MCPB Item No.

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#### Veirs Mill Corridor Master Plan: Work Session #4

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#### **SUMMARY**

During the fourth work session, staff will begin discussions with the 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.

On September 20, discussion will commence on the plan's transportation recommendations. Additional work sessions to continue discussions on the transportation recommendations are tentatively scheduled for October 4 and 18.

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

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
October 18, 2018	Planning Board Work Session #6 (Tentative)

#### **WORK SESSION PURPOSE**

The purpose of the fourth work session is to initiate dialogue on the transportation recommendations in the Veirs Mill Corridor Master Plan Public Hearing Draft. Since it has been several months since staff presented the master plan recommendations to the Planning Board, we will begin the work session with an overview of the following:

- Characteristics of Veirs Mill Road, including its varied right-of-way;
- Multifaceted functions as a major highway, transit corridor and residential street;
- A summary of Vision Zero;
- Veirs Mill Road's role in the High Injury Network, as defined by Montgomery County's Vision Zero Two-Year Action Plan; and
- A summary of the public testimony received.

#### **VEIRS MILL ROAD CHARACTERISTICS**

Veirs Mill Road was constructed in the mid-1930s and expanded to a divided highway in the mid-1950s. It is an important east-west connection that extends 5.78 miles from Georgia Avenue (MD 97) in Wheaton, west to the intersection of East Jefferson Street (MD 28) and Rockville Pike (MD 355) in the City of Rockville. Veirs Mill Road, also known as Maryland Route 586 (MD 586), is a state highway. The Maryland Department of Transportation State Highway Administration (MDOT SHA) manages and maintains the roadbed, drainage and lighting, while the Montgomery County Department of Transportation (MCDOT) manages the traffic signalization and maintenance of the abutting residential service roads. Maintenance of and improvements to sidewalks, signals and other infrastructure are shared by the state and the county.

Veirs Mill Road is an important corridor in the county as it provides a direct connection between the commercial centers in the City of Rockville and the Wheaton Central Business District. It also provides one of the few east-west connections in the southern part of the county.

Veirs Mill Road carries approximately 43,000 vehicles per day within the master plan area. Unlike many corridors in the county, traffic on the road does not have a peak direction; traffic volumes are nearly balanced in both directions throughout the day. It is also a transit corridor with significant bus ridership. While it is a major highway and transit corridor, Veirs Mill Road also functions as a residential street with a combination of residential service roads and direct driveway access for many single-family homes.

The typical cross-section of Veirs Mill Road varies with four-, five- and six-lane segments. In addition to the variation in the number of travel lanes, segments of the road also include extended right-turn only lanes, a median of varying width, wide shoulders and residential service roads that provide separate access to adjacent land uses. The service roads manage access to the residential properties fronting on Veirs Mill Road and allow for on-street parking.

## **VEIRS MILL ROAD VISION ZERO – SEVERE AND FATAL CRASHES**

The Veirs Mill Corridor Master Plan is the first master plan to commence following the Montgomery County Council's adoption of Vision Zero in 2016. Montgomery County's Vision Zero Two-Year Action Plan, released in November 2017, identifies Veirs Mill Road as a high-risk roadway and includes the road in the county's high injury network. The high injury network includes roadway segments with five or

more severe or fatal collisions and one or more collisions per mile per year. Veirs Mill Road, between the intersections of Newport Mill Road and Connecticut Avenue, is identified as a high priority corridor for engineering improvements based on the total number of severe and fatal crashes, the number of crashes per mile per year and the number of crashes per vehicle miles traveled.

As shown in Figure 1, between 2015 and 2017, there were five fatal and seven severe injury crashes on or near Veirs Mill Road. Although travel by motor vehicle represents the majority of person trips along the corridor, pedestrians and bicyclists accounted for 66 percent of these crashes, including four fatalities and four severe injuries. In comparison, as shown in Figure 2, approximately 30 percent of the fatal and severe crashes in the county between 2015 and 2017 involve a pedestrian or a bicyclist. This increases to 45 percent in the areas that Montgomery County defines as urban for purposes of the road code (Chapter 49 of the County Code) and further increases to 63 percent in the major urban areas of Bethesda, Silver Spring, Wheaton, White Flint, Friendship Heights and Rockville Town Center. This high-level analysis suggests that infrastructure improvements are critical to improve safety on Veirs Mill Road, particularly for vulnerable users such as pedestrians and bicyclists.

# Severe and Fatal Crashes On and Near Veirs Mill Road (2015-2017)

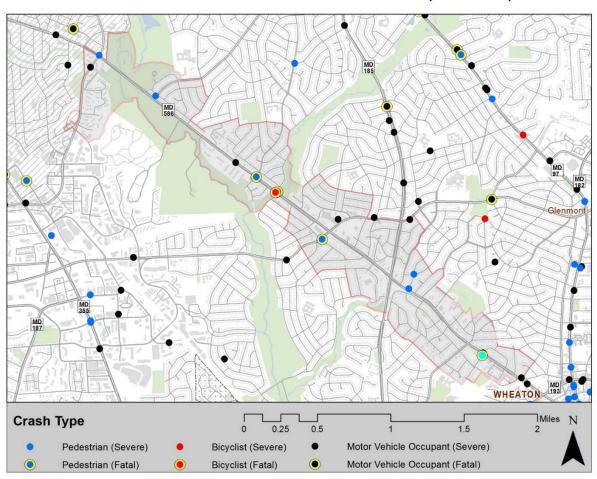


Figure 1: Severe and Fatal Crashes on and Near Veirs Mill Road (2015-2017)

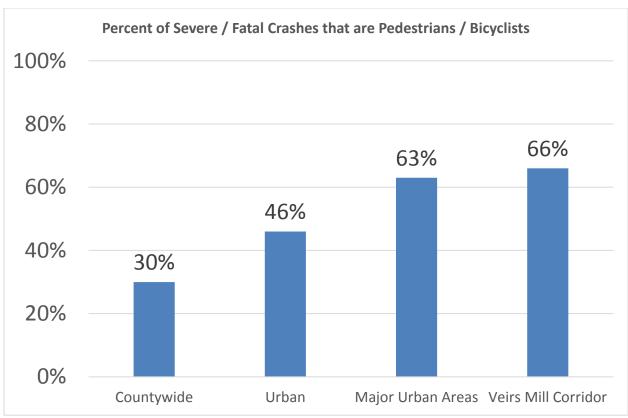


Figure 2: Percent of Severe or Fatal Crashes that are Pedestrians / Bicyclists

## STREET RECOMMENDATIONS

During the fourth work session, staff will focus on the Veirs Mill Corridor Master Plan Public Hearing Draft's street network recommendations. Consistent with the county's Vision Zero policy to eliminate transportation-related fatalities and severe injuries, these recommendations seek to advance Vision Zero on Veirs Mill Road by dedicating space for each road user, slowing motor-vehicle speeds and increasing predictability where road users cross paths, such as at intersections and driveways. The street network recommendations are described in additional detail in the following paragraphs.

#### Multimodal Complete Street

The Veirs Mill Corridor Master Plan Public Hearing Draft recommends the transformation of Veirs Mill Road into a multimodal complete street with the design and implementation of long-term redevelopment or infrastructure projects, such as bus rapid transit (BRT).

The transformation of Veirs Mill Road to a multimodal complete street, or a street designed, operated and maintained to provide safe accommodations for people who walk, bicycle, use transit and drive, is a long-term vision. As the operation and maintenance of Veirs Mill Road is a shared responsibility between the state and the county, the complete streets policies of each agency are relevant to the implementation of this long-term vision.

MDOT SHA adopted a Complete Streets Policy in 2011 that requires the consideration and incorporation of all transportation modes when developing or redeveloping the state's transportation system. The

policy is committed to a safe, efficient and multimodal network as well as partnerships with local governments, transit providers and stakeholders to develop and maintain a complete street network.

The Montgomery County Complete Streets Policy and Standards, included in Section 49-25 of the Montgomery County Code, seek to safely and conveniently accommodate all users of the roadway system. Included in Montgomery County's Road Design and Construction Code, the Complete Streets Policy and Standards "guide the planning, design, and construction of transportation facilities in the public right-of-way."

With the planning, design and construction of long-term infrastructure projects, such as bus rapid transit (BRT), it is critical to implement the complete streets policies of the state and the county to facilitate the safe and efficient movement of all transportation modes. Major transportation projects such as BRT can only be successful if they are accompanied by a safe and comfortable walking environment. A safe, comfortable and convenient walking environment makes transit more accessible and appealing for people who may otherwise choose to drive.

# Multimodal Street Classification

The master plan further recommends the creation of a road design standard for multimodal corridors in residential communities through the Vision Zero Action Plan or alternative collaborative process with MDOT SHA and MCDOT to reduce target speeds and lane widths and accommodate improved pedestrian and bicycle facilities on Veirs Mill Road. Target speeds are defined by the National Association of City Transportation Officials (NACTO) as the speed at which you intend drivers or traffic to travel, as opposed to a design speed or a posted speed limit.

A new road classification is needed because roads such as Veirs Mill Road do not fit into the existing urban, suburban and rural classification system. While Veirs Mill Road is suburban in land use, it is more urban in its activity level, due to a large amount of walking, bicycling and especially transit use. The intent of the recommended new road classification is to create an environment that prioritizes walking, bicycling and transit use consistent with the urban road classification described in Section 49 of the Montgomery County Code, which reduces target speeds and lane widths and improves pedestrian and bicycle infrastructure to increase safety for all road users.

# Target Speeds

This master plan recommends reducing target speeds on Veirs Mill Road to 35 miles per hour to improve safety.

The speed of vehicles on Veirs Mill Road contributes to the inadequate quality of the environment for all road users and is inconsistent with the county's Vision Zero policy. The posted speed on Veirs Mill Road within the master plan boundary is currently 40 miles per hour from the eastern plan boundary to Turkey Branch Parkway and 45 miles per hour from Turkey Branch Parkway to the western plan boundary in Rockville. The observed top vehicle speeds often well exceed the posted speed. Since research has shown that pedestrians have a 90 percent chance of survival if they are hit by a motor vehicle at 20 miles per hour, and a 90 percent chance of death if they are hit at 40 miles per hour, reducing traffic speeds is the most important change that is needed to eliminate traffic fatalities and severe injuries in the corridor.

While traffic signals can improve safety by controlling conflicts at crossings, a principle tenet of Vision Zero is understanding that people make mistakes and sometimes fail to follow traffic control devices. Roads should be designed so these mistakes do not result in death or severe injury.

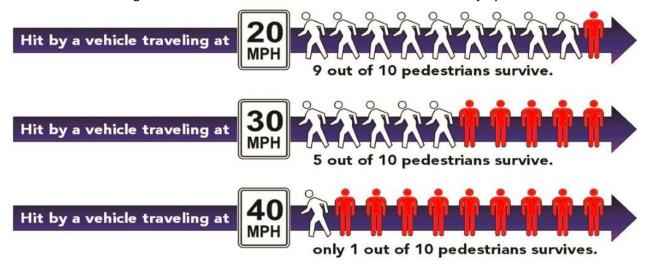


Figure 3: Pedestrian Death Risk Declines at Lower Vehicle Speeds (Courtesy of World Resources Institute)

Several strategies can be applied to reduce vehicle speeds, including reducing the posted speed and increasing automated enforcement. As discussed in greater detail below, these strategies can be effective and should be pursued. However, this master plan also recommends engineering strategies, including reducing lane widths.

Design standards for urban and suburban arterial roadways generally specify 12-foot wide travel lanes. However, transportation officials, including the American Association of State Highway and Transportation Officials (AASHTO) and the National Association of City Transportation Officials (NACTO) have suggested the use of 10- or 11-foot wide lanes to promote slower driving speeds and reduce the severity of crashes without impacting traffic operations. Reducing the width of travel lanes also provides an opportunity to reallocate space to other modes of transportation and streetscape improvements.

With the long-term transformation of Veirs Mill Road to a complete street, this master plan recommends 10-foot-wide travel lanes and 11-foot-wide transit lanes. The reduction in lane widths provides an opportunity to increase safety for road users by slowing speeds and reducing pedestrian crossing times. It also allows reallocation of right-of-way to improve safety for all users by providing adequate width for sidewalks, bikeways, medians, and buffers.

Target speeds serve as a key factor for determining design speeds, influencing operating speeds, and serving as a reference for establishing speed limits. County Executive Regulation 31-08, Context Sensitive Road Design Standards, identifies target speeds to provide consistency among the design characteristics of a roadway, its operating speed, the speed limit, and the required safety and mobility for all road users. The target and design speed ranges identified in the Context Sensitive Road Design Standards are intended to capture a broad range of conditions, are not suitable to every situation and may be periodically revised to meet the needs of the county.

Although Veirs Mill Road is a state road, the county's road design standards provide context to evaluate appropriate speeds on a multimodal corridor such as Veirs Mill Road, which is classified as a major highway in the *Master Plan of Highways and Transitways*. The Context Sensitive Road Design Standards

identify the target speed on a major highway in an urban area as 25-to-40 miles per hour and 30-to-50 miles per hour in a suburban area. This master plan recommends the reduction of target speeds on Veirs Mill Road to 35 miles per hour, consistent with the lower range of the target speed identified in the road design standards. The Context Sensitive Road Design Standards acknowledge that design exceptions for lower target speeds may be warranted, including on roadways which experience high levels of pedestrian and bicycle activity, which are anticipated in Bicycle Pedestrian Priority Areas such as Veirs Mill Road.

Pursuant to Maryland State Law Subtitle 8 Section 21-803, a local authority may alter speed limits on a state highway with the approval of MDOT SHA if, based on an engineering and traffic investigation, the local authority determines that the maximum speed limit exceeds or is less than reasonable or safe under existing conditions. The local authority may then establish a reasonable and safe maximum speed limit with the approval of MDOT SHA.

#### School Zones

This master plan recommends the implementation of a school speed zone on Veirs Mill Road between Valleywood Drive and Norris Drive to improve safety for the children who walk along Veirs Mill Road to reach Highland Elementary School, Newport Mill Middle School and Albert Einstein High School. The plan further recommends a school zone speed limit of 25 miles per hour when flashing.

Within a half-mile radius of any school, the MDOT SHA or a local authority may establish a school zone and maximum speed limits in the school zone. In school zones designated and posted by the local authorities of any county, the county may decrease the maximum speed limit to 15 miles per hour during school hours, provided the county pays the cost of placing and maintaining the necessary signs.

# **Automated Enforcement**

The Montgomery County Police Department's Safe Speed program is an automated speed enforcement program that enforces speeds in residential areas through speed cameras. Currently, there are no speed cameras on Veirs Mill Road. This master plan encourages the Montgomery County Police Department to add Veirs Mill Road as a Speed Camera Corridor as part of the Safe Speed Enforcement program. Other Maryland State Highways, including Colesville Road, Georgia Avenue and Connecticut Avenue are designated speed camera corridors.

Additional Recommendations to Advance Vision Zero

The Veirs Mill Corridor Master Plan Public Hearing Draft also recommends several tools to improve roadway safety on Veirs Mill Road including:

- Mechanisms to improve compliance with the existing right-turn and bus-only lanes;
- Elimination of unsignalized left-turns where possible;
- Limiting left-turn lanes to a single lane where possible at signalized intersections; and
- Improved lane continuity.

These tools improve roadway safety by slowing vehicle speeds, increasing predictability for all road users and reducing the exposure of the most vulnerable users.

# **CONCLUSION**

During the fourth work session, staff will discuss the plan's street 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.