with the Planning Board, summarize the testimony received and propose minor revisions to the recommendations in response to testimony received during the public comment period, including comments received from MDOT SHA and MCDOT.