



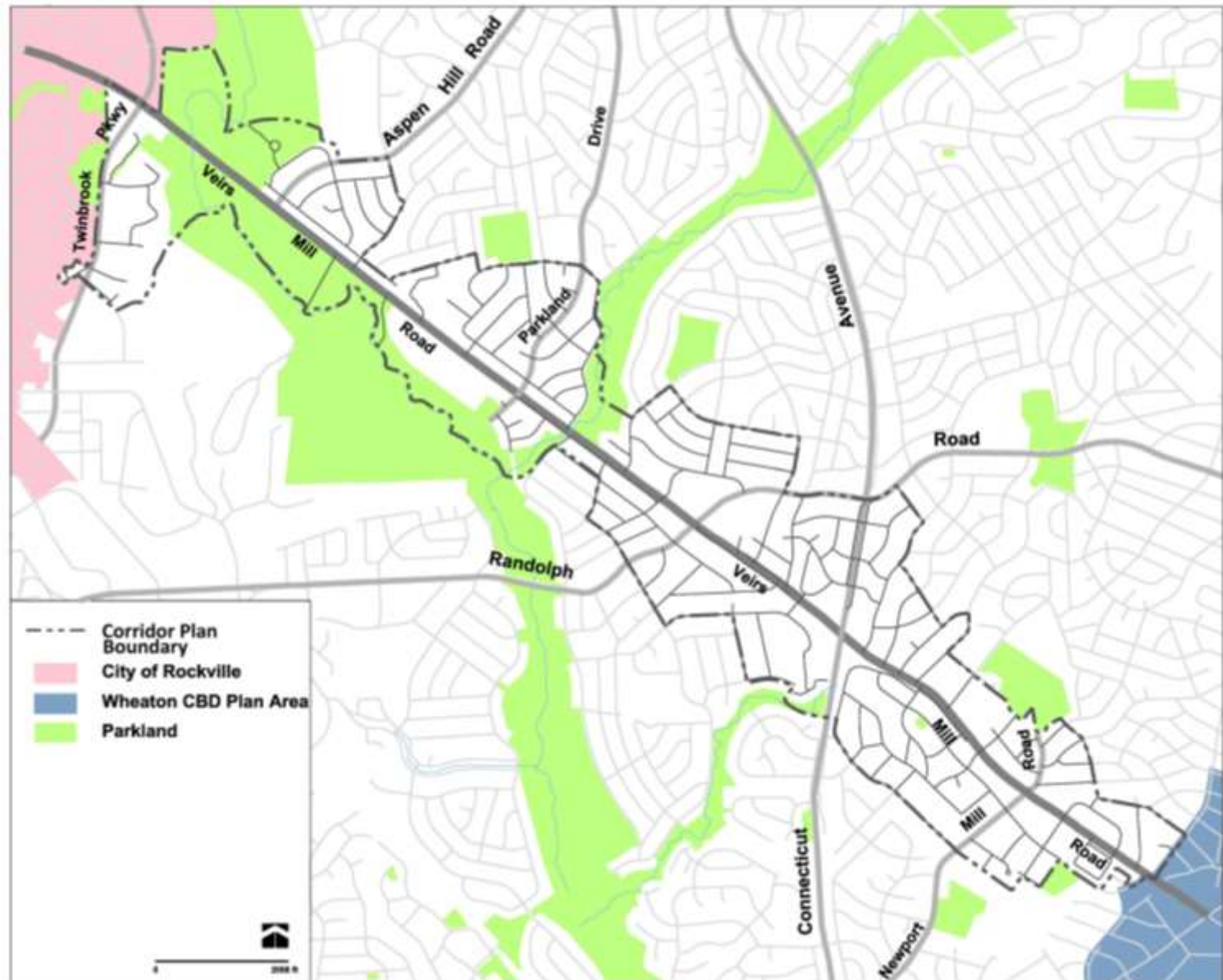
VEIRS MILL

Preliminary Staff Recommendations





VEIRS MILL CORRIDOR MASTER PLAN





VEIRS MILL CORRIDOR MASTER PLAN





PLAN BACKGROUND AND CONTEXT



Map of Countywide Transit Corridors



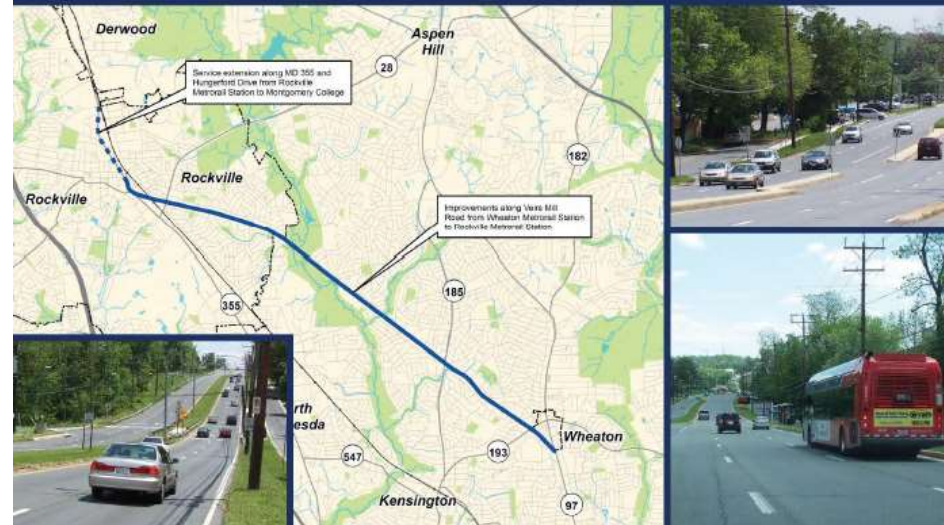
Bus Rapid Transit Prototype Station Design



DRAFT Corridor Study Report

MD 586 / Veirs Mill Road Bus Rapid Transit Study

September 2016



COMMUNITY OUTREACH



THE FUTURE OF VEIRS MILL BELONGS TO YOU.
EL FUTURO DE VEIRS MILL TE PERTENECE.

MONTGOMERYPLANNING.ORG/VEIRSMILL





VEIRS MILL CORRIDOR MASTER PLAN





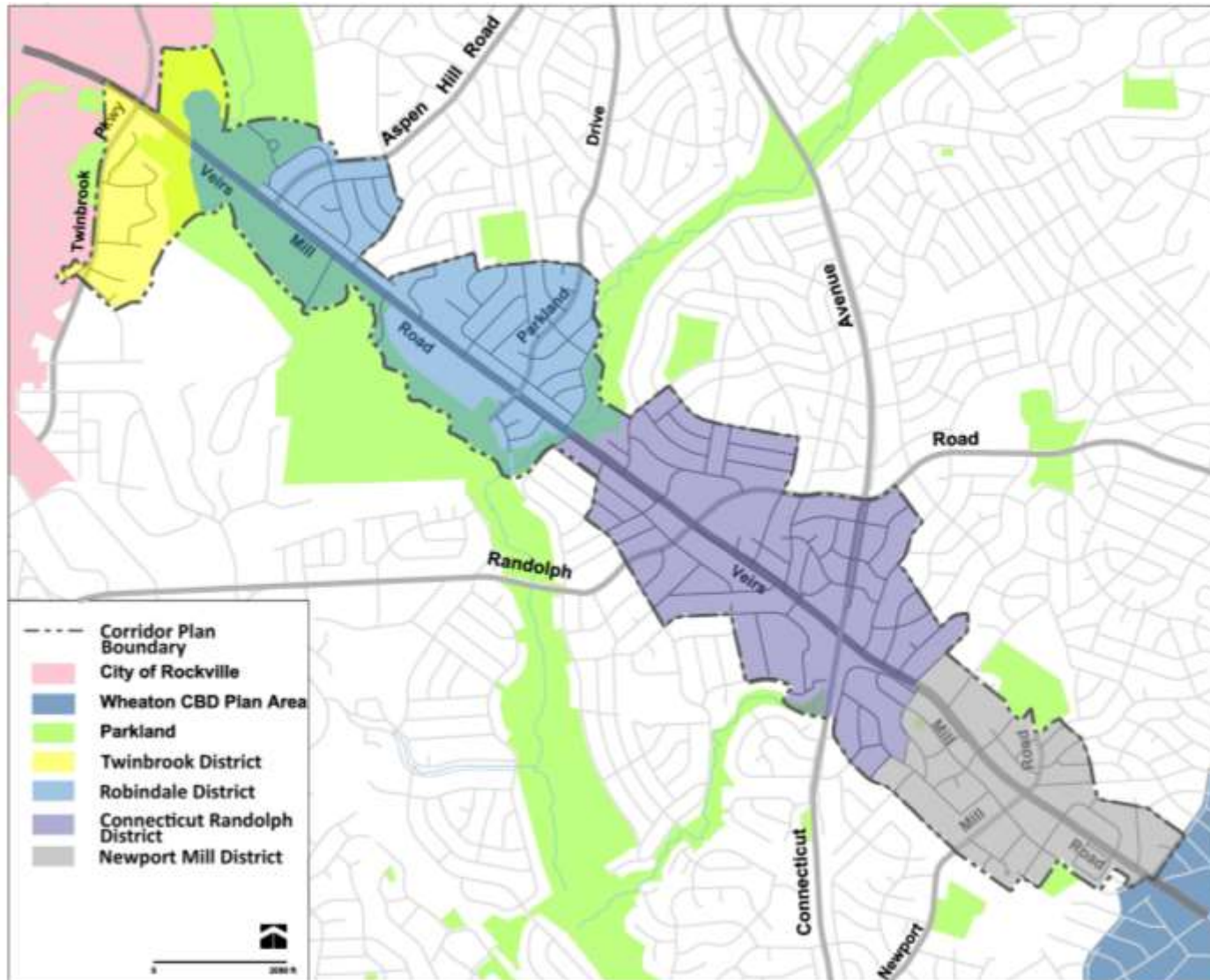
PLAN VISION

- Preserve and strengthen the Veirs Mill Corridor communities by enhancing existing community resources, increasing connectivity and promoting safety in the public realm.



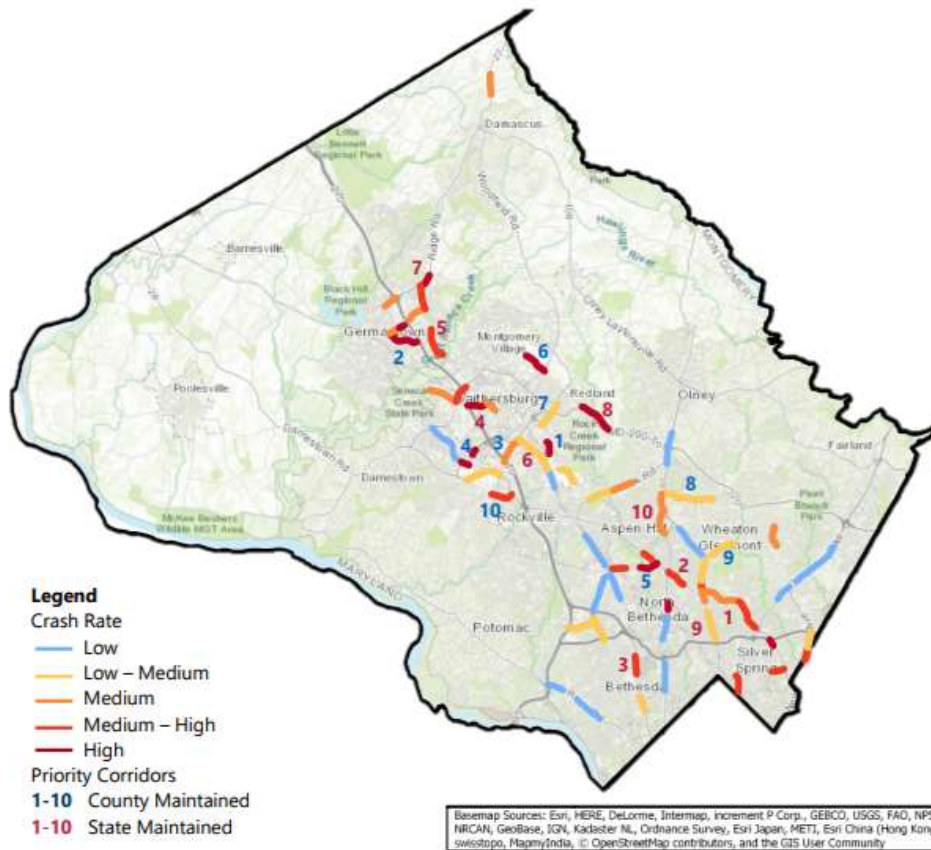


PLAN FRAMEWORK





PLAN APPROACH AND FRAMEWORK



Vision Zero Action Plan – High Injury Network

VISION ZERO

**NO TRAFFIC DEATHS BY 2030
IN MONTGOMERY COUNTY**

**OUR PLAN TO ELIMINATE FATALITIES AND
SEVERE INJURIES ON OUR ROADS BY 2030**

TWO-YEAR ACTION PLAN • NOV 2017

WHAT IS VISION ZERO?

A change in mindset that says that there is no acceptable level of traffic fatalities and serious injuries AND that traffic deaths and injuries are not accidents but are preventable.

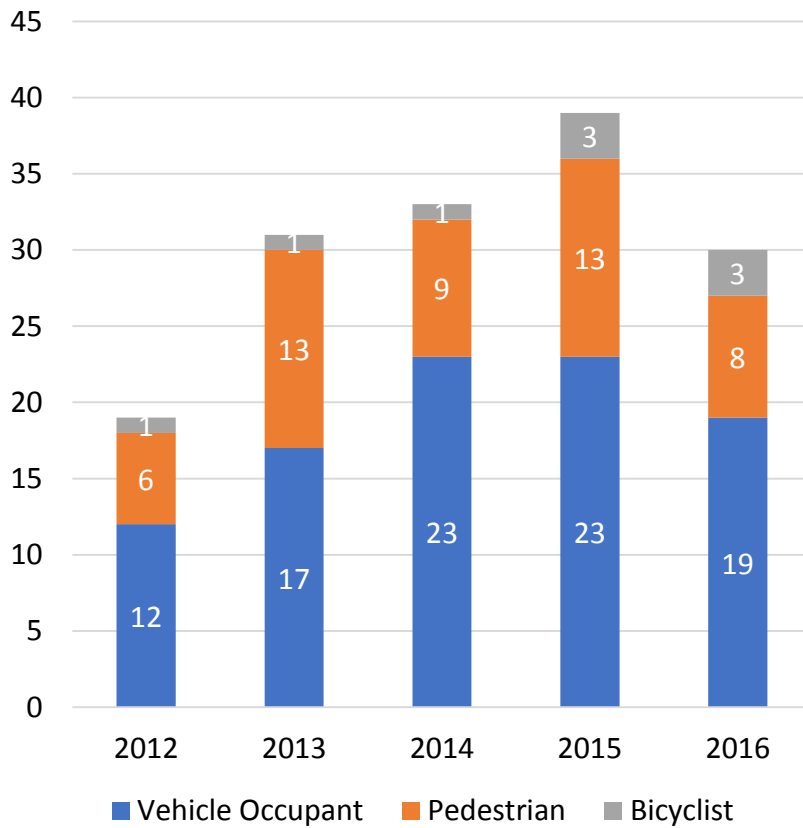
- Human life takes priority over mobility.
- Human error is inevitable.
- People are inherently vulnerable, and speed is a fundamental predictor of survival.



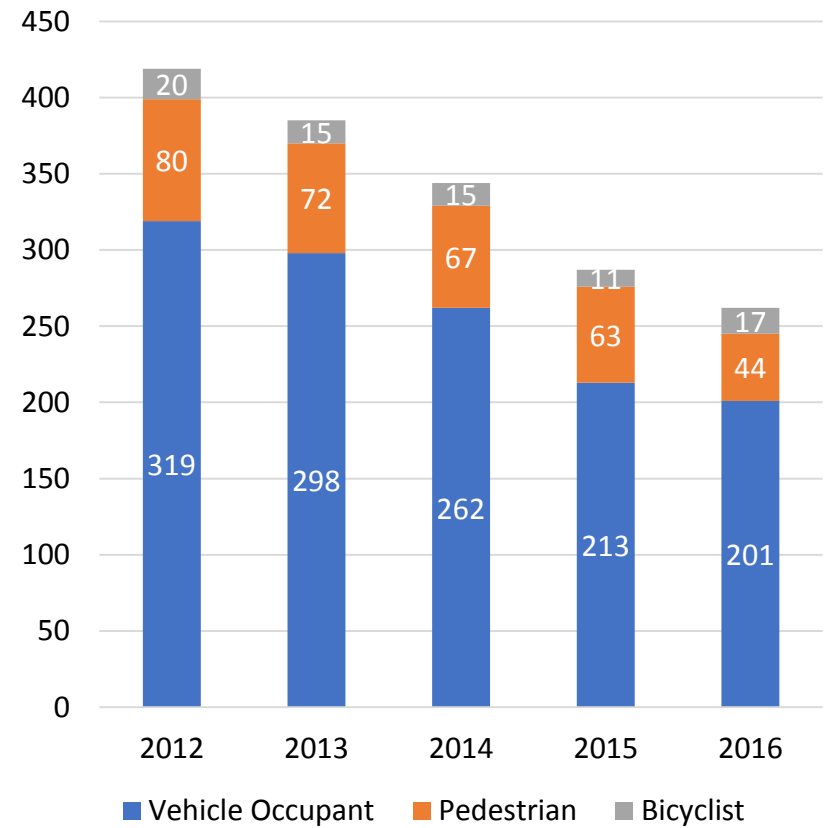
Fatal and Severe Collisions in Montgomery County (2012-2016)

(excludes Interstates and City of Takoma Park)

Fatalities

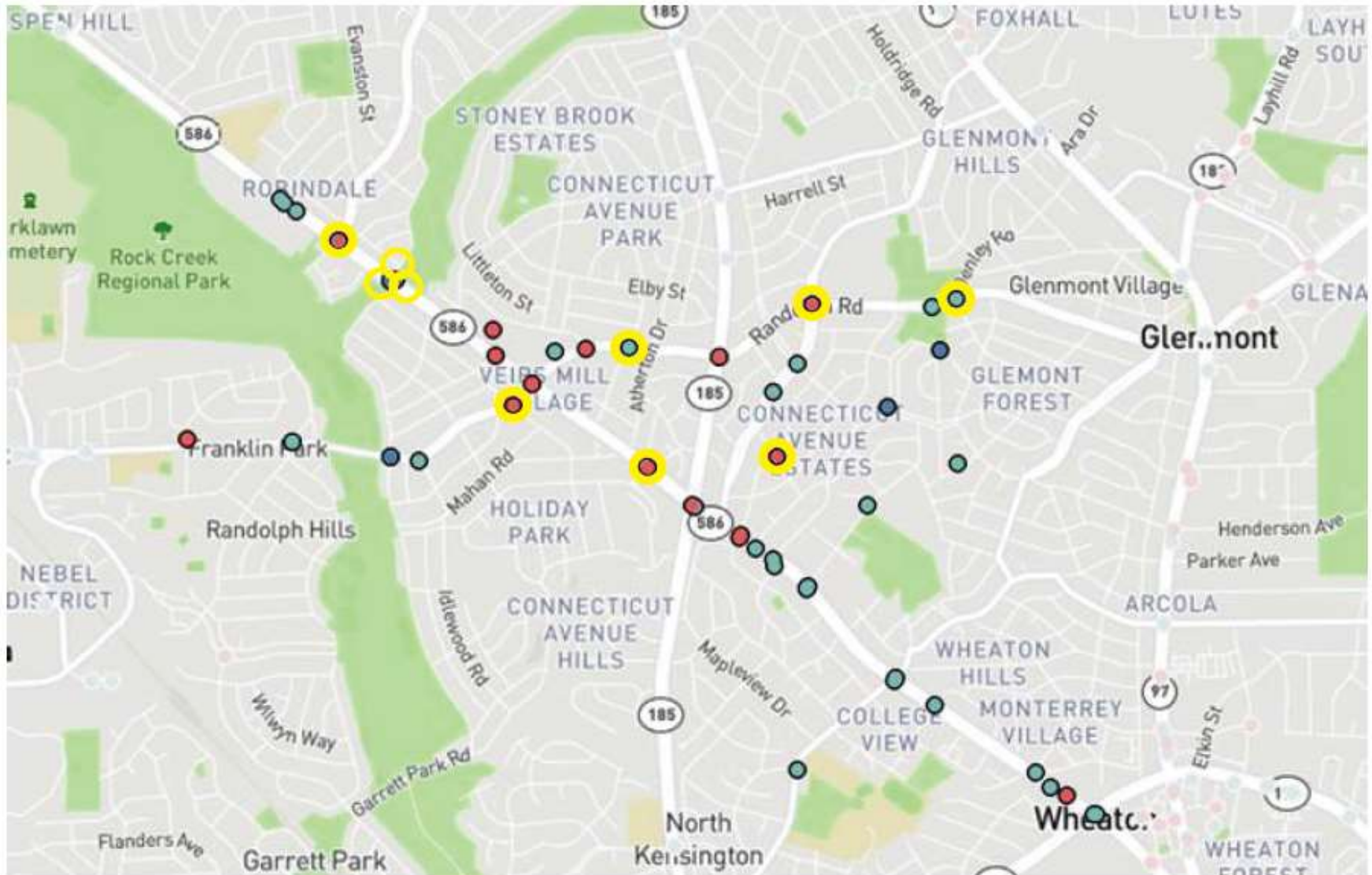


Severe Injuries





Fatal and Severe Collisions on and Near Veirs Mill Road (2012-2016)





VEIRS MILL ROAD VISION ZERO INITIATIVE

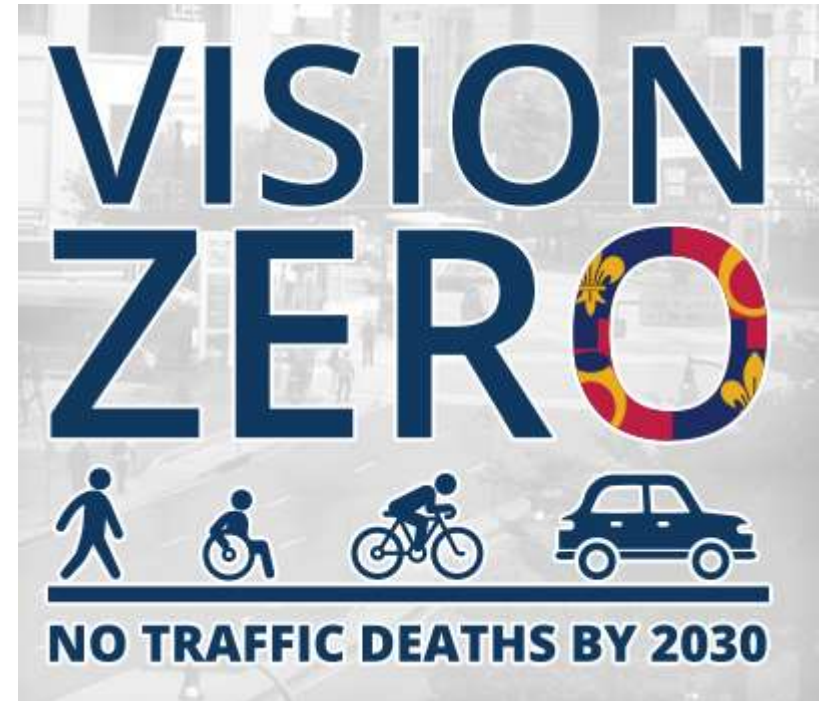


Imagining and Achieving **ZERO**
Traffic Deaths or Serious Injuries



What is Vision Zero?

- Vision Zero is an international effort to achieve ZERO deaths and serious injuries on our roadways due to traffic crashes
- In the United States, it is a response to the approximately 34,000 yearly traffic fatalities
- Montgomery County has adopted Vision Zero
- Unlike most cities that adopt Vision Zero, Montgomery County must adapt to wide range of urban and suburban roadway contexts





How is Vision Zero Different?

- Vision Zero requires a paradigm shift in thinking about traffic safety
- It assumes that all traffic deaths are preventable, if safety is made top priority

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**

PERFECT human behavior

Prevent **COLLISIONS**

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VS

VISION ZERO

Traffic deaths are **PREVENTABLE**

Integrate **HUMAN FAILING** in approach

Prevent **FATAL AND SEVERE CRASHES**

SYSTEMS approach

Saving lives is **NOT EXPENSIVE**



Creating safety: What do we know works?

There are two general ways to increase traffic safety:

- Decrease the **frequency** of crashes
 - Decrease the number of conflicts that occur
 - Increase safe yielding
- Decrease the **severity** of crashes
 - Reduce energy created in crashes by reducing motor vehicle speed



Decrease the Number of Conflicts that Occur

Designate Space for Different Road Users:

- Road users should know where they belong
- Conflict points with other modes should be in predictable, regulated locations such as designated crossings or intersections





Decrease the Number of Conflicts that Occur

Designate Space for Different Road Users:

- In very low speed contexts, motor vehicles can share space with other modes
- Traffic calming is essential for this to occur safely





Decrease the Number of Conflicts that Occur

Calm and shorten crossings:

- Vulnerable travelers such as pedestrians and bicyclists are sensitive to detour
- Providing frequent controlled crossings can reduce unsafe crossings

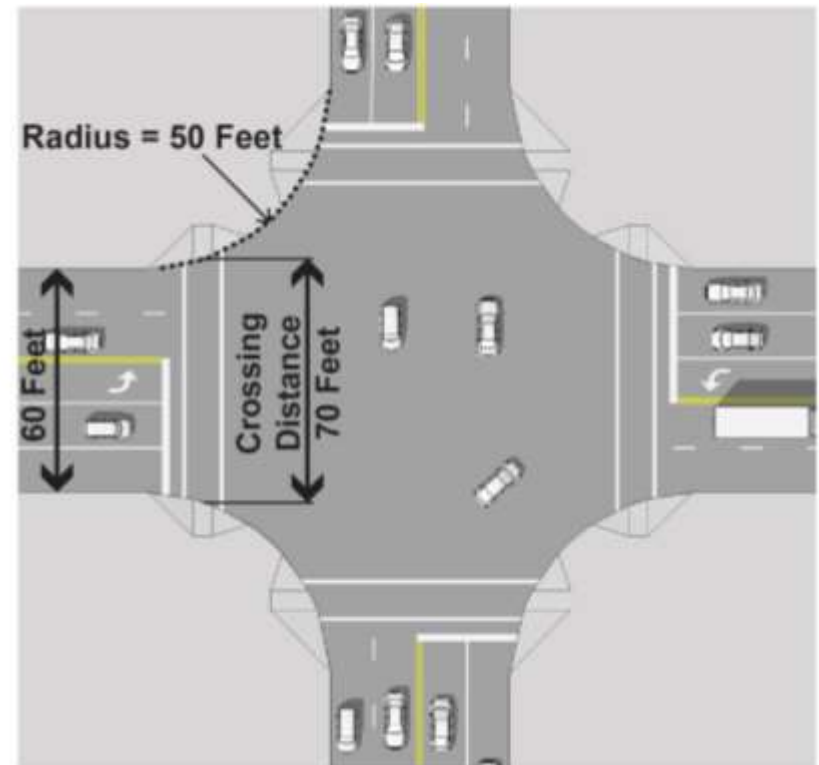
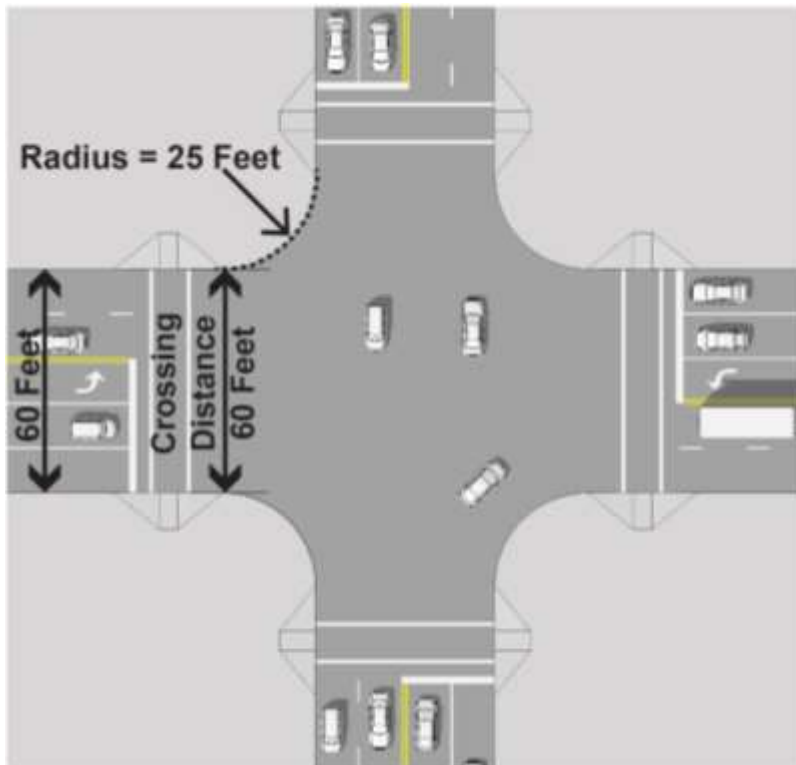




Decrease the Number of Conflicts that Occur

Calm and shorten crossings:

- Reducing motor vehicle speed at crossings, and reducing crossing distances is also important





Decrease the Number of Conflicts that Occur

Calm and shorten crossings:

- Use design to lower motor vehicle speeds at crossings and reduce crossing distances





Decrease the Number of Conflicts that Occur

Calm and shorten crossings:

- Use design to lower motor vehicle speeds at crossings and reduce crossing distances



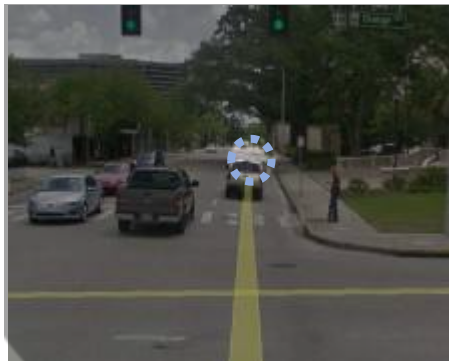


Increase Safe Yielding

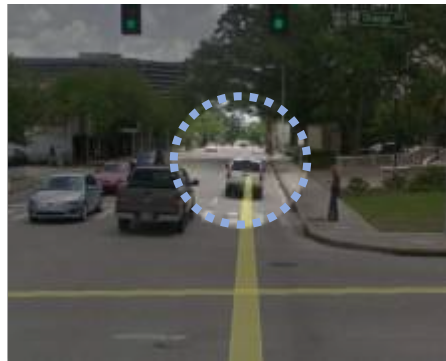
Reduce speed of motor vehicles:

- Slower moving motor vehicles can more easily yield when unexpected conflicts occur
 - This reduces crash frequency

Driver cone of vision at different speeds



40 MPH



30 MPH



20 MPH



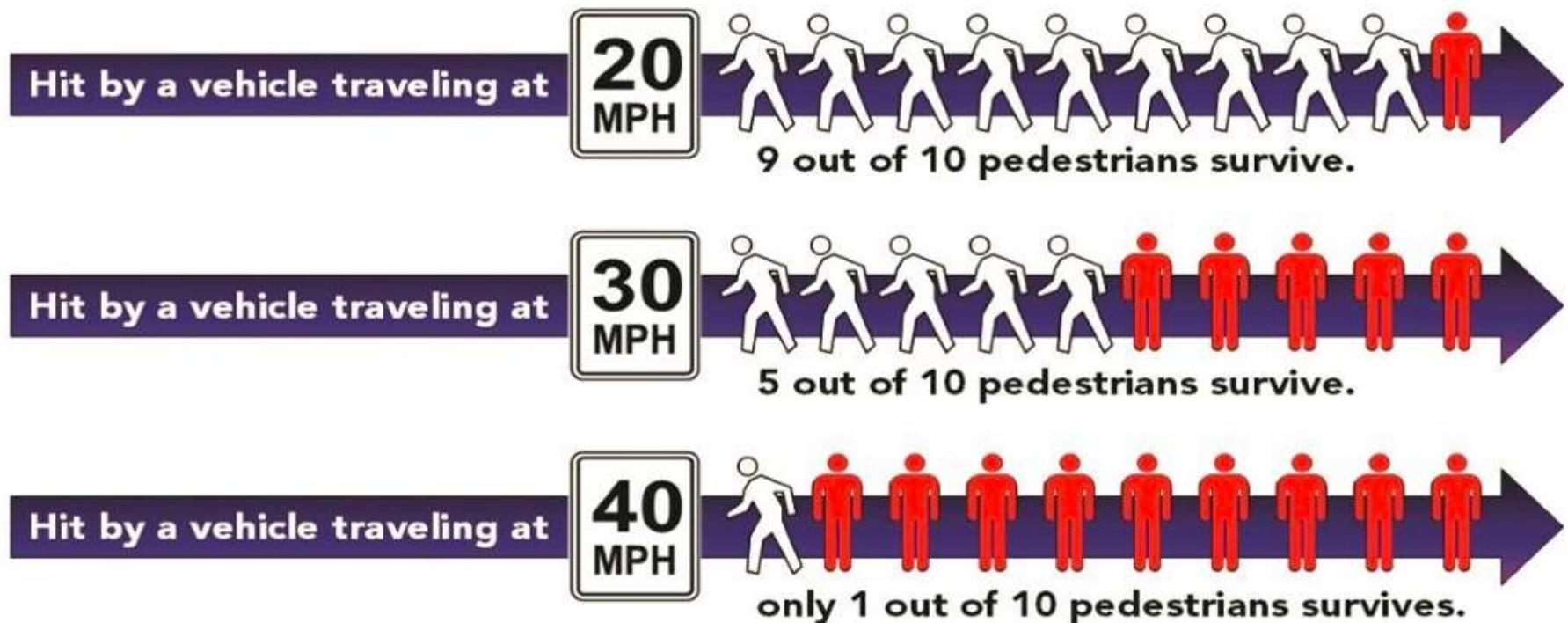
15 MPH



Decrease Crash Severity by Reducing Speed

Reduce the energy created in crashes by reducing motor vehicle speed:

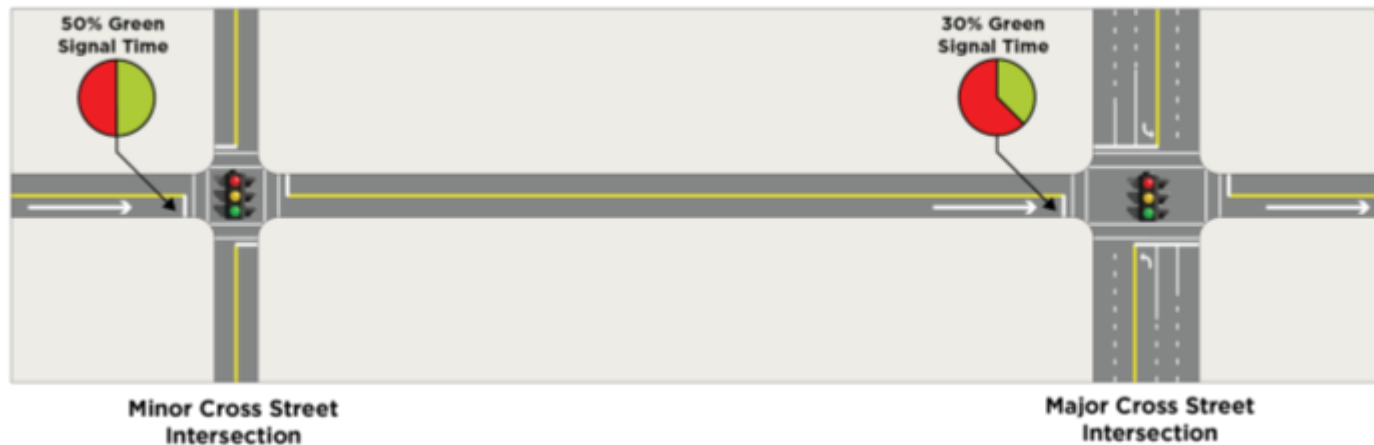
- Slower motor vehicles cause less severe crashes when they do not safely yield





A Note on Speed And Roadway Capacity

- Average speed is what dictates the amount of time it takes to get through an area.
- The capacity of a corridor is mostly dictated by the traffic signals.





Tools for Reducing Motor Vehicle Speeds

Three intervention types have proven track records of reducing motor vehicle speeds

- Safe Street Design
- Reducing Speed Limits
- Automated Speed Enforcement



Safe Street Design

Drivers take cues from the physical environment. Tools to send safe speed cues include:

- Traffic signal progression at a desired speed
- Traffic calming through engineering to changes the vehicle's path vertically (speed humps, tables, etc.) or horizontally (chicanes, yield streets, turn radii)
- Traffic calming through constraining the “feel” of a street



Image credit: Scott Batson

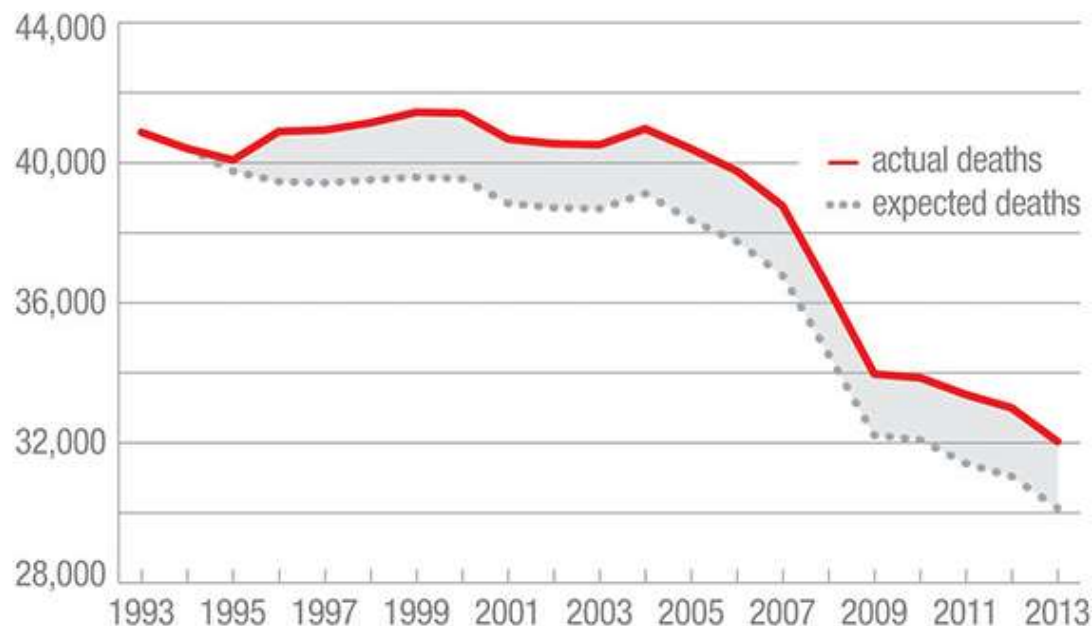


Image credit: Cascade Design Collaborative



Reducing Speed Limits

- The National Transportation Safety Board has recently emphasized the role of speed limit setting in safety
- The Insurance Institute for Highway Safety estimates that 33,000 deaths between 1993 and 2013 are attributable to the raising of speed limits (see below graph)



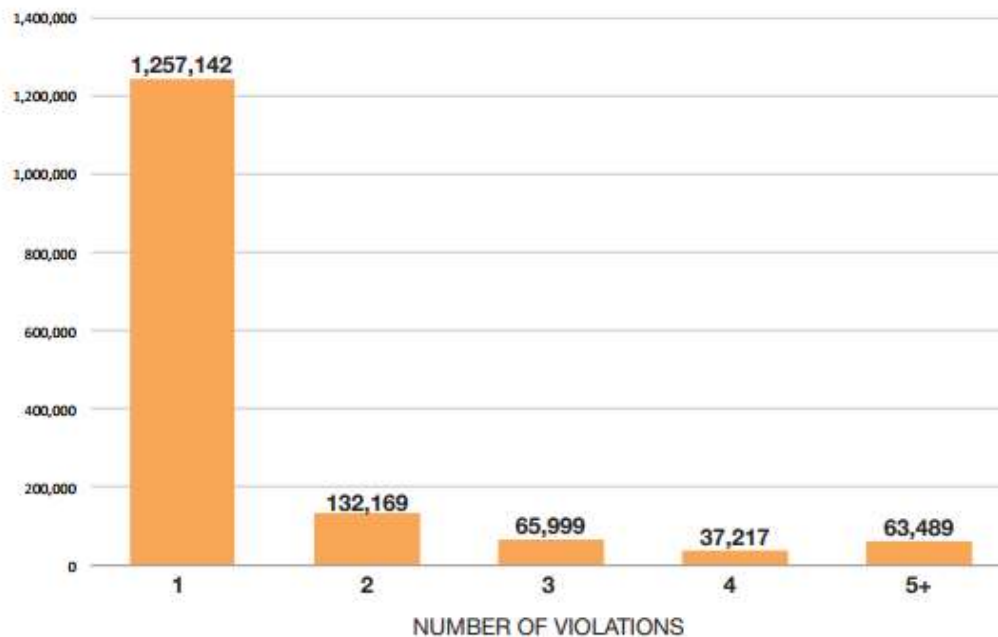
Source: Status Report from Insurance Institute for Highway Safety, Highway Loss Data Institute, 2016



Automated Speed Enforcement

- Automated enforcement can reduce concerns about bias in traffic enforcement if placement is driven by safety data and fees are considered fair
- Automated enforcement can be controversial but appears to change driver behavior

REPEAT VIOLATORS



Source: NYC DOT, Automated Speed Enforcement Program Report 2014-2016



TRANSPORTATION RECOMMENDATIONS

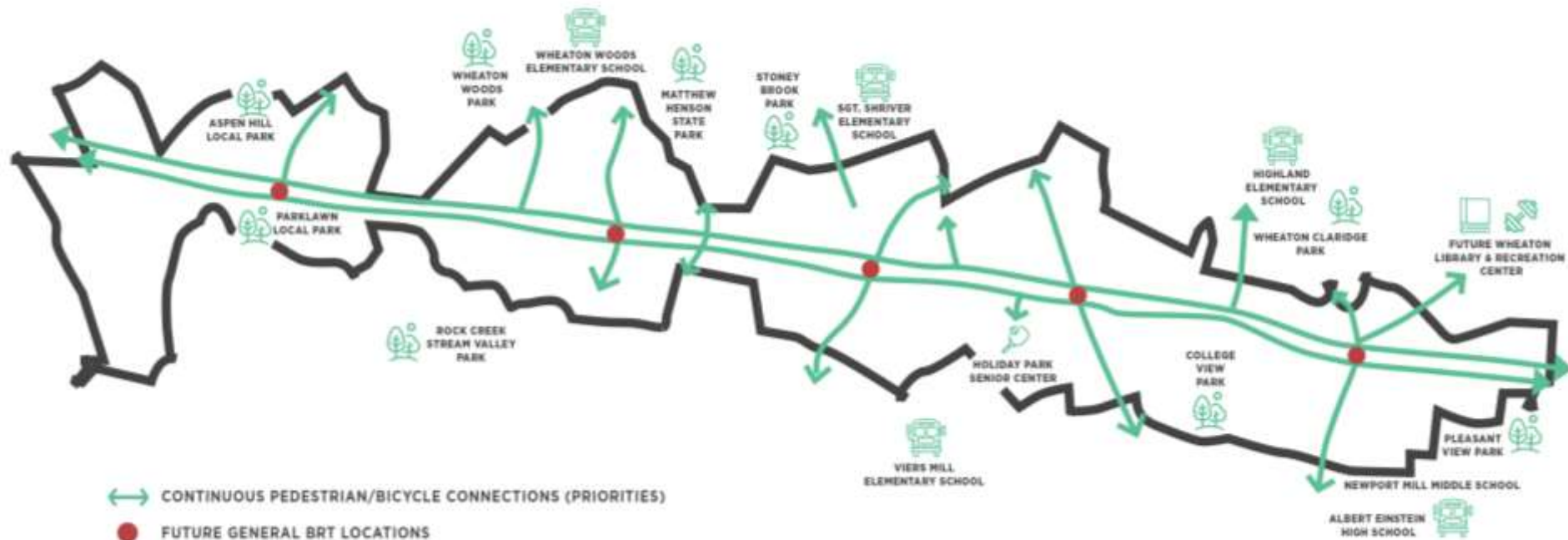
- Veirs Mill Road as a “Complete Street”





TRANSPORTATION RECOMMENDATIONS – PEDESTRIAN / BICYCLE

- Introduce pedestrian and bicycle infrastructure along Veirs Mill Road and on residential streets which connect to community facilities



TRANSPORTATION RECOMMENDATIONS – PEDESTRIAN / BICYCLE

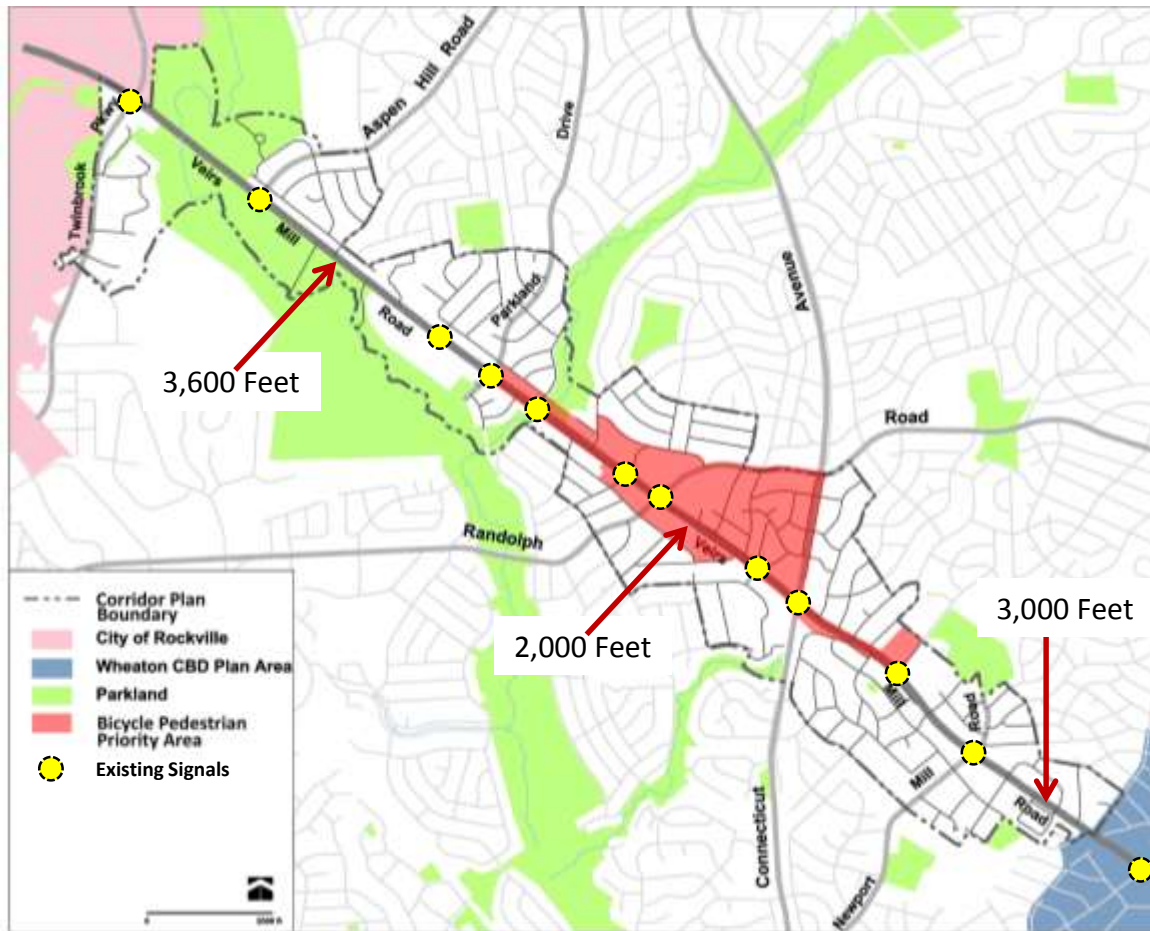
- Complete sidewalk network with sidewalks and or sidepaths
- Introduce a bicycle network in the near-term with a combination of:
 - Neighborhood greenways on parallel streets
 - Sharrows and contraflow lanes on access roads
 - New sidepaths
 - Connections to existing trails



Examples of neighborhood greenway and priority shared lane markings (Right Image Courtesy of Kittelson & Associates, Inc.)

TRANSPORTATION RECOMMENDATIONS – PEDESTRIAN / BICYCLE

- Create new and improve existing crossings, including at the Matthew Henson Trail
- Expand the Veirs Mill Road – Randolph Road Bicycle and Pedestrian Priority Area





TRANSPORTATION RECOMMENDATIONS – MATTHEW HENSON CROSSING

- Near-Term Recommendations
 - Install a full traffic signal and lighting
 - Realign crosswalk to provide direct connection
- Long-Term Recommendation
 - Provide a grade-separated crossing



Existing Matthew Henson Trail Crossing



Recommendations for Matthew Henson Trail Crossing (Courtesy of Kittelson & Associates, Inc.)



TRANSPORTATION RECOMMENDATIONS – STREETS

- Apply Urban Road Code Boundary to Veirs Mill Rd
 - Reduce speeds and lane widths
 - Provide pedestrian / bicycle infrastructure
- Eliminate/modify right-turn and bus only lanes
- Improve lane continuity



Improve lane continuity



Modify existing right-turn lanes with engineering solutions such as curb extensions (Right Image Courtesy of Kittelson & Associates, Inc.)



TRANSPORTATION RECOMMENDATIONS – STREETS

- Introduce new street connections with future redevelopment at Gridley Road, Gannon Road and Halpine Place



Introduce new street connections with future redevelopment



TRANSPORTATION RECOMMENDATIONS – TRANSIT

- Support the alignment of Veirs Mill Road Bus Rapid Transit (BRT)
- Improve access to and quality of existing bus stops and future BRT stations



Bus Rapid Transit in Eugene, OR



Bus Rapid Transit in Cleveland, OH



Bus Rapid Transit in Alexandria, VA



TRANSPORTATION RECOMMENDATIONS – INTERSECTIONS

- Remove / modify channelized right turn lanes
- Retrofit existing signalized intersections
- Limit left turn lanes to a single lane
- Eliminate the proposed interchange at Veirs Mill Road and Randolph Road



Raised Pedestrian Crossing (Image Courtesy of Kittelson & Associates, Inc.)



Protected Intersection (Image Courtesy of NACTO)



*Reconfigured Intersection at Connecticut Avenue
(Image Courtesy of Rhodeside & Harwell, Inc.)*

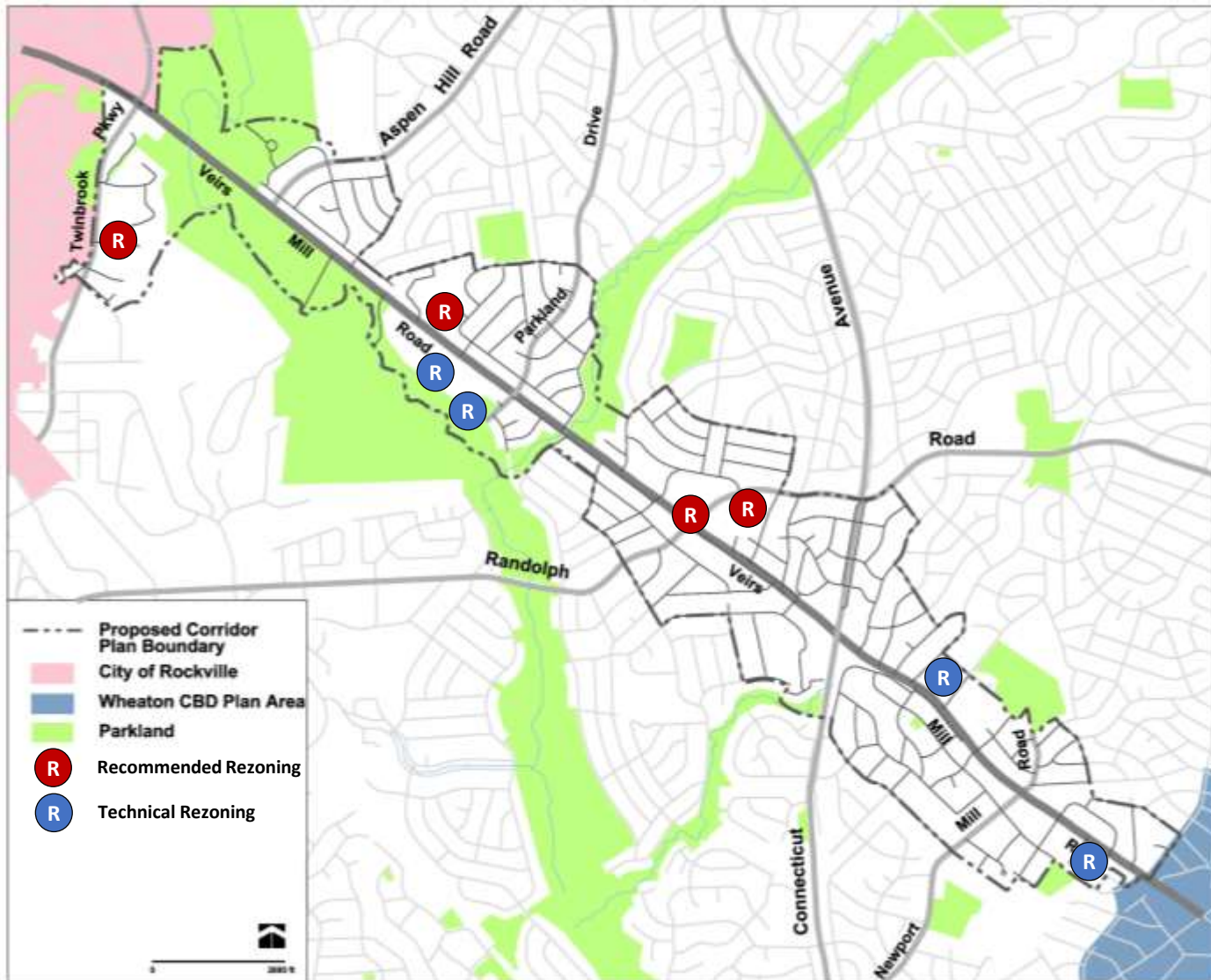
LAND USE AND ZONING RECOMMENDATIONS

- Preserve and maintain residential scale and character
- Retain majority of existing multi-family residential development
- Rezone select properties near the commercial center, Metrorail or future Bus Rapid Transit Stations
- Encourage partnerships to advance neighborhood development and revitalization.





LAND USE AND ZONING RECOMMENDATIONS





LAND USE AND ZONING RECOMMENDATIONS

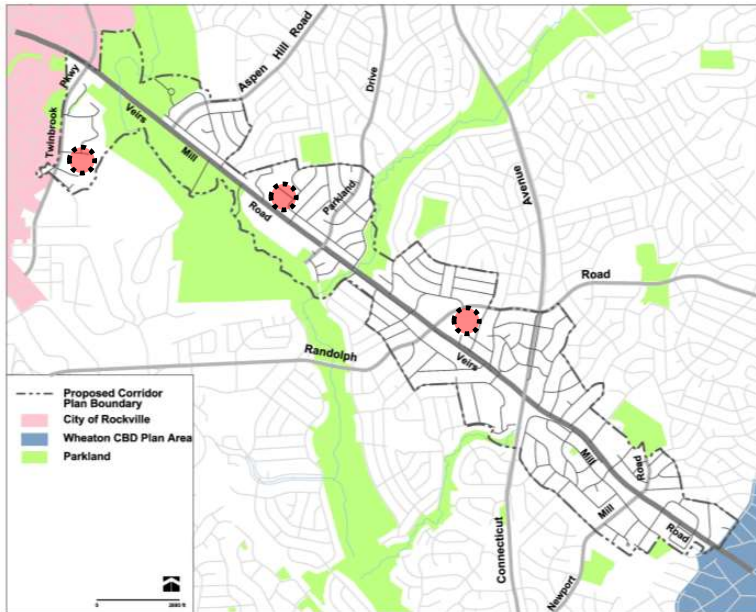
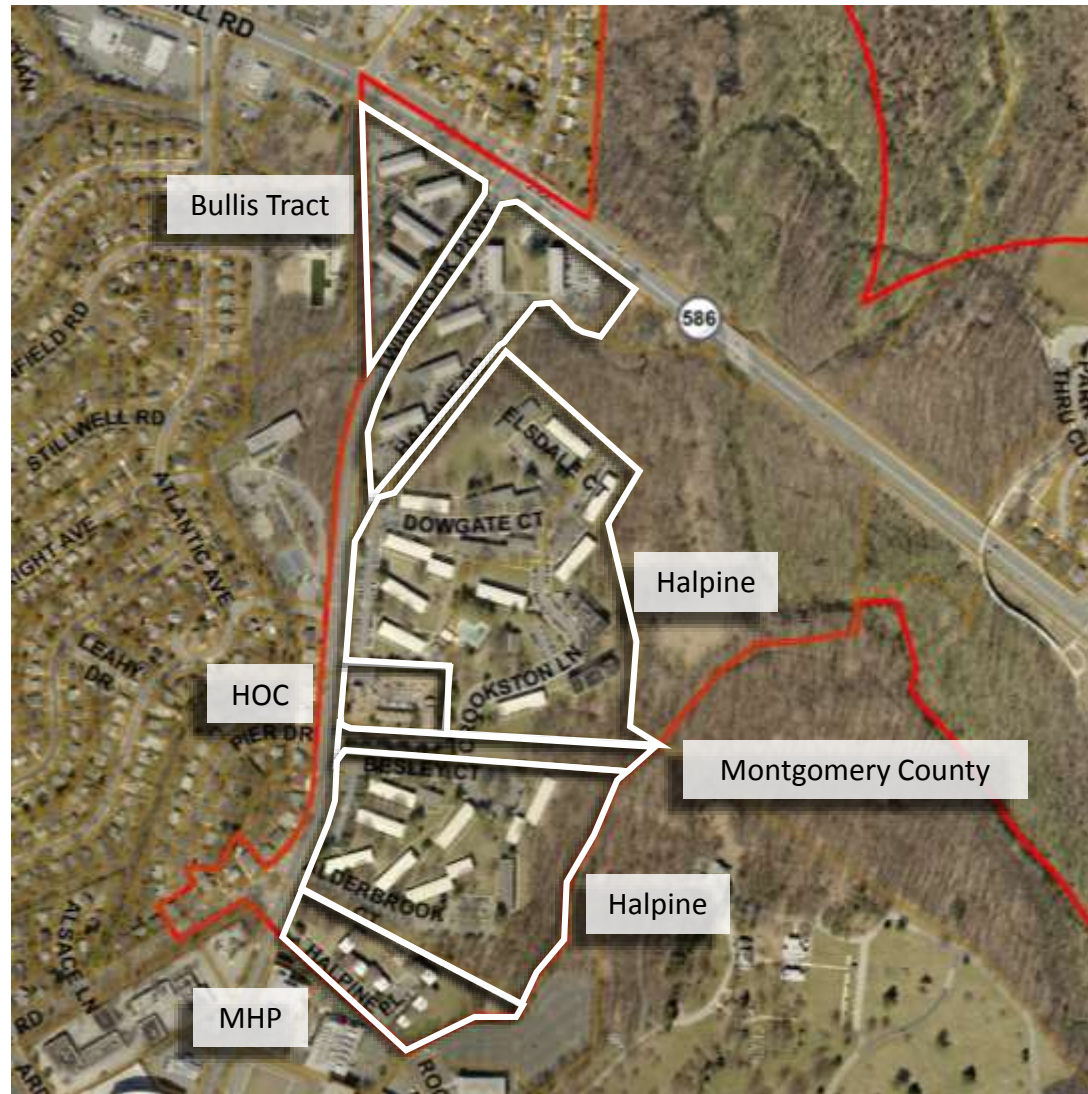


Image Courtesy of MissingMiddleHousing.com

Missing Middle Housing Types



LAND USE AND ZONING RECOMMENDATIONS





Preliminary Recommendations | Urban Design | Intensify Residential Uses

Recommendation: Support increasing single-family uses and redevelopment in multi-family complexes and key single-family properties.



(1) Higher density multi-family development closer to Twinbrook Metro (2) Existing units in park setting to be preserved (3) New development should engage adjacent Rock Creek Park and build connections where feasible (4) New multi-family should provide a centralized area for public use (5)(6) Promote alternatives for higher-density low-rise housing prototypes on key properties along Veirs Mill Road.



Preliminary Recommendations | Urban Design





Preliminary Recommendations | Urban Design | Short Term Improvements

Recommendation: Promote short and long term improvements on commercial properties to create neighborhood serving centers.



Short Term

Focus on surface parking lots to identify potential areas where open spaces for public use could be established. Improve streetscape, storm water management, and existing storefronts.

Example of retrofitted parking lot to accommodate parking and occasional events (TAXI Development, Denver CO)

(1) Overall view (2) Overall view during event (3)(4) Retrofits to add drainage, landscaping, and landscape panels between parking spaces (5) Seating area within new landscape.





Preliminary Recommendations | Urban Design | Commercial Redevelopment

Recommendation: Promote short and long term improvements on commercial properties to create neighborhood serving centers.



Long Term

Mixed-use redevelopment with residential uses, new internal street connections, and open spaces for public use.

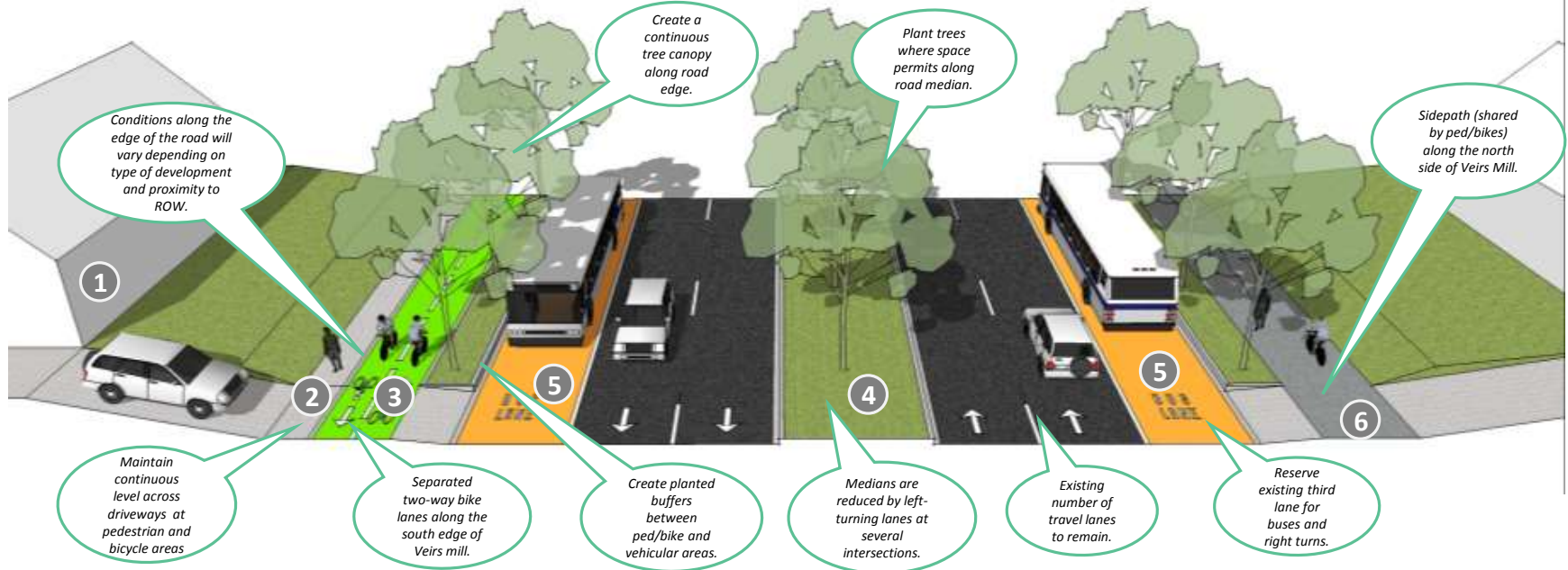
(1) Mixed-use development (2) Open spaces for public use (3) Internal streets lined with active uses (4) Lower-scale residential uses (5) Integrated mobility alternatives



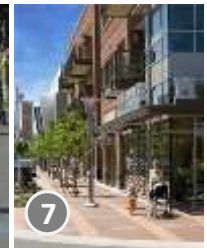
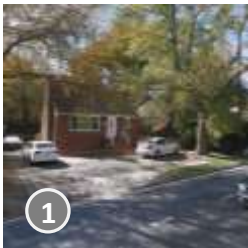


Preliminary Urban Design Recommendations | Complete Streets Approach

Recommendation: Implement a complete streets approach along Veirs Mill Road



(1) Existing residential development to remain (2) Provide continuous sidewalks protected by a green buffer with trees (3) Implement a two way separated bicycle lane along the south side – configuration to vary depending on available space (4) Improve landscaping along median where feasible (5) Dedicated bus and right-turn lane for the long-term bus rapid transit alternative (6) Provide a sidepath along the north side of Veirs Mill (7) Mixed-use development may occur along Veirs Mill Road over the long term, where commercial properties exist today.





Preliminary Recommendations | Urban Design | Create Local Character

Recommendation: Promote partnerships to encourage community participation and to create local character.



1989 Master Plan for The Communities of Kensington-Wheaton

Green Corridors Policy

Objective: To preserve the identity of residential areas along major highway corridors, to soften the distinction between commercial and residential areas.



(1) Hammond Wood (2) St. Catherine Laboure Catholic Church (3) Veirs Mill Baptist Church (4) Retail cluster at Veirs Mill Road and Randolph Road (5) Shrine of St. Jude Thaddeus Catholic Church (6) Parklawn Local Park



Preliminary Recommendations | Urban Design | Create Local Character

Recommendation: Promote partnerships to encourage community participation and to create local character.



(1) Enhanced median landscape including native species and storm water management (2) Partner with utility company to enhance appearance of electrical poles in the short term (3) Plant street trees along residential sidewalks where missing (4) Introduce separated bicycle facilities (5) Explore opportunities for public art at bus shelters and bus rapid transit shelters (6) Promote creative temporary use of frontage road space for community events.

PARKS, TRAILS AND OPEN SPACE RECOMMENDATIONS

- Improve the visual presence of community destinations (parks, trails, open space and community facilities) through enhanced connections and wayfinding
- Introduce Neighborhood Green Urban Parks with new development at commercial areas and areas near transit
- Redesign Parklawn Local Park to include additional park uses, improve the park frontage, and improve the relationship with Veirs Mill Road
- Improve the Matthew Henson trail crossing and identify opportunities to connect to Matthew Henson State Park from the east





ENVIRONMENTAL RECOMMENDATIONS

- Retrofit underutilized right of way and private institutions / commercial properties with stormwater management
- Integrate innovative stormwater management into design of bus rapid transit lanes and stations.
- Improve air quality by promoting non-automobile transportation options



COMMUNITY FACILITIES RECOMMENDATIONS

- Improve connectivity between transit and community facilities
- Provide an improved gateway to the Holiday Park Senior Center
- Consider opportunities to integrate evening programming for youth, potentially at the Holiday Park Senior Center if long-term facility modernization plans are undertaken



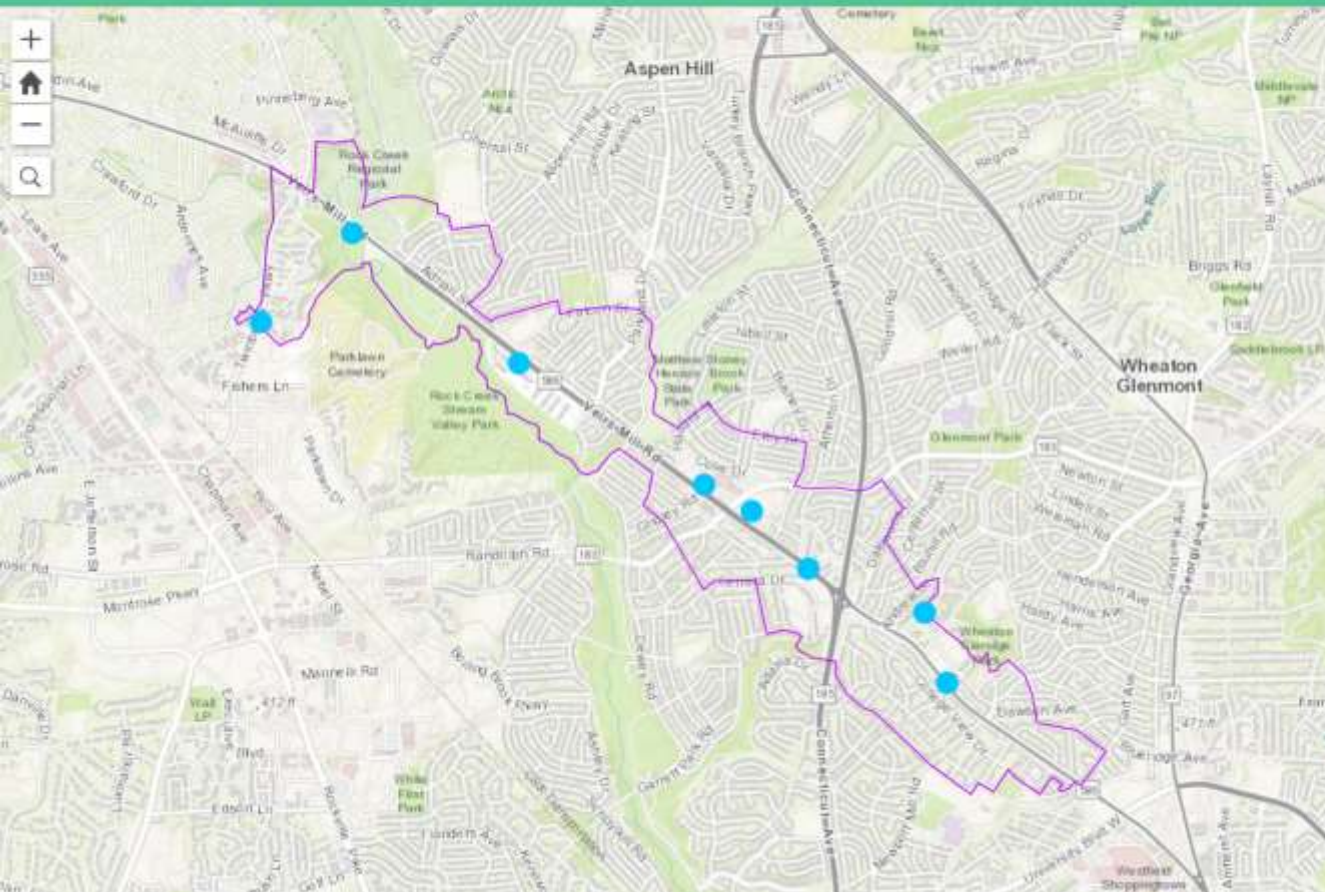


NEXT STEPS

← → ↻ mcatlas.org/veirmill/



VEIRS MILL CORRIDOR PLAN PRELIMINARY RECOMMENDATIONS



CONNECTING COMMUNITIES

Veirs Mill Preliminary Recommendations

Connectivity



Safety



Enhanced Community



NEXT STEPS

- January: Planning Board – Preliminary Recommendations
- March: Planning Board – Working Draft of Master Plan
- April: Planning Board Public Hearing
- April - May: Planning Board Worksessions
- June: Approval of Planning Board Draft Master Plan
- July: County Council Public Hearing

CONNECT WITH US

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