

Montgomery Planning 09/08/2020



Vision Zero in the Planning Department



Public Safety

Pedestrian dies after being struck last week in Rockville

Public Safety

Two killed, five seriously injured in Potomac, Md., collision

Transportation

Crash at risky Md. crosswalk kills teen on bike he received for Christmas

Transportation safety is a major issue in Montgomery County.

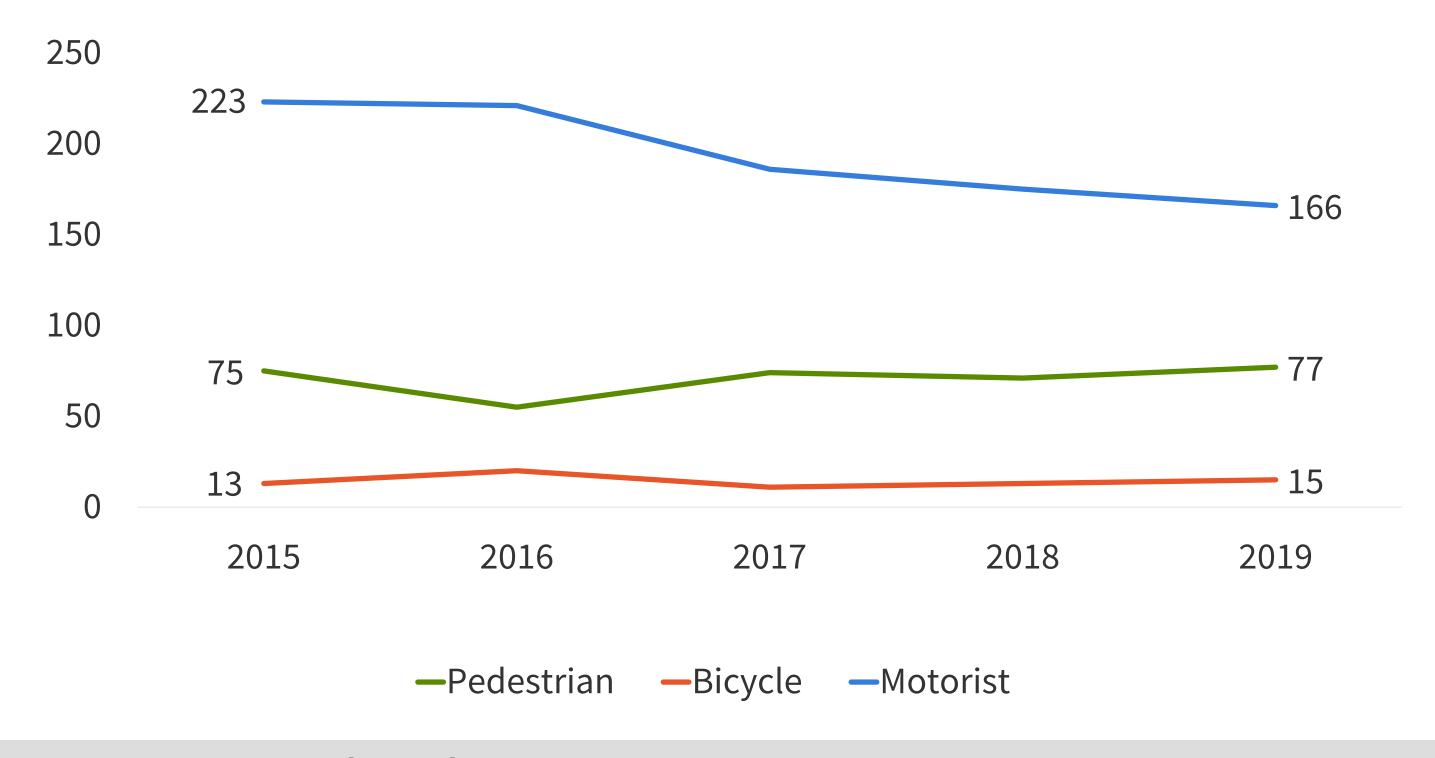
2015-2019 by the numbers:

59,090 reported crashes

1,183 severe injuries

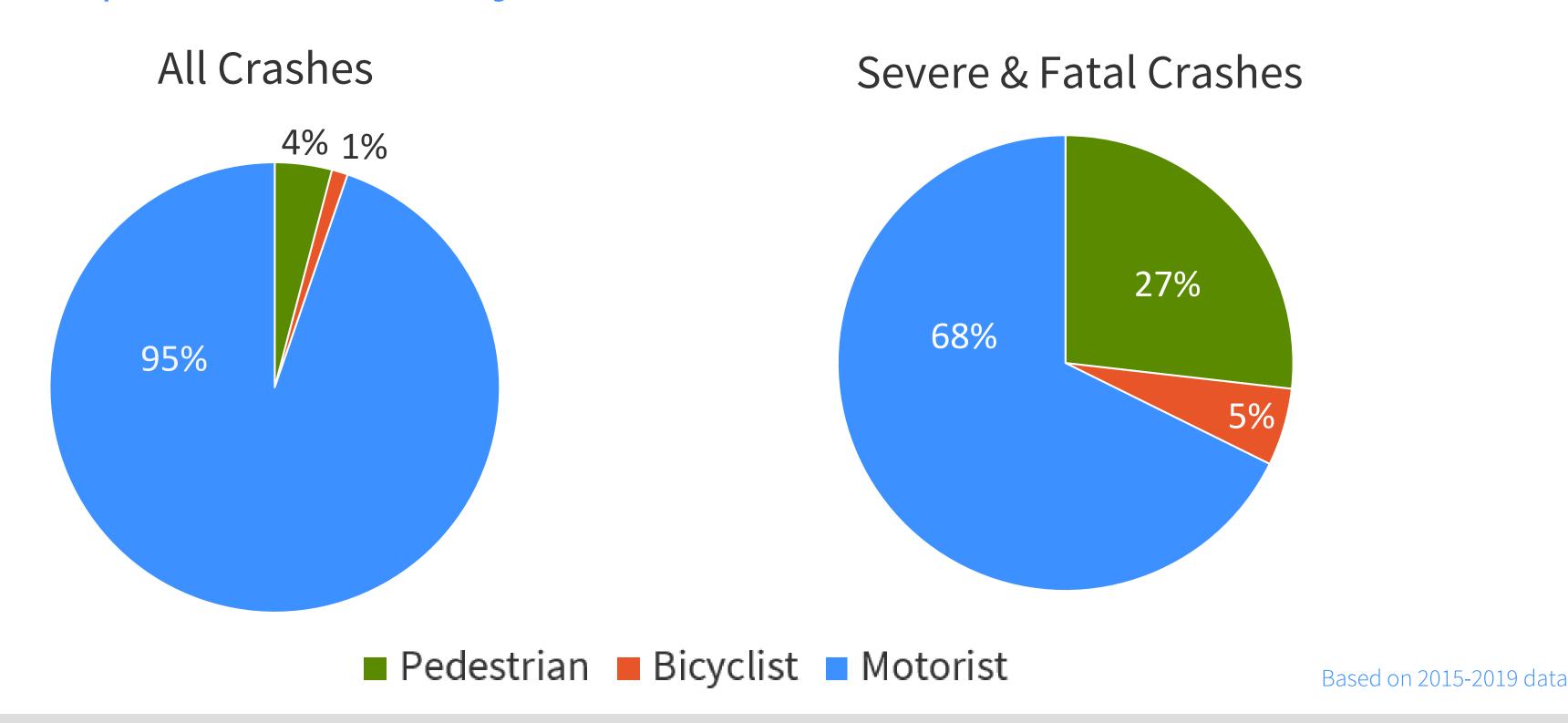
> **145** fatalities

Severe Injuries & Fatalities (2015-2019)



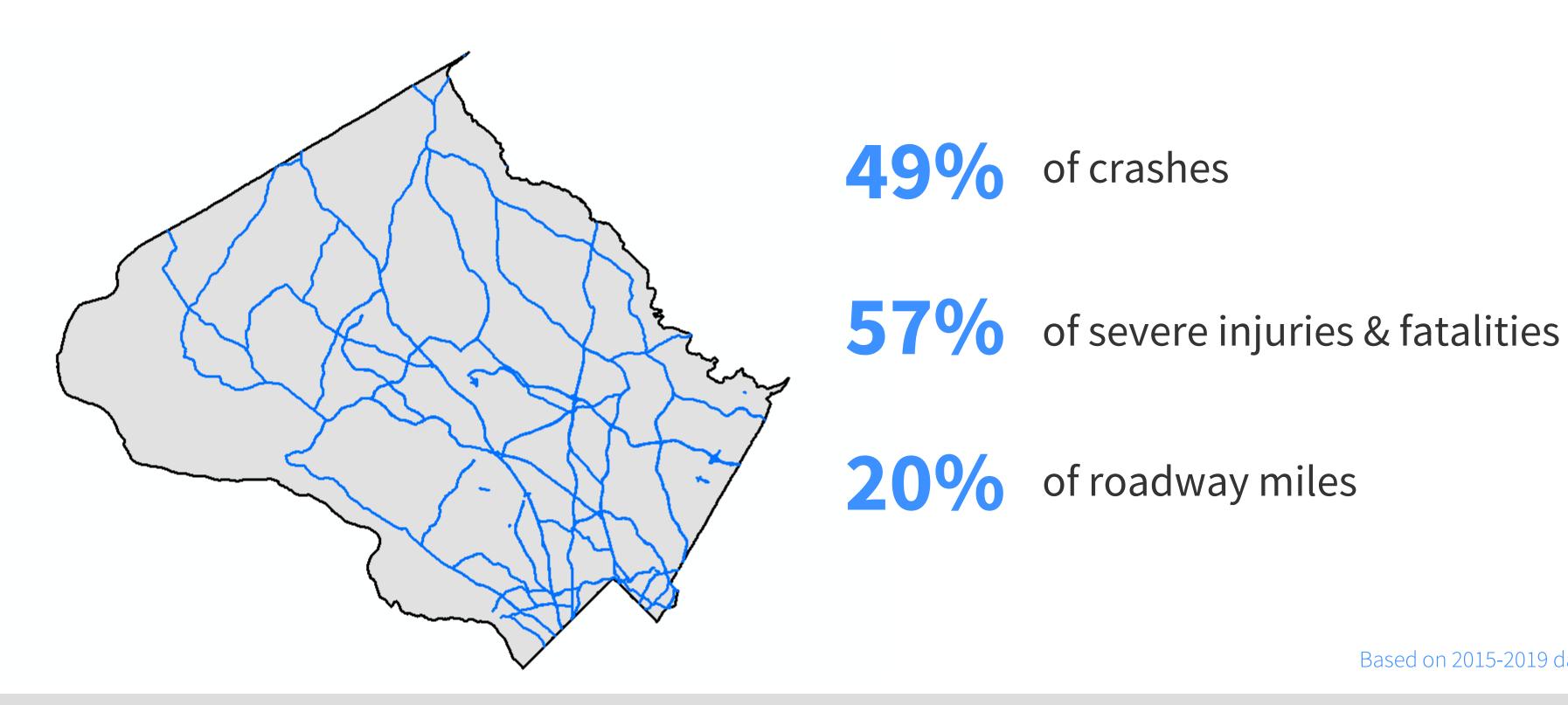


Impact on Bicyclists & Pedestrians



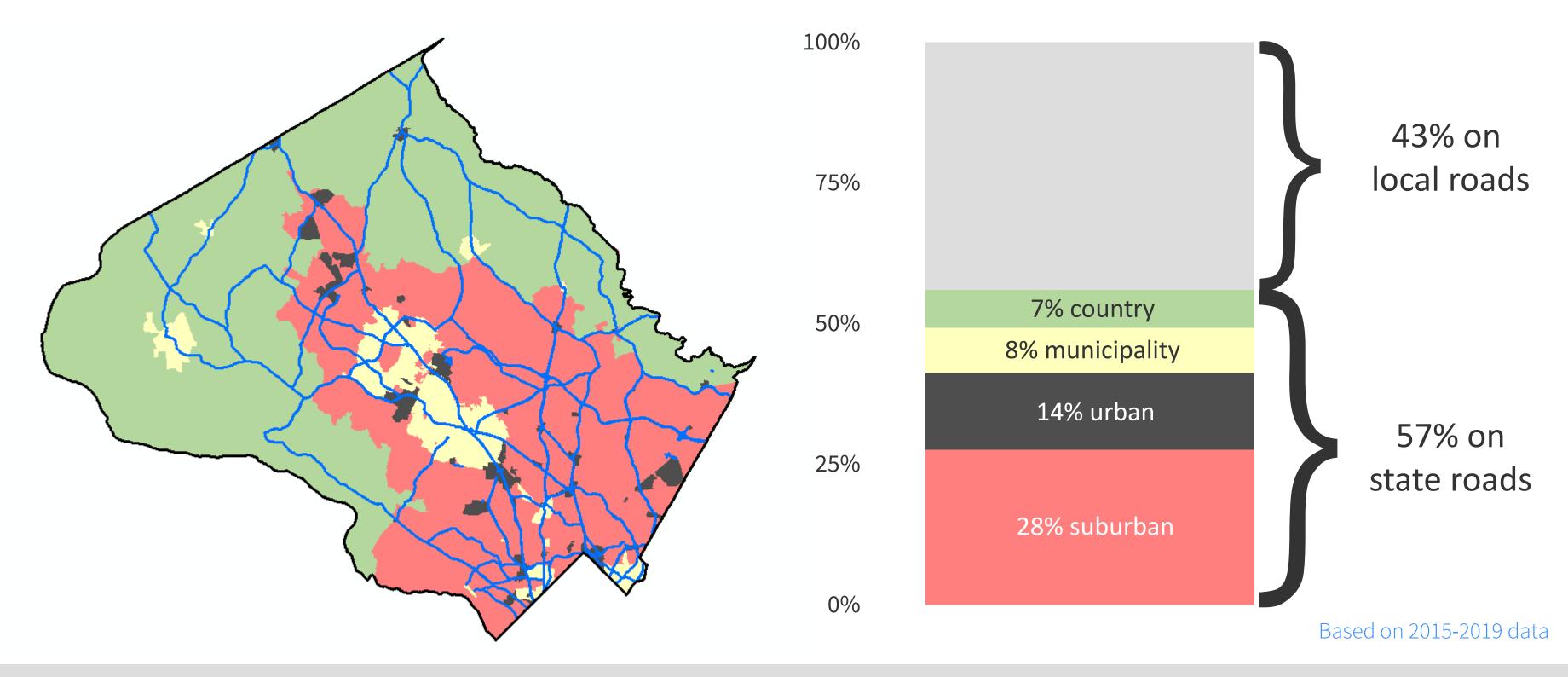


Crashes on State Roads



Based on 2015-2019 data

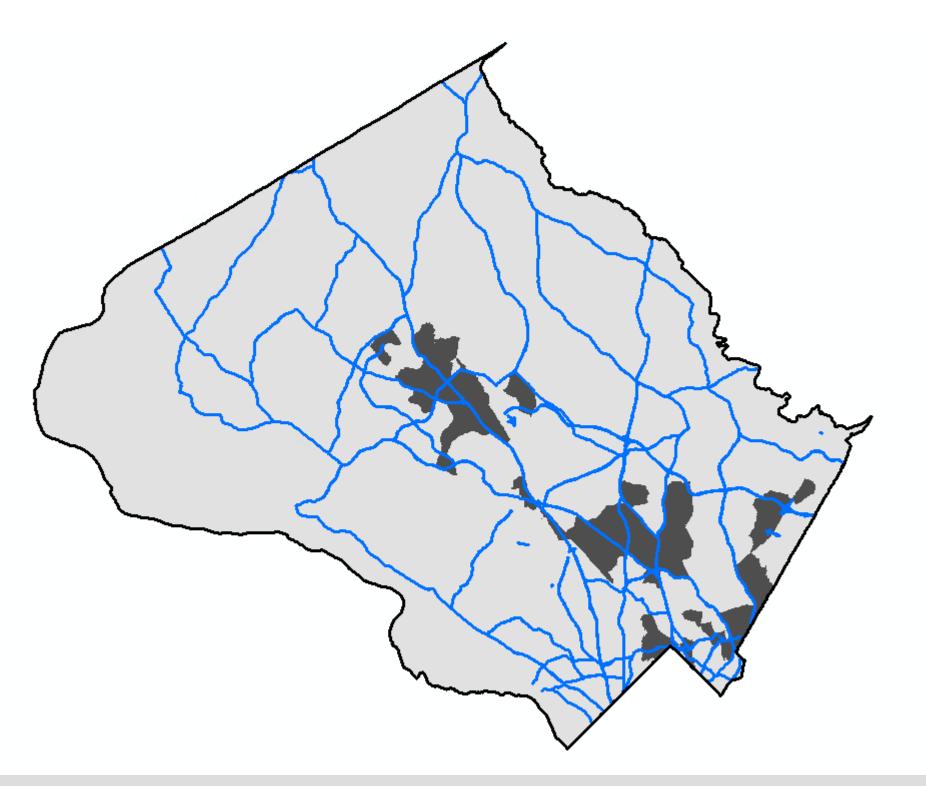
Severe Injuries and Fatalities



Equity & Vision Zero

Hispanic and Black residents have a 33% higher traffic fatality rate in Montgomery County compared to Whites.

Equity Emphasis Areas



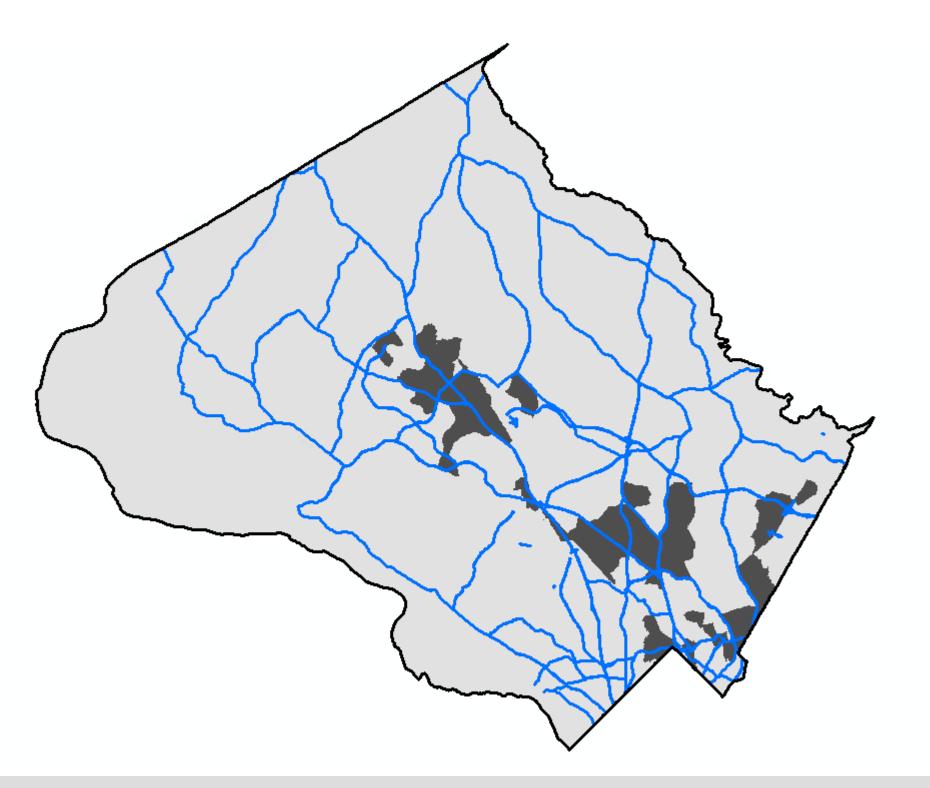
32% of crashes

28% of severe injuries & fatalities

7% of land area

Based on 2015-2019 data

State Roads in Equity Emphasis Areas



49% of EEA crashes

of EEA severe 59% injuries & fatalities

Based on 2015-2019 data

Suburban Safety Challenges

- 1. Fast roads with high traffic volumes
- 2. Infrequently spaced protected crossings
- 3. Inadequate walking and biking infrastructure
- 4. Land uses that encourage speed

Fast Roads with High Traffic Volumes



Infrequently Spaced Protected Crossings



Inadequate Bicycle and Pedestrian Infrastructure





Land Uses that Encourage Speed



What is Vision Zero?

Vision Zero is a Paradigm Shift

TRADITIONAL APPROACH

Traffic deaths are INEVITABLE

PERFECT human behavior

Prevent COLLISIONS

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VISION ZERO

Traffic deaths are PREVENTABLE

Integrate HUMAN FAILING in approach

Prevent FATAL AND SEVERE CRASHES

SYSTEMS approach

VS

Saving lives is NOT EXPENSIVE



Vision Zero's Long History

1997: Swedish Parliament adopts Vision Zero as official policy



"In every situation a person might fail. The road system should not."

- Claes Tingvall



Chicago, 2012:

"Eliminate all pedestrian, bicycle and overall traffic crash fatalities within 10 years"



VISION ZERO SF

San Francisco and NYC, 2014:

Both cities adopt Vision Zero plans in January 2014



Edmonton Canada, **2015:** Edmonton is the first Canadian city to officially adopt Vision Zero



Montgomery County, 2017: Montgomery County is one of the first county governments in the United States to initiate a Vision Zero plan



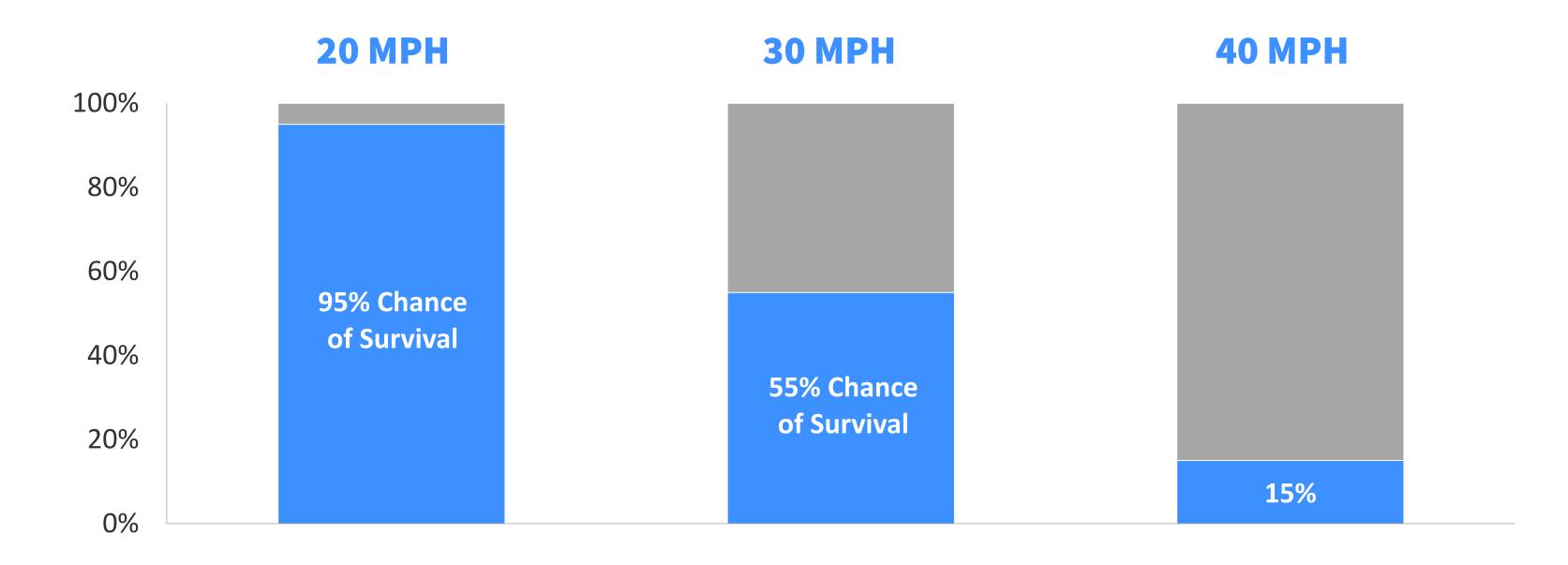
Anticipating Human Error

- Separating users in space
- Separating users in time
- Increasing attentiveness and awareness





Accommodating Human Vulnerability

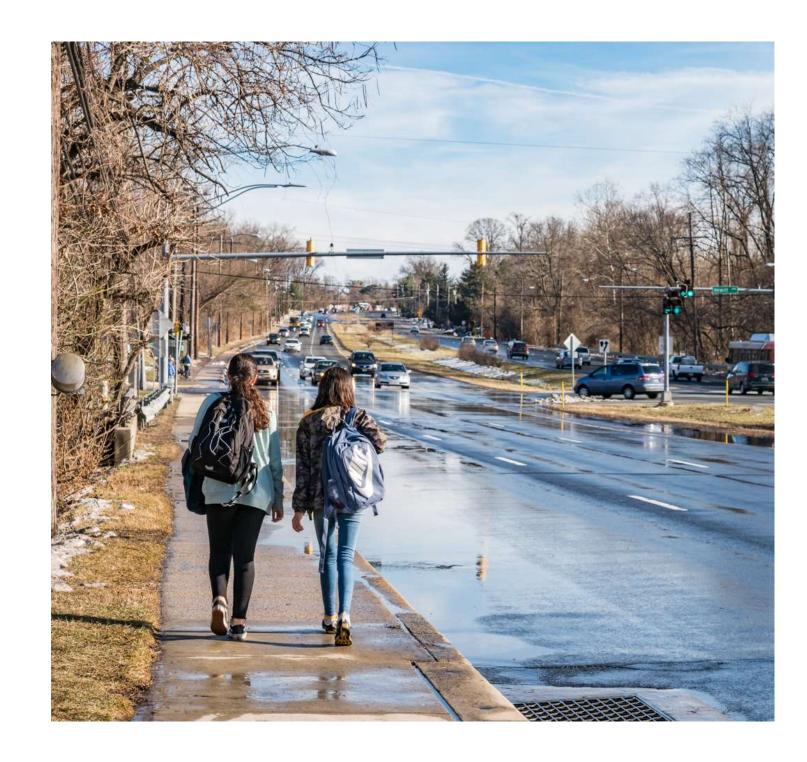


Pedestrian survival rates when involved in crashes with vehicles at different speeds

How We're Improving Safety

Vision Zero in the Planning Department

- Master planning
- Development & capital projects review
- Data analysis
- Community support & engagement
- Advocate for change



What We Don't Do

- Construct roads, sidewalks, or bikeways
- Install traffic signals or crosswalks
- Enforce traffic laws



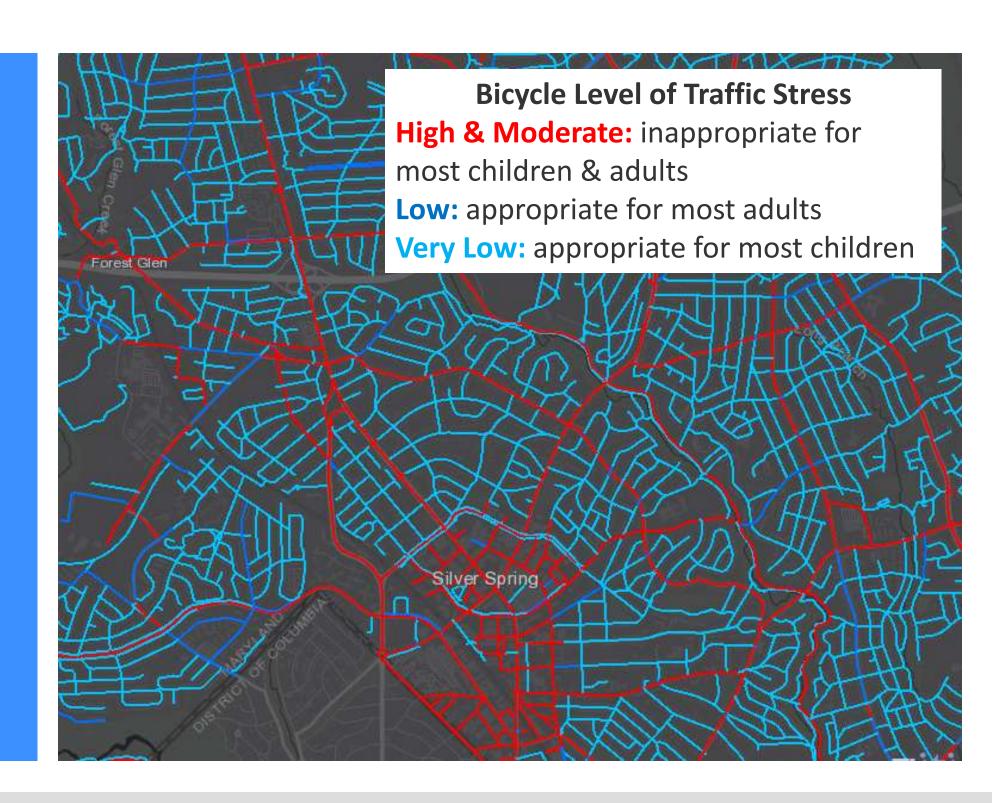
Shift from Reactive to Proactive

Identify future problem areas and work to prevent severe crashes before they happen.

- Focus on context data (in addition to crash data)
- Predictive safety analysis

Bicycle Master Plan

Only 11% of potential bike trips can be made on a comfortable bicycling network in Montgomery County.



1,125 Miles of Bikeways

Recommendation: Extend MD 187 / Old Georgetown Road buffered bike lanes north of I-495. Add physical separation in the buffers of the recently striped bike lanes.



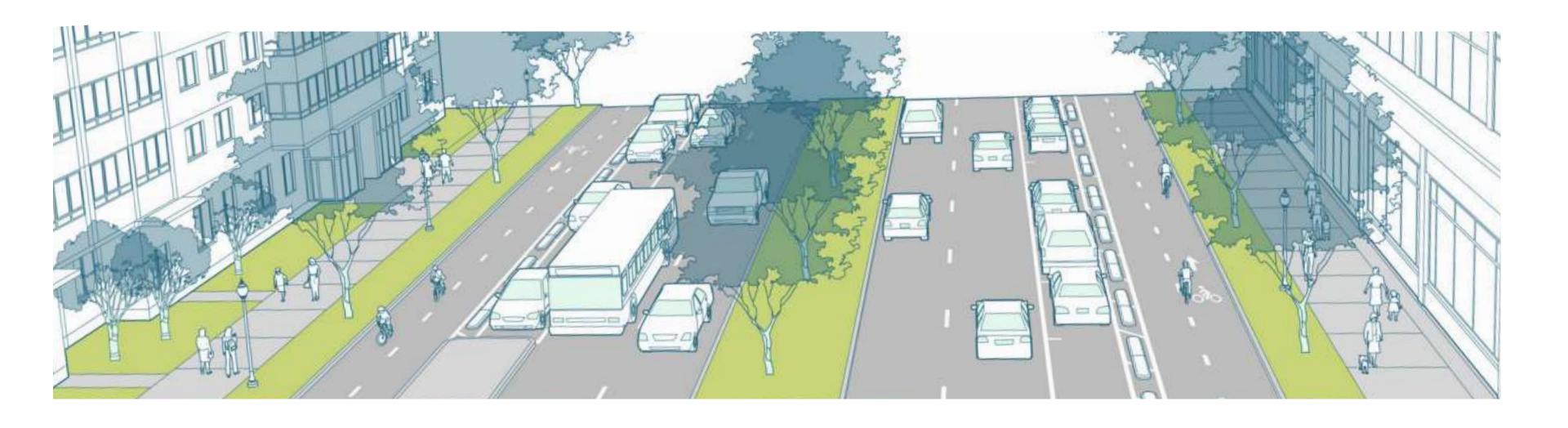








Complete Streets Design Guide



Street Types

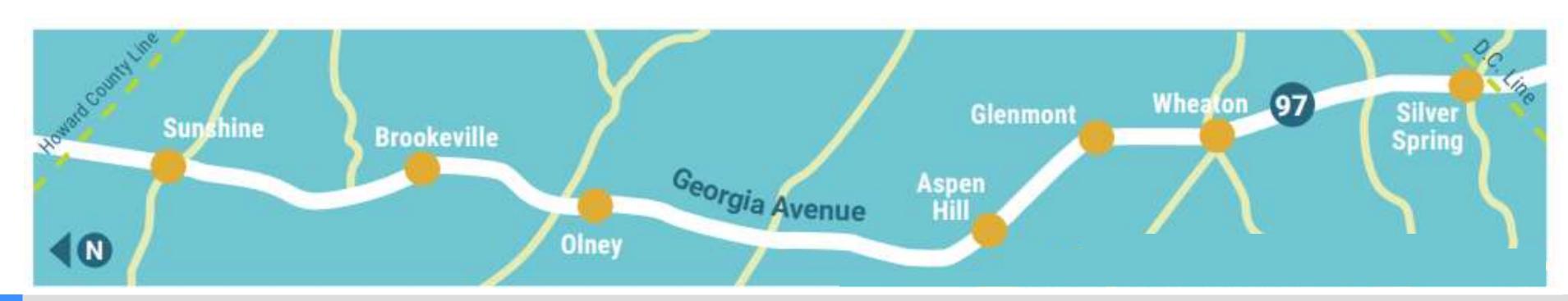
- Downtown Boulevard
- Town Center Boulevard
- Neighborhood Connector
- Neighborhood Street
- Industrial Street
- Country Road
- Major Highway



Design Parameters

- Target speeds
- Number of vehicle lanes
- Lane widths
- Spacing between crossings

- Spacing for signalized intersections
- Sidewalk width
- Bikeway type and width

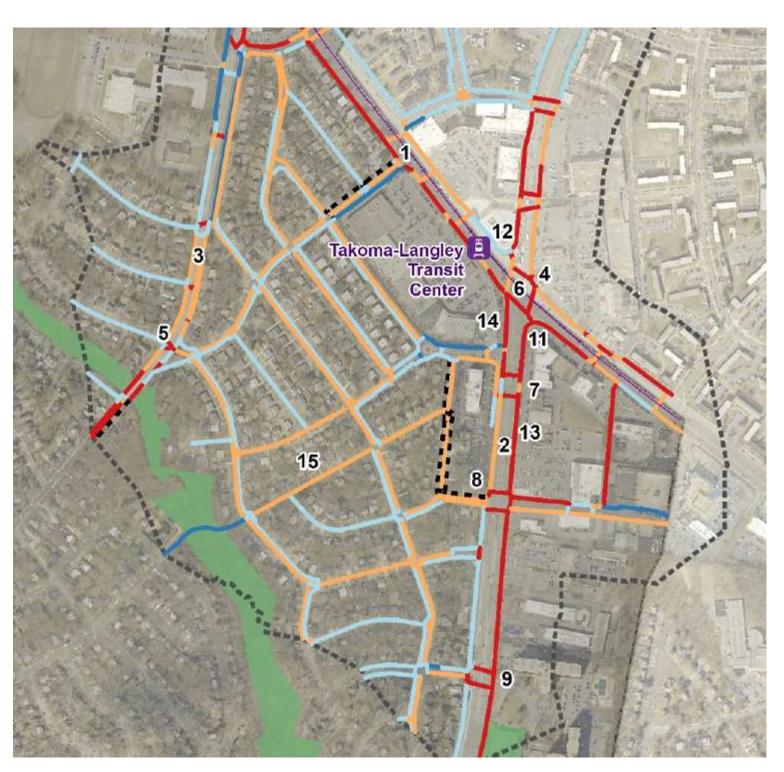


Ties to MDOT SHA

- SHA is developing its own context-sensitive design guide
- Seeking to align key parameters, like target speeds and distances between safe crossings:
 - Downtown Boulevards: target speed of 25 mph, but many posted at 30 mph
 - Town Center Boulevards: target speed of 30 mph, but many are posted at 40 mph



Purple Line Pedestrian Analysis



Takoma-Langley Transit Center

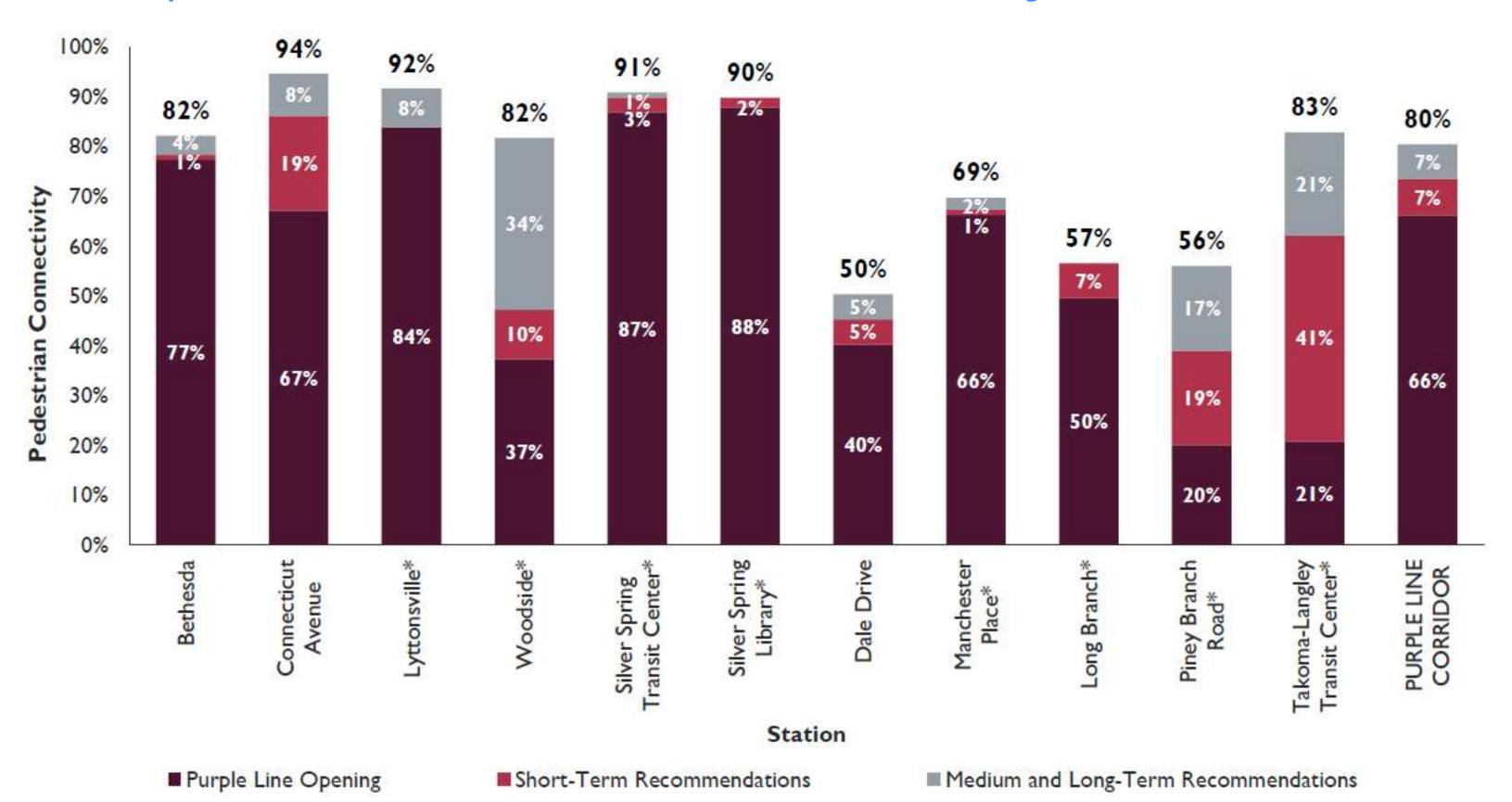
Existing Connectivity: 21%

Connectivity with Recommendations: 83%

Recommendations:

- Slower speeds
- Safer crossings
- Dedicated space for bicycling and walking

Purple Line Pedestrian Analysis



Reduce Posted Speed Limits

Connecticut Ave between Manor

Piney Branch Rd between Flower

35 -> 25 mph Connecticut Avenue station

Rd and Chevy Chase Lake Dr

30 → 25 mph

Long Branch station

Ave and University Blvd

University Blvd between Glenville

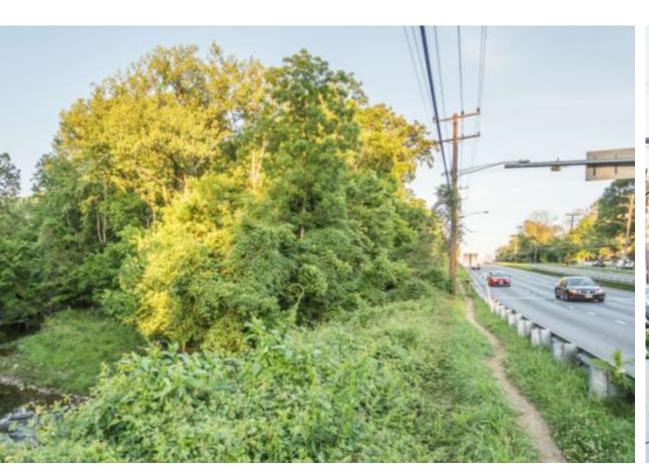
Rd/Heron Dr and 14th Ave

35 -> 25 mph

Long Branch and

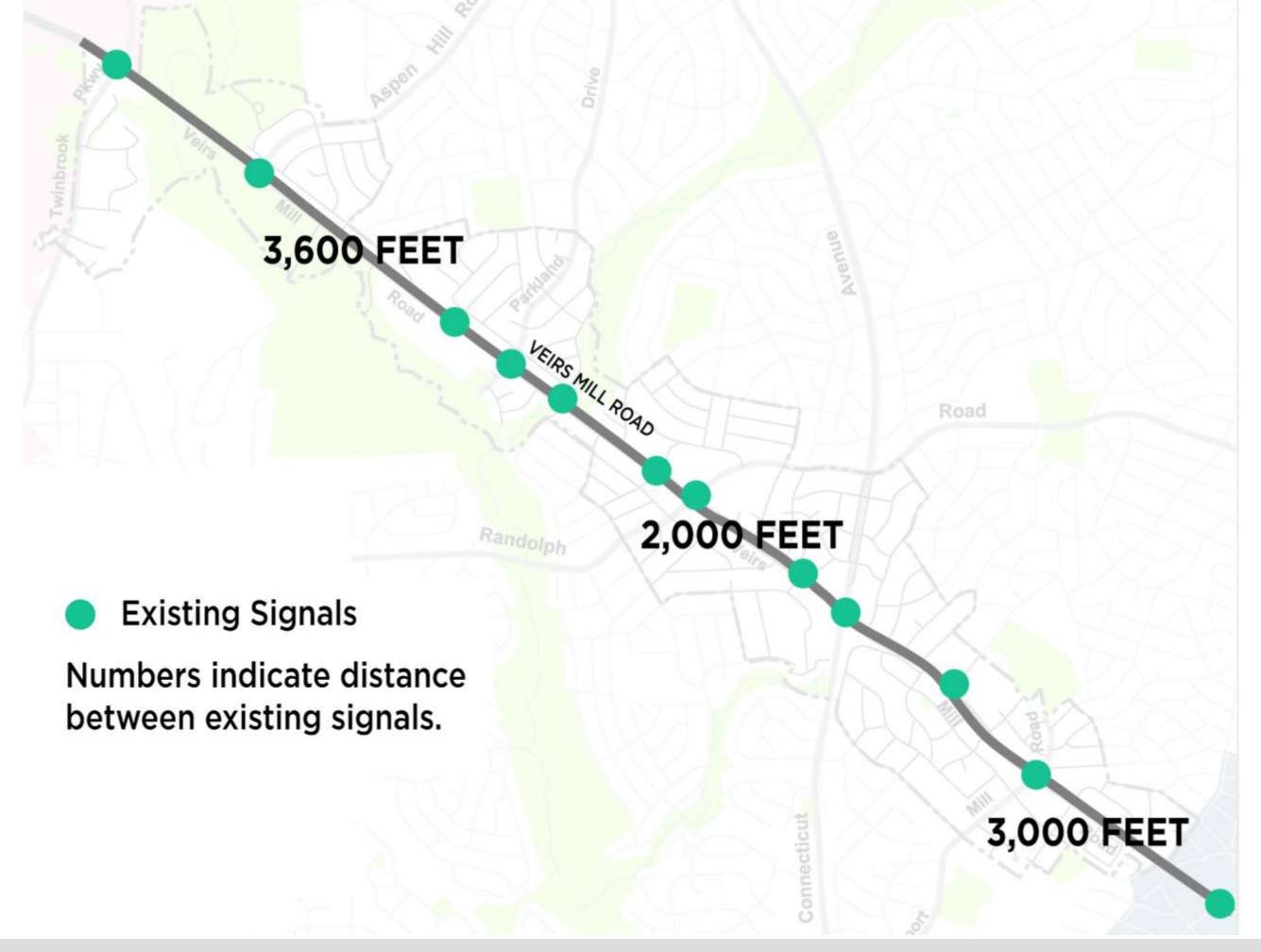
Takoma-Langley stations

Veirs Mill Corridor Master Plan





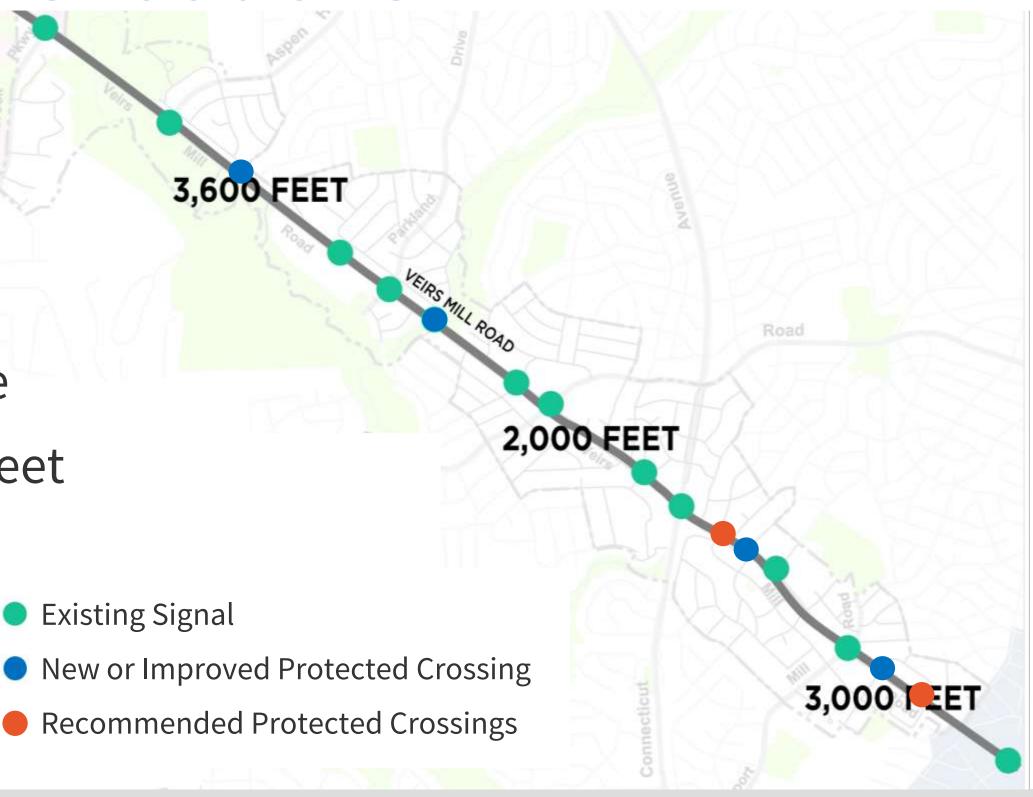




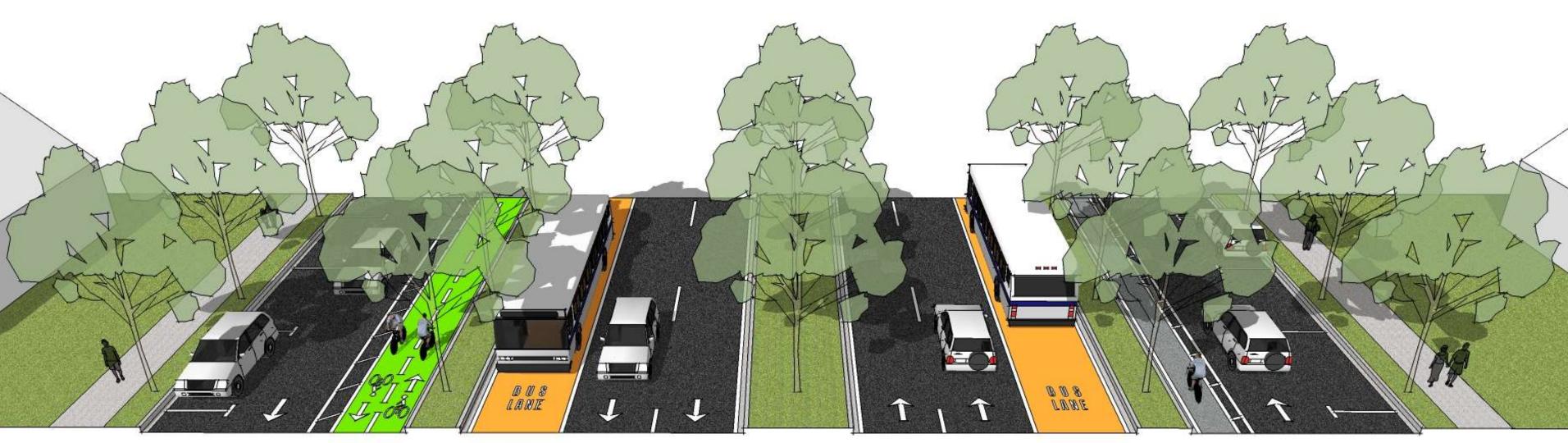


Short-Term Recommendations

- Continuous sidewalks
- School speed zone
- New protected crossings
 - Veirs Mill Road at Norris Drive
 - Veirs Mill Road at Andrew Street



Long-Term Vision



Transform Veirs Mill Road to a Complete Street

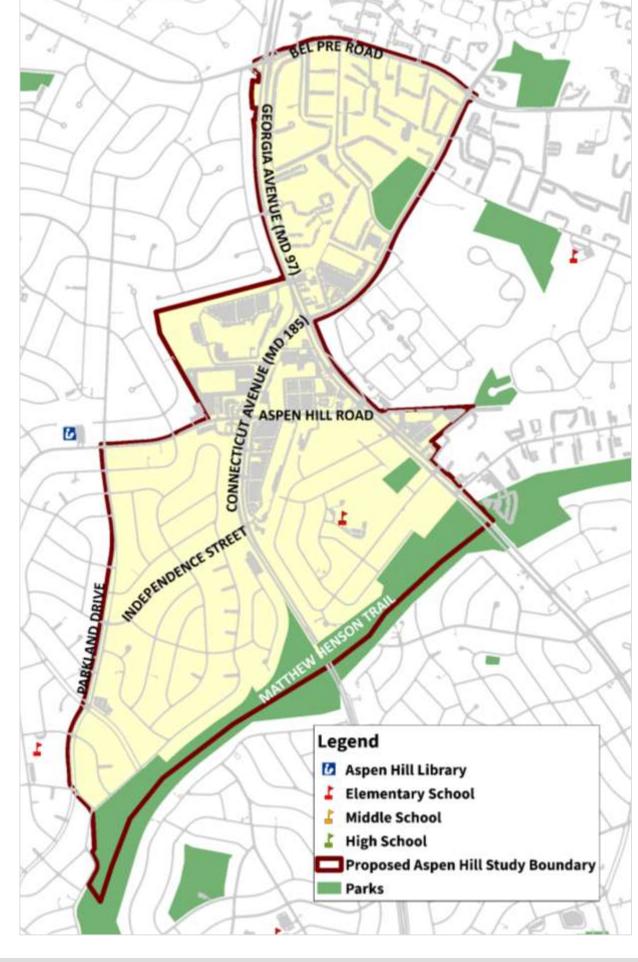
Aspen Hill Vision Zero Study





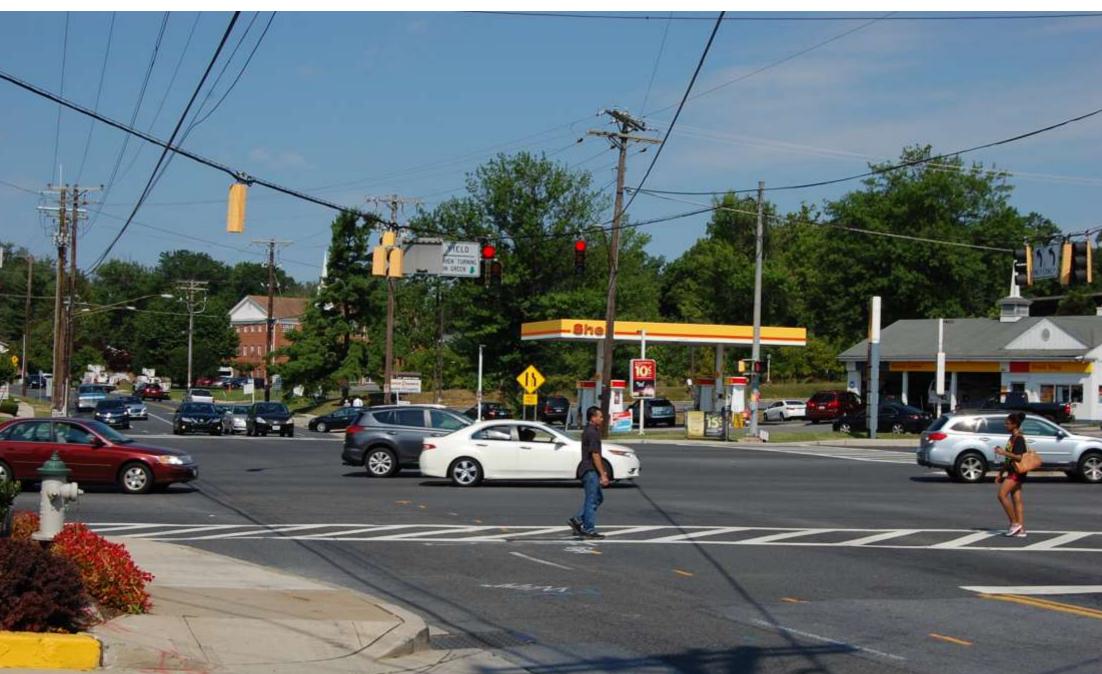












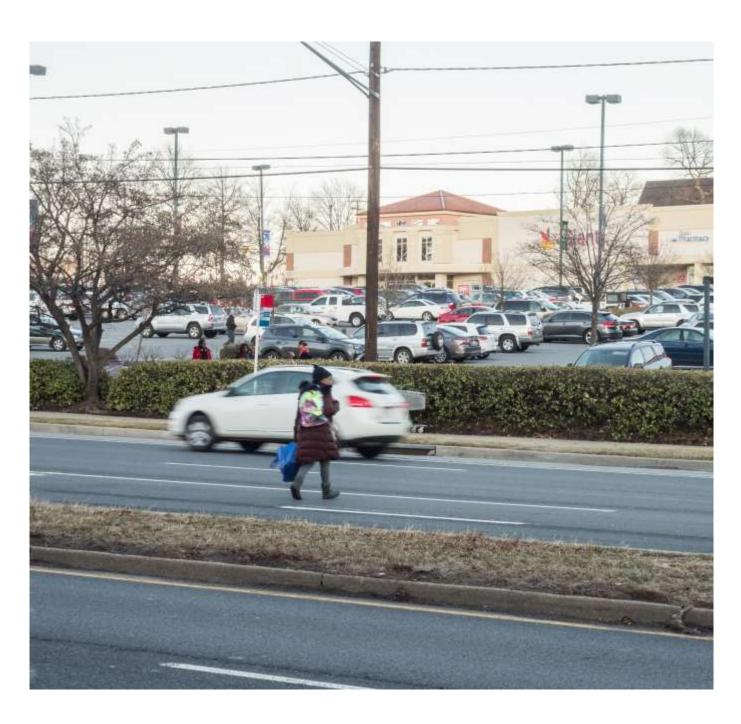






Vision Zero in the Planning Department

Safety Toolkit



- Range of safety improvements
- Applicable locations
- Key implementation and design considerations
- Equity and accessibility
- Safety benefits

Case Studies & National Best Practices

DDOT Speed Cameras:

20% reduction in crashes and 20% decrease in injuries

AASHTO Lane Widths:

10-foot and 11-foot travel lanes do not affect motorist safety, nor do they reduce capacity



Aspen Hill Recommendations

- Install median refuges along Georgia Ave at Hewitt Ave, Connecticut Ave, Aspen Hill Rd, Heathfield Rd, and Bel Pre Rd
- Employ right-turn-on-red restrictions at Connecticut Ave and Aspen Hill Rd and Georgia Ave and Hewitt Rd
- Install leading pedestrian intervals at Georgia Ave and Hewitt Ave

Wrap Up

- Transportation safety is a major issue in Montgomery County.
- 49% of crashes and 57% of fatalities occur on state roads.
- To address safety, we need
 - Slower speeds
 - Safer crossings
 - Dedicated space for bicyclists and pedestrians

Key Recommendations

Slower Speeds:

- Reduced speed limits surrounding Purple Line stations
- Align speed limits with **Complete Streets Design** Guide target speeds

Safer Crossings:

- Protected crossings along Veirs Mill Rd at Norris Dr and Andrew St
- Median refuges along Georgia Ave in Aspen Hill

Dedicated Space for Walking & Bicycling:

- Continuous sidewalks along Veirs Mill Rd
- Extend MD 187 / Old Georgetown Road buffered bike lanes north of I-495







Questions?

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