

# VISION ZERO



NO TRAFFIC DEATHS BY 2030

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

PRESENTATION TO GREATER SHADY GROVE TMD • 03/04/20

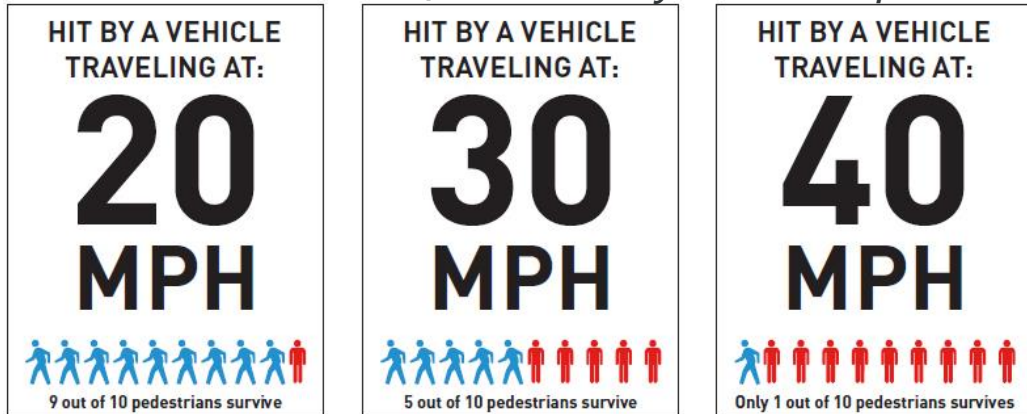


# WHAT IS VISION ZERO?



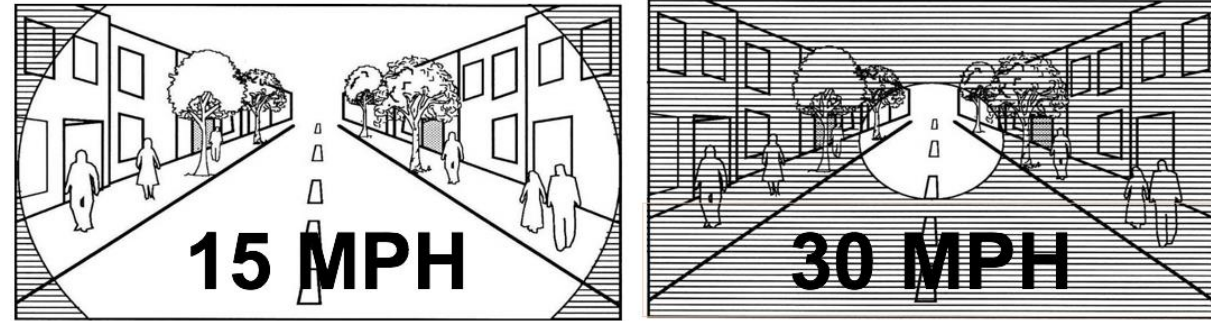
1. Transportation–related deaths and severe injuries are **preventable and unacceptable**.
2. **Human life takes priority over mobility** and other objectives of the road system. The road system should be safe for all users, for all modes of transportation, in all communities, and for people of all ages and abilities.
3. Human **error is inevitable**; the transportation system should be designed to anticipate error so the consequences are not severe injury or death.

*Pedestrian Chance of Survival by Vehicle Speed*



Graphic courtesy of: [Vision Zero Network](https://www.visionzero.org/)

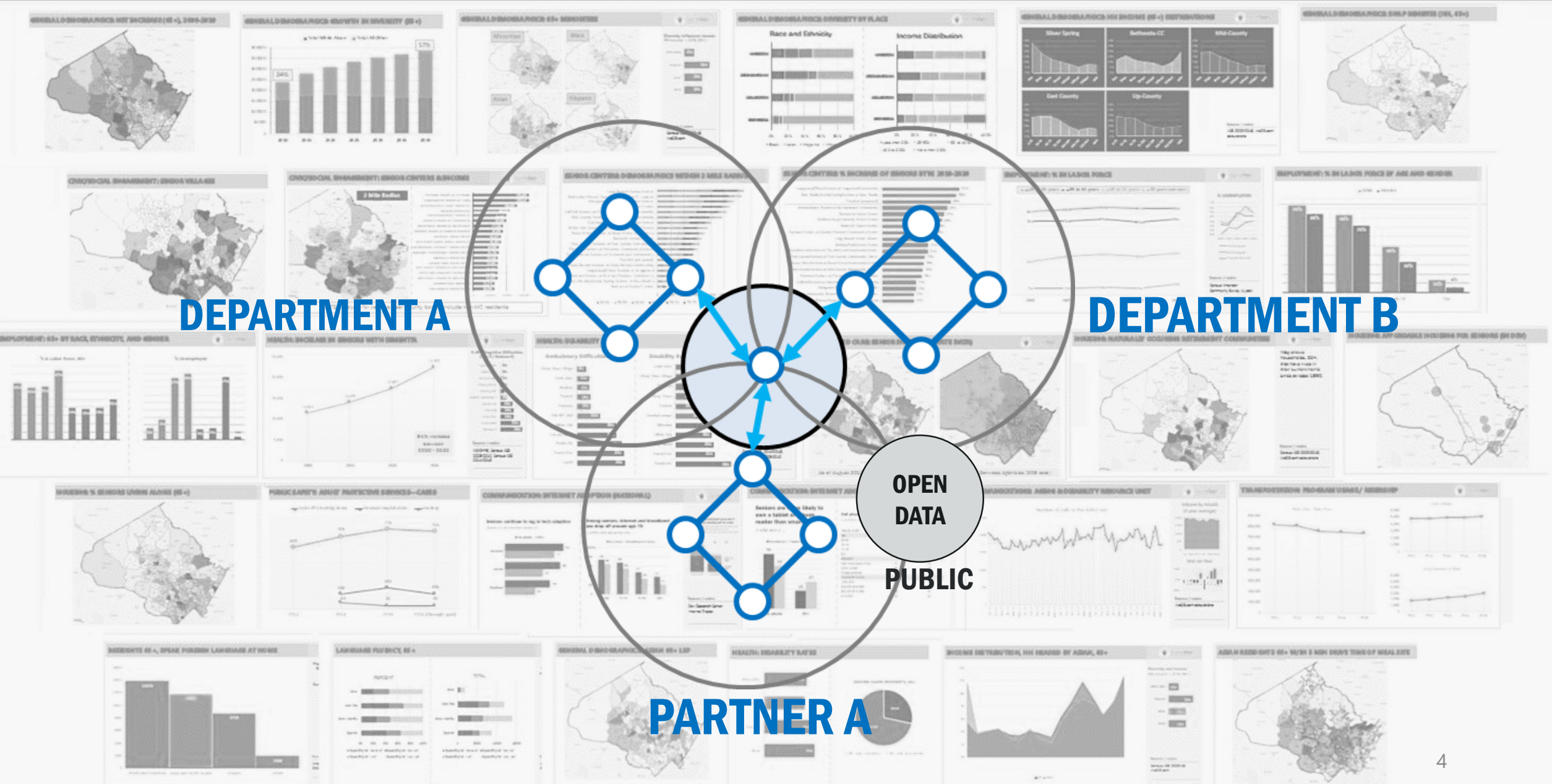
*Driver Cone of Vision by Vehicle Speed*



4. People are inherently vulnerable, and **speed is a fundamental predictor of crash survival**. The transportation system should be designed for speeds that protect human life.
5. **Safe human behaviors**, education, and enforcement are essential contributors to a safe system.
6. **Policies and practices at all levels of government need to align**, making safety the highest priority for roadways.



# COORDINATOR'S ROLE IN VISION ZERO



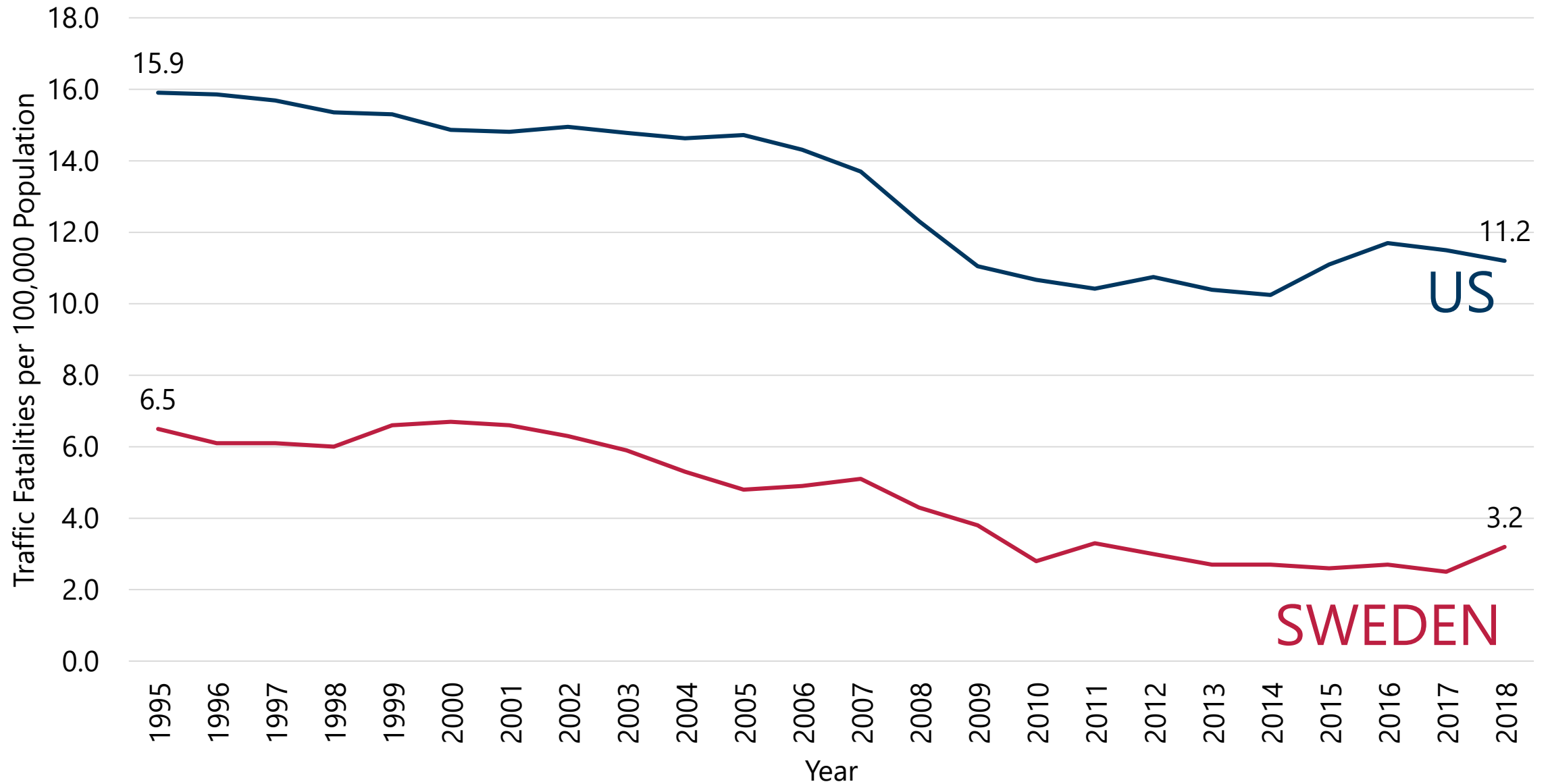
**DEPARTMENT A**

**DEPARTMENT B**

**OPEN DATA PUBLIC**

**PARTNER A**

# VISION ZERO – SWEDEN'S RESULTS VS. US

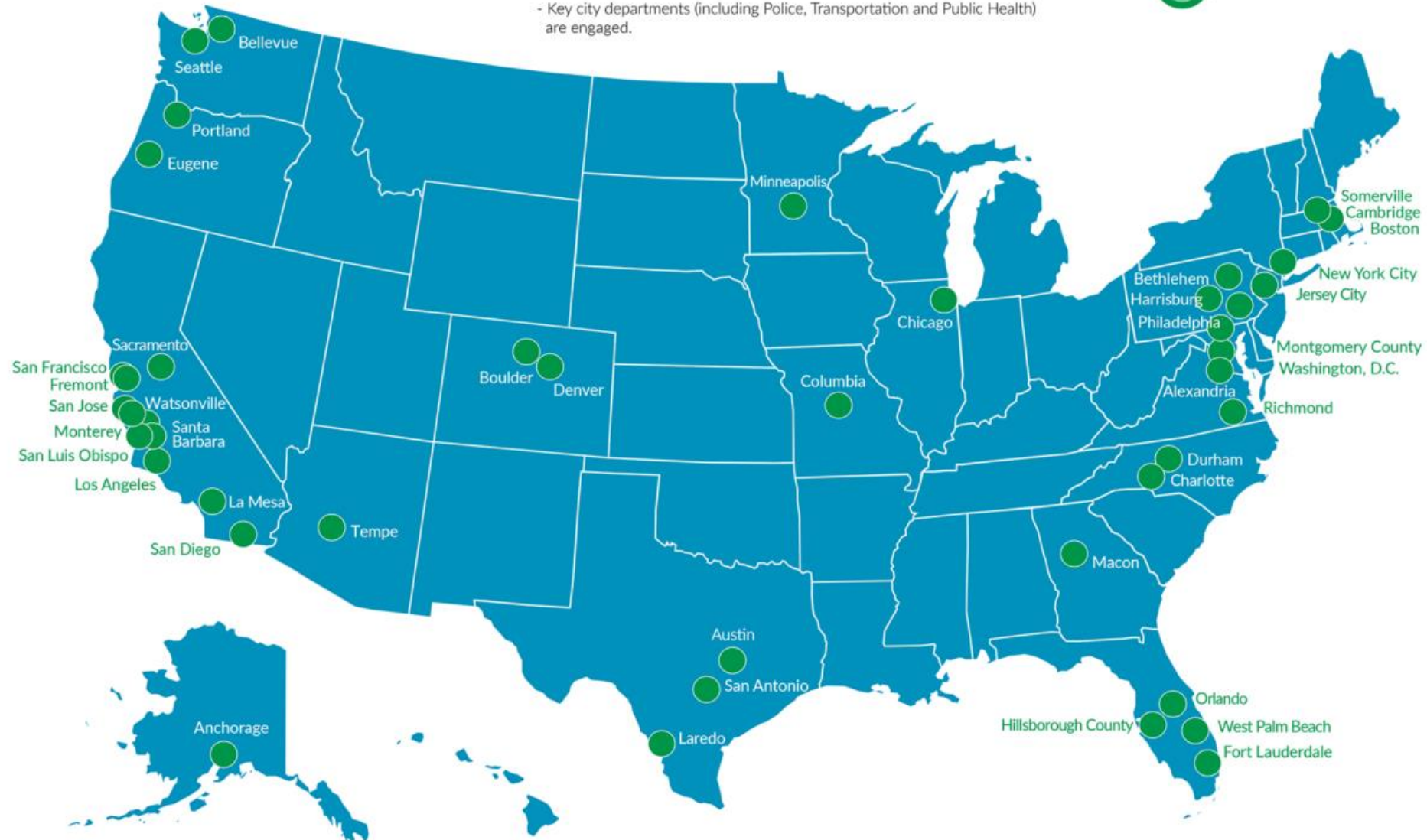


# VISION ZERO CITIES AND COUNTIES

## Vision Zero Cities

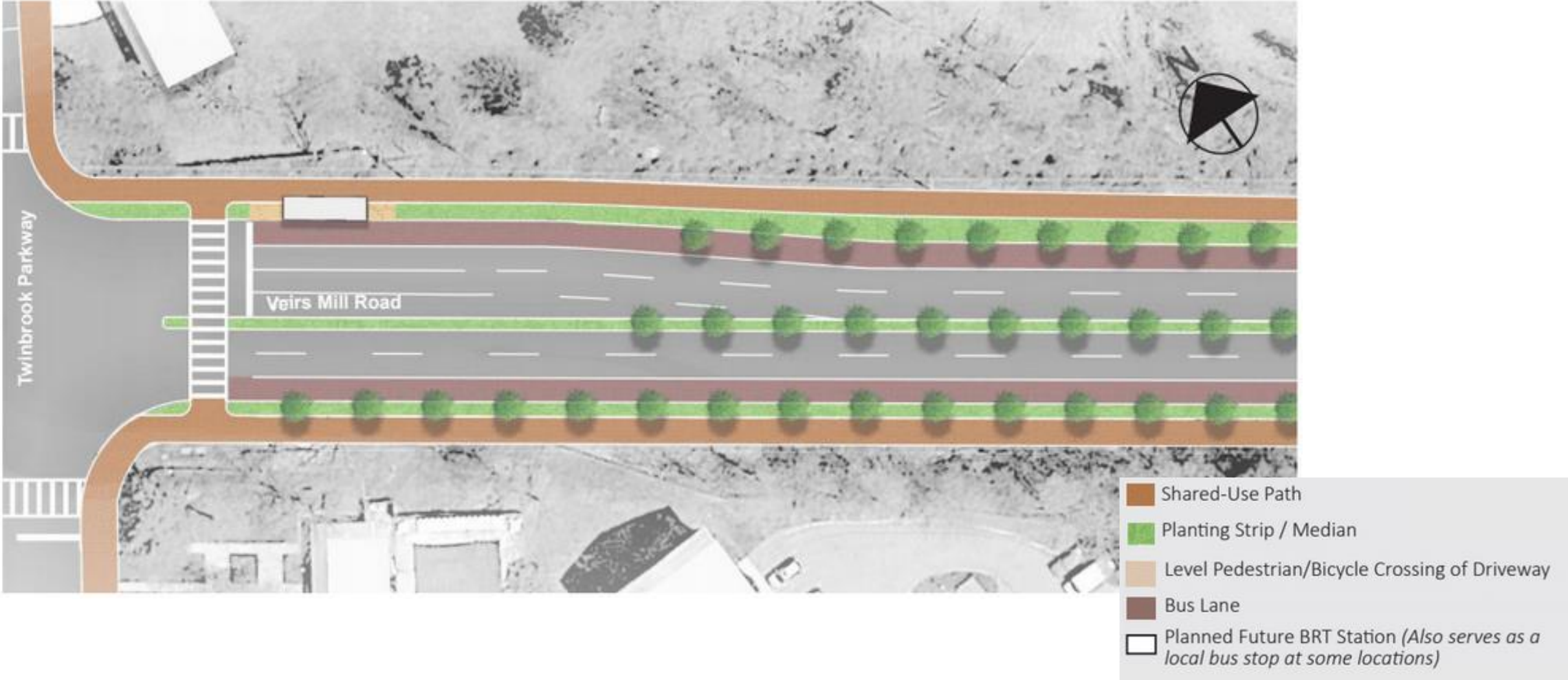
A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.





# CREATING COMPLETE STREETS



Graphic courtesy of: Planning Dept. (Draft design, not official)

# CREATING COMPLETE STREETS

## PEDESTRIAN SCRAMBLE

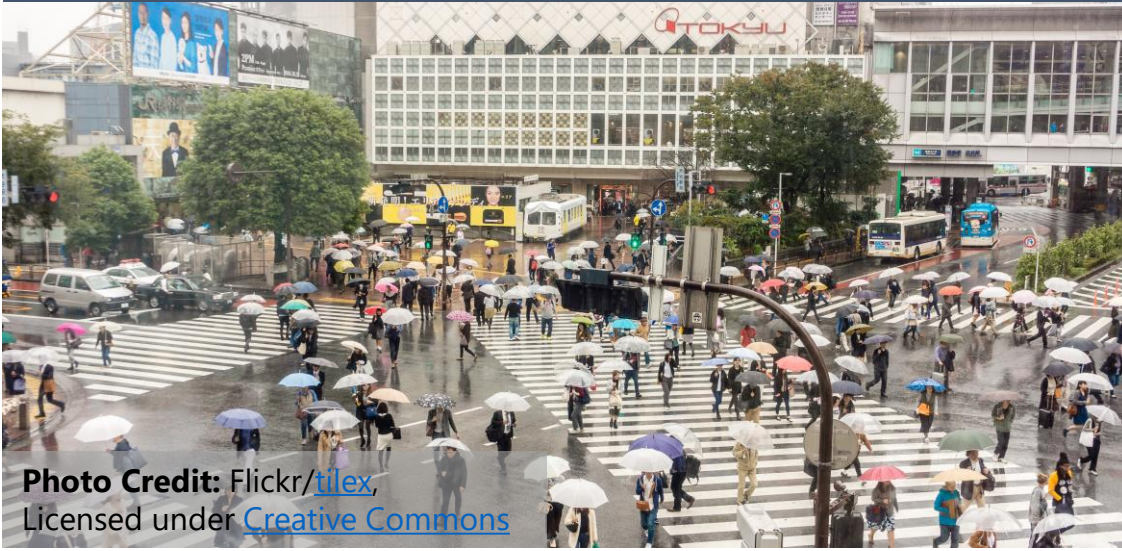


Photo Credit: Flickr/[tilex](#),  
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## PEDESTRIAN HYBRID SIGNALS (HAWK BEACON)

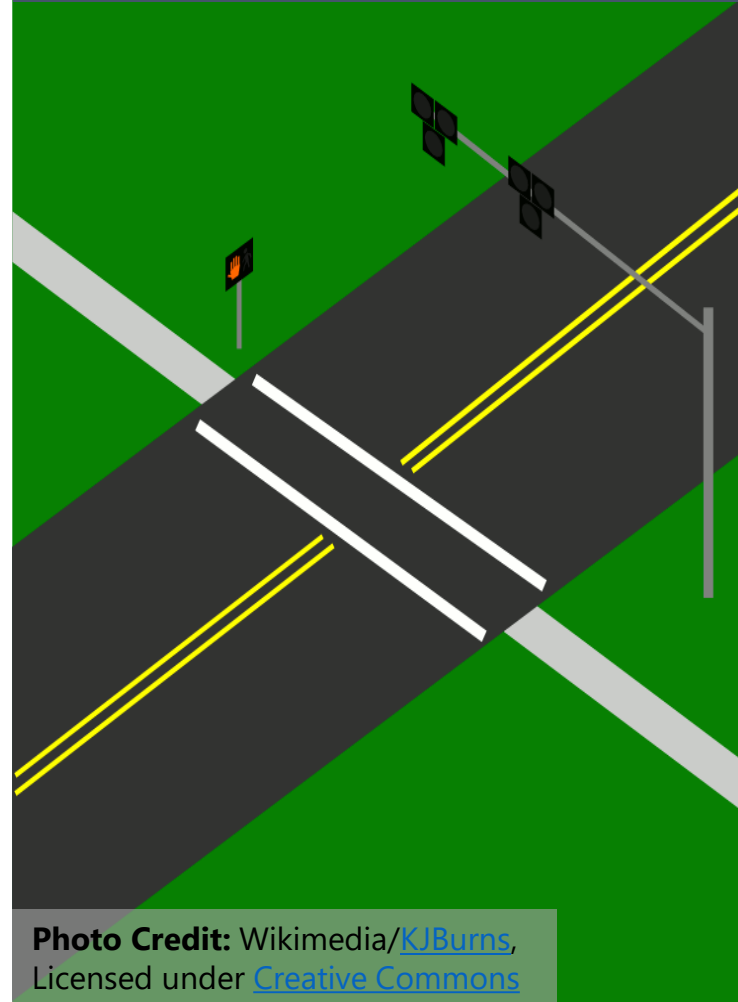


Photo Credit: Wikimedia/[KJBurns](#),  
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## SIGNAL TIMING



## LIGHTING



## PROTECTED BIKE LANES



Photo Credit: MCDOT, Used with permission





# VISION ZERO 2020 ACTION PLAN



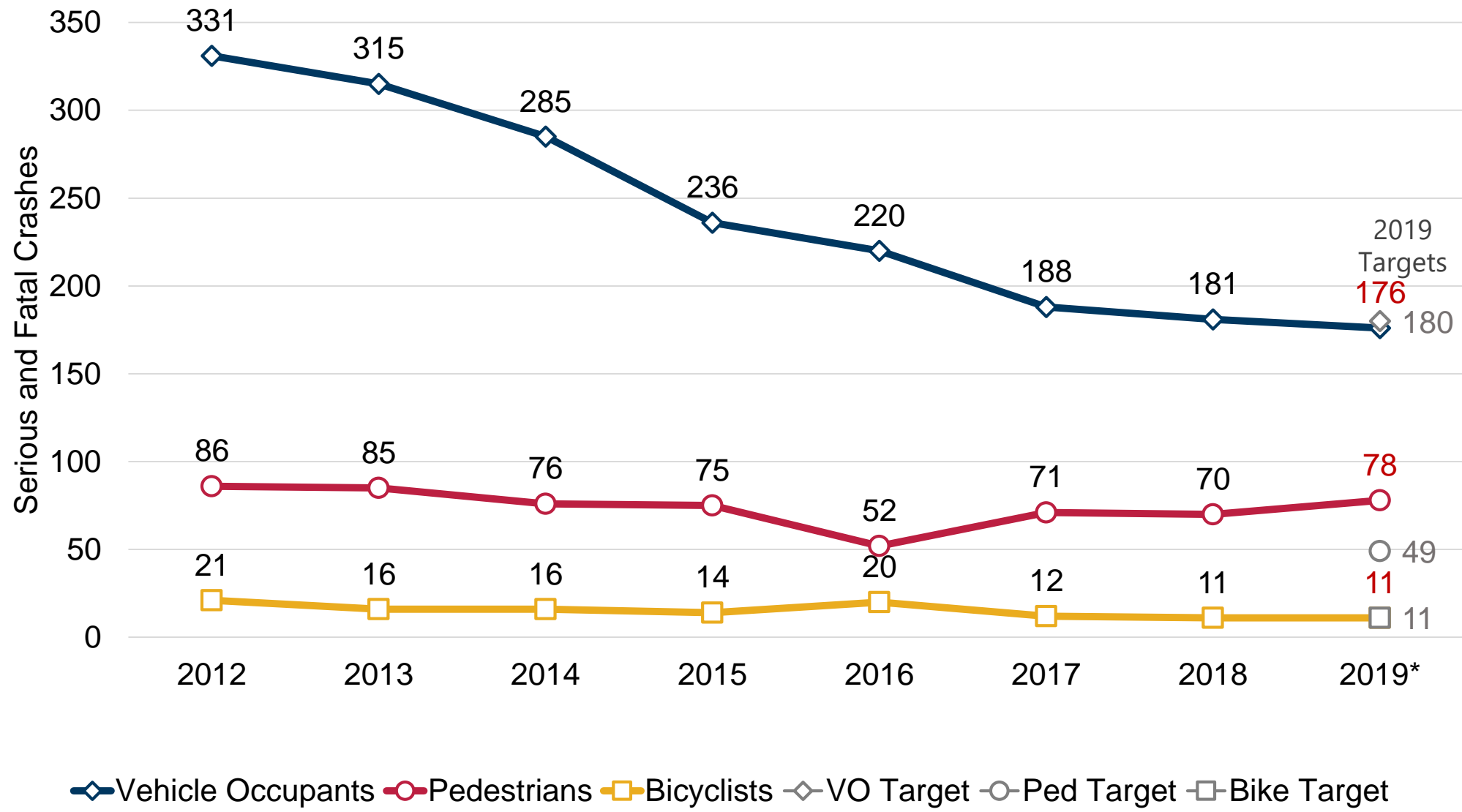


# CRASH STATISTICS





# SERIOUS & FATAL CRASHES BY YEAR



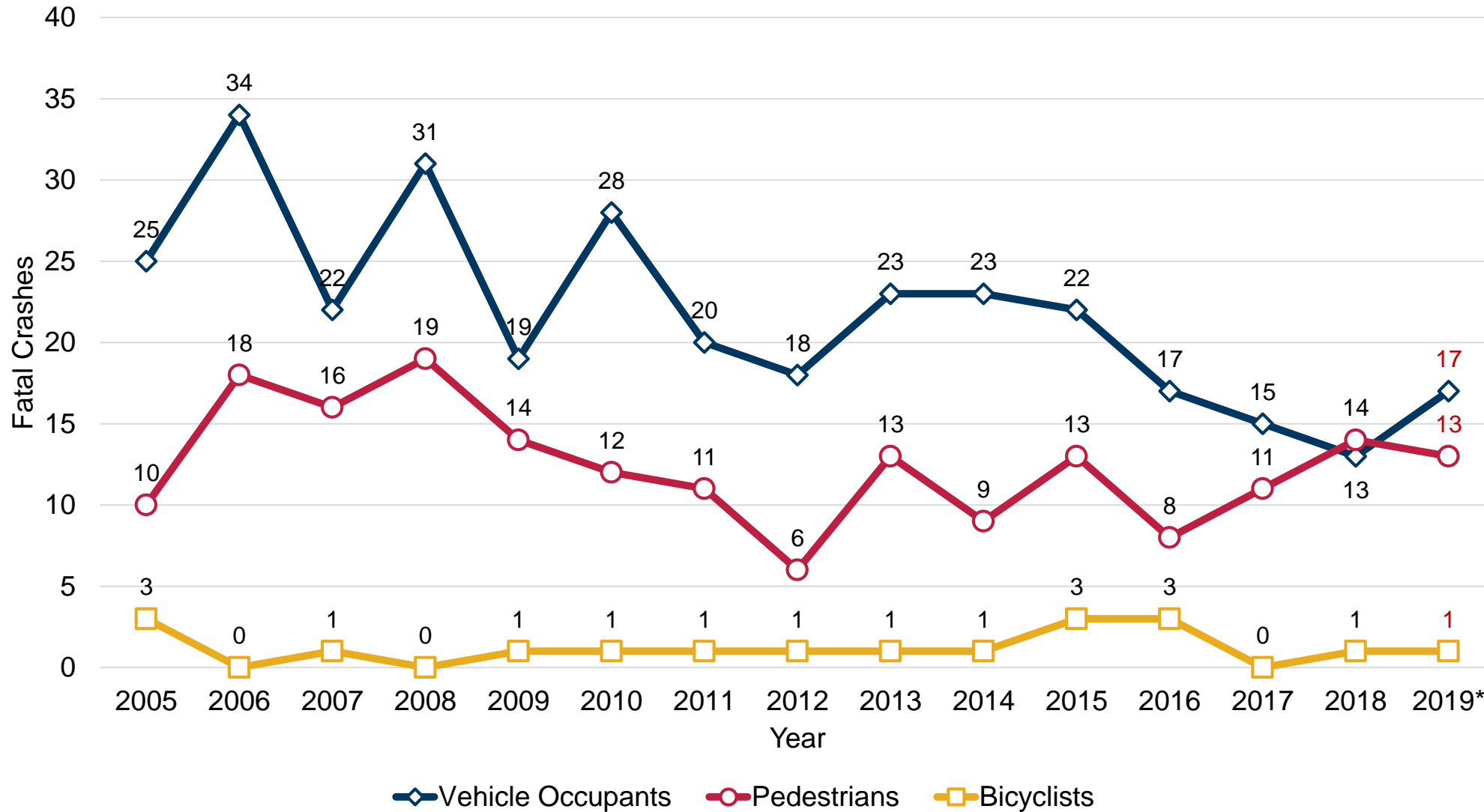
The Vision Zero Two-Year Action Plan set out reduction targets of 20% and 35% in 2018 and 2019 compared to the 2012-2016 average.

Preliminary 2019 data show 265 serious and fatal collisions, a 28% reduction from the 2012-2016 average. Targets for vehicle occupants and cyclists were met, but pedestrian crashes did not meet the target.

Source: MCPD

\*2019 data are preliminary and subject to change

# FATAL CRASHES BY YEAR



In 2019, there were **31 fatal crashes with 32 fatalities**. This matches the 2014-2018 5-year historical average.

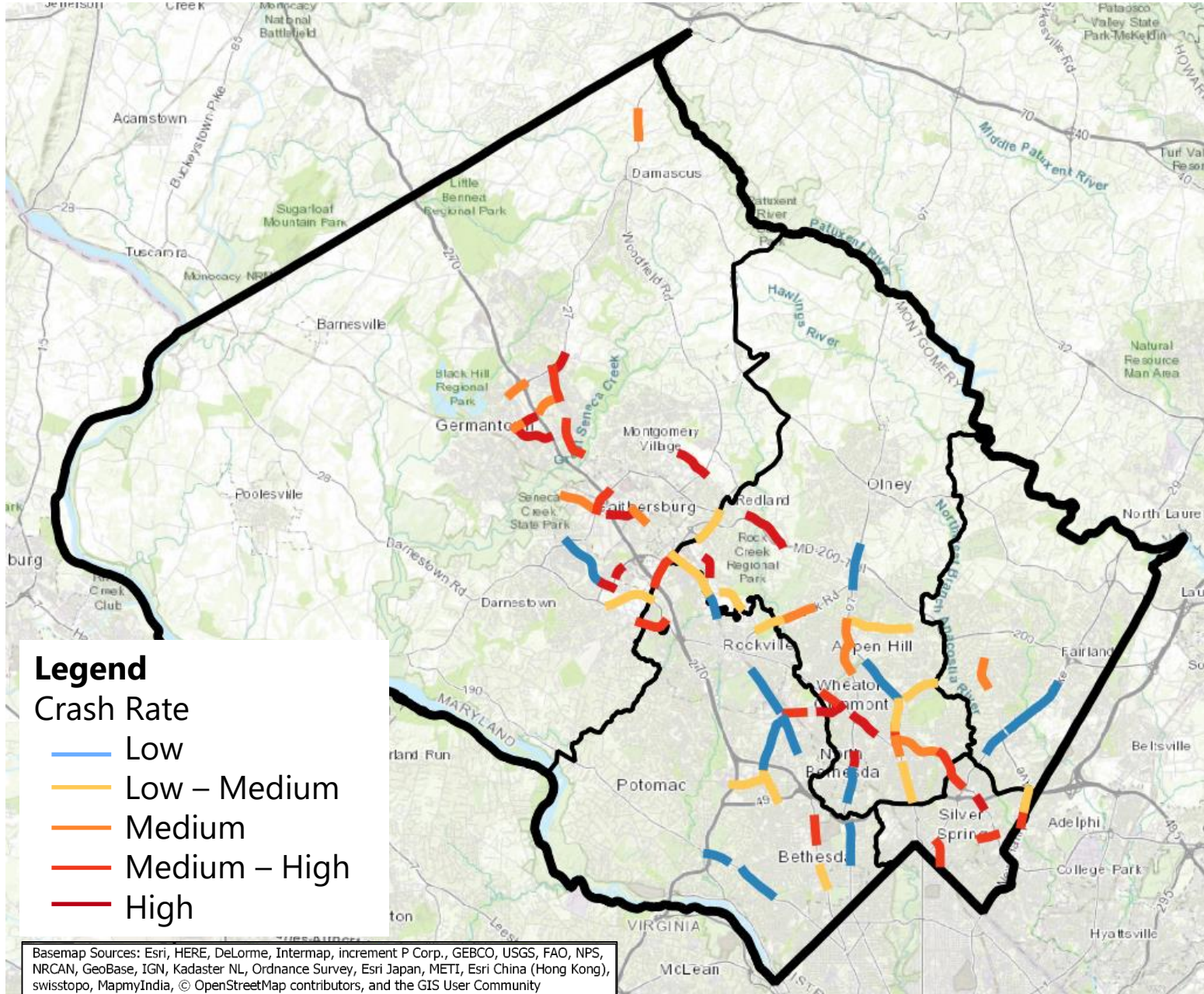
After four consecutive years of decline and a record low in 2018, the number of fatal crashes for vehicle occupants increased in 2019.

There was one fewer pedestrian fatality in 2019 compared to 2018. Nationwide, pedestrian fatalities are increasing by 35% from 2008 to 2017.

**Source:** MCPD Collision Reconstruction Unit  
 \*2019 data are preliminary and subject to change



# HIGH INJURY NETWORK

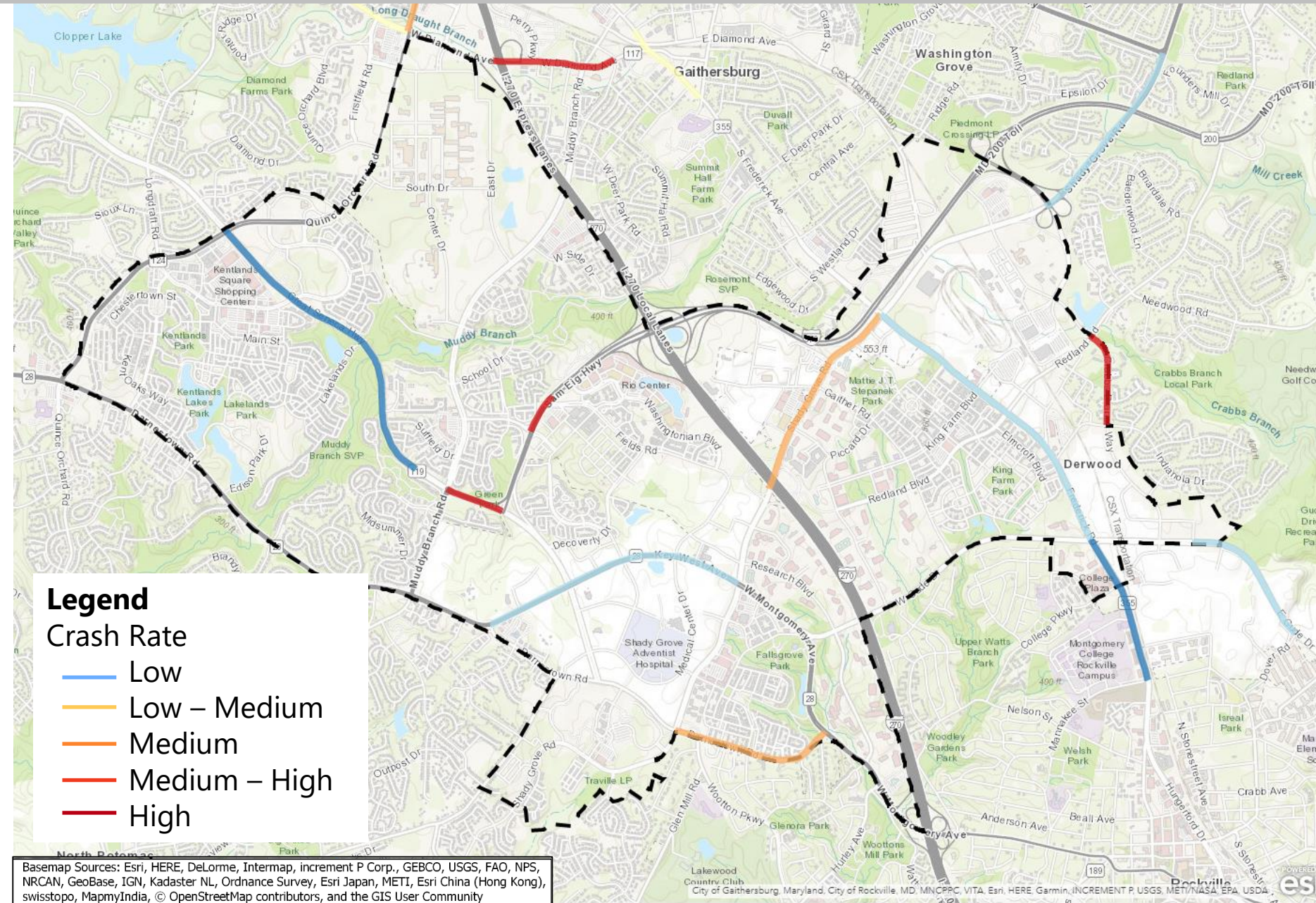


The High Injury Network (HIN) identifies roadway segments that have a higher amount of crashes (at least one crash per mile per year) relative to the amount of traffic on that road. MCDOT will use this initial list to identify roadways for engineering improvements.



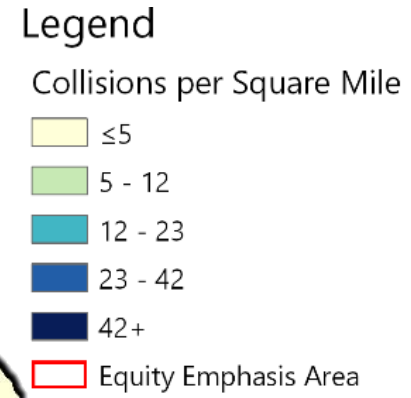
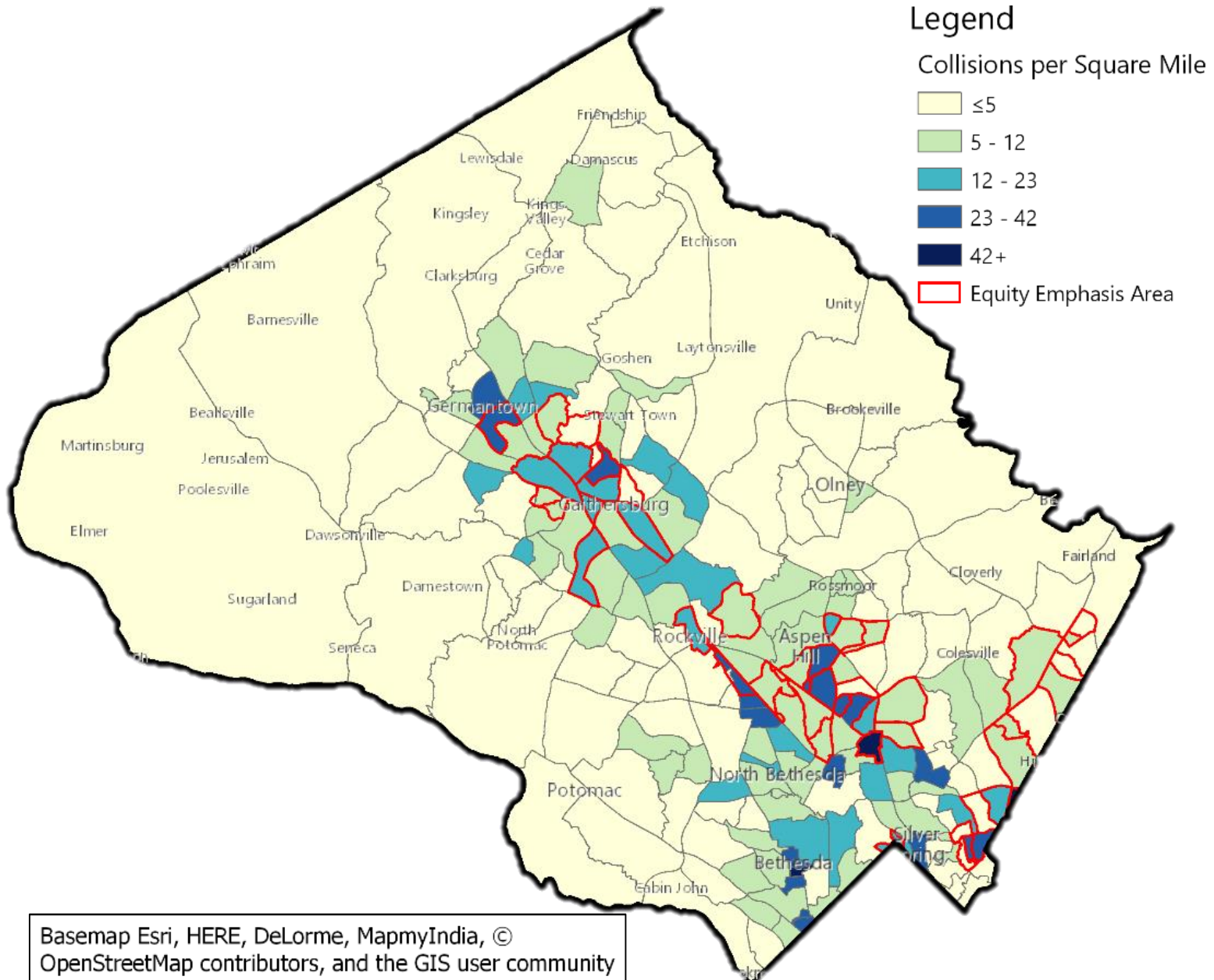
# HIGH INJURY NETWORK IN SHADY GROVE TMD

The High Injury Network (HIN) roadways of concern in the Greater Shady Grove TMD are mainly located in Wheaton, Glenmont, and Aspen Hill. With the exceptions of Bel Pre Rd, Crabbs Branch Way, and E Gude Dr, and Shady Grove Rd, these HIN roadways are controlled and maintained by the State Highway Administration.





# SEVERE AND FATAL COLLISIONS BY CENSUS TRACT



Crash Density was <u>higher</u> in neighborhoods with...	
Higher ↑	Percentage of households that speak English less than "very well"
Higher ↑	Percentage of population that is Hispanic or Latino
Higher ↑	Percentage of households below the poverty level
Lower ↓	Median age

Basemap Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



## Engineering

- Design facilities that prioritize safety above all else
- Key Outcome: Reductions in severe and fatal collisions in High Injury Network (HIN)



## Enforcement

- Encourage safe behaviors using evidence-based high visibility enforcement
- Key Outcome: Hours of dedicated enforcement for factors contributing to severe and fatal collisions



## Education

- Engage the public to promote the importance of traffic laws and safe behaviors
- Key Outcome: Increased awareness of dangerous driving, biking, and walking behaviors



## Traffic Incident Management

- Ensure that when a collision occurs, prompt care is provided
- Key Outcome: Maintain response times for traffic collisions with injuries based on dept. standards



## Law, Policy, and Advocacy

- Improve the way traffic safety is managed by changing codes, laws, and policies that do not align with Vision Zero
- Key Outcome: Passage of significant laws and policies required to implement Vision Zero



# 2020 Projects in Greater Shady Grove





# RECOMMENDED CIP BUDGET HIGHLIGHTS

- **\$266.6 Million for Vision Zero related projects**
  - 26 pedestrian and bikeway projects
  - Vision Zero incorporated into 16 road and bridge projects
- **\$23.9 Million in additional funding**
  - \$9.3 Million for Pedestrian Safety CIP
  - \$4.5 Million for Purple Line BiPPA
  - \$4.2 Million for filling in sidewalk gaps
  - \$2.0 Million for Amherst Ave. bikeway
  - \$1.9 Million for lighting along Seven Locks Rd Bikeway
  - \$1.3 Million for minor bikeway projects
  - \$0.7 Million for widening Good Hope Rd sidewalk project



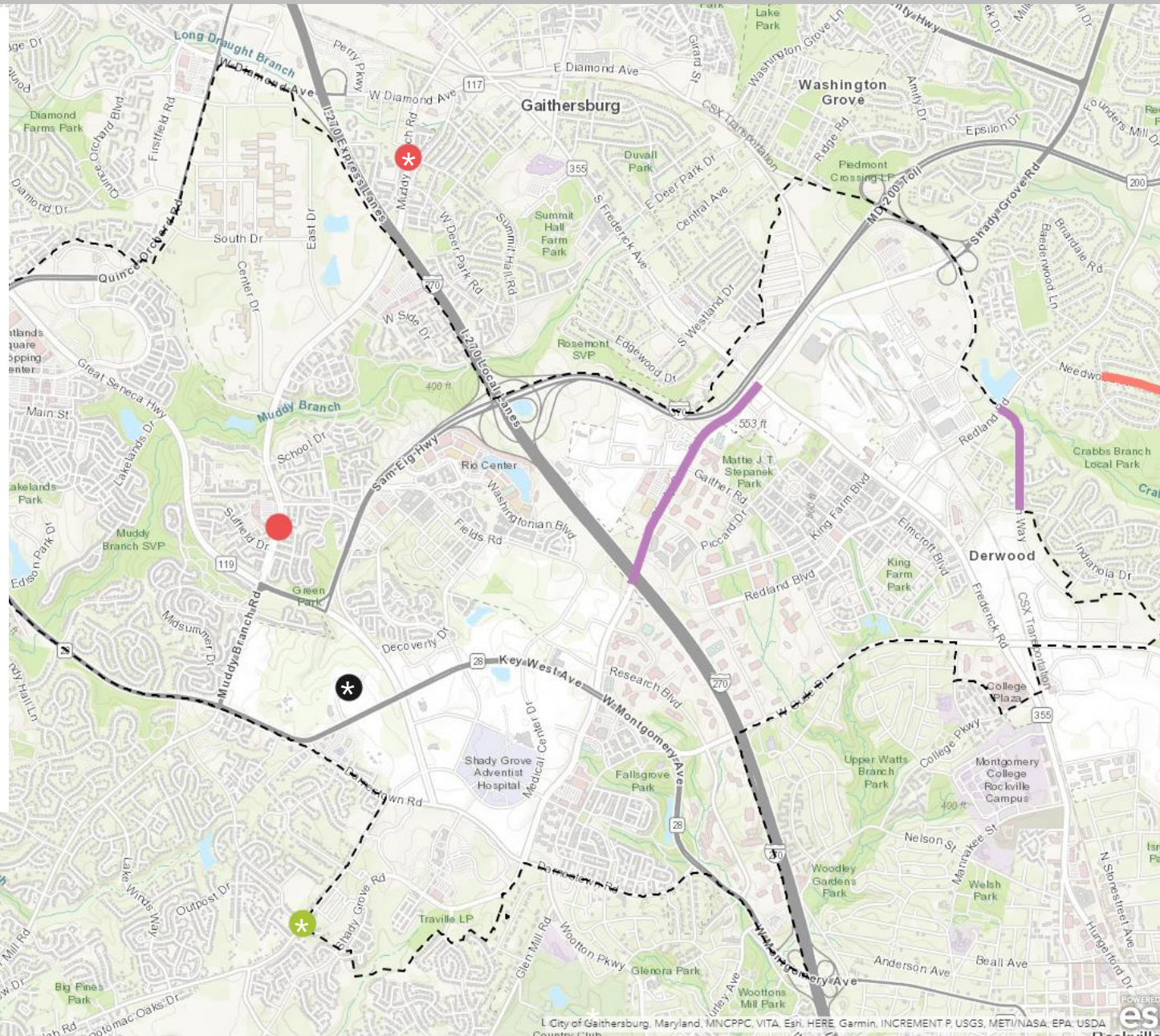
# PROJECTS IN GREATER SHADY GROVE TMD

## Vision Zero Spot/Intersection Projects

- Traffic Signal
- HAWK
- RRFB
- Ped. Flashing Beacon
- Median Refuge
- ADA Improvements
- Crosswalk
- Traffic Calming

## Vision Zero Corridor Projects

- Bicycle Facility
- Bus Stop Improvement
- Traffic Calming
- Corridor Improvement
- Median Treatment
- Speed Limit Lowered



Scheduled to be installed are:

### HAWK Beacons:

- Muddy Branch & Muddy Branch Square Shopping Center

### Signal Timing

### Modifications:

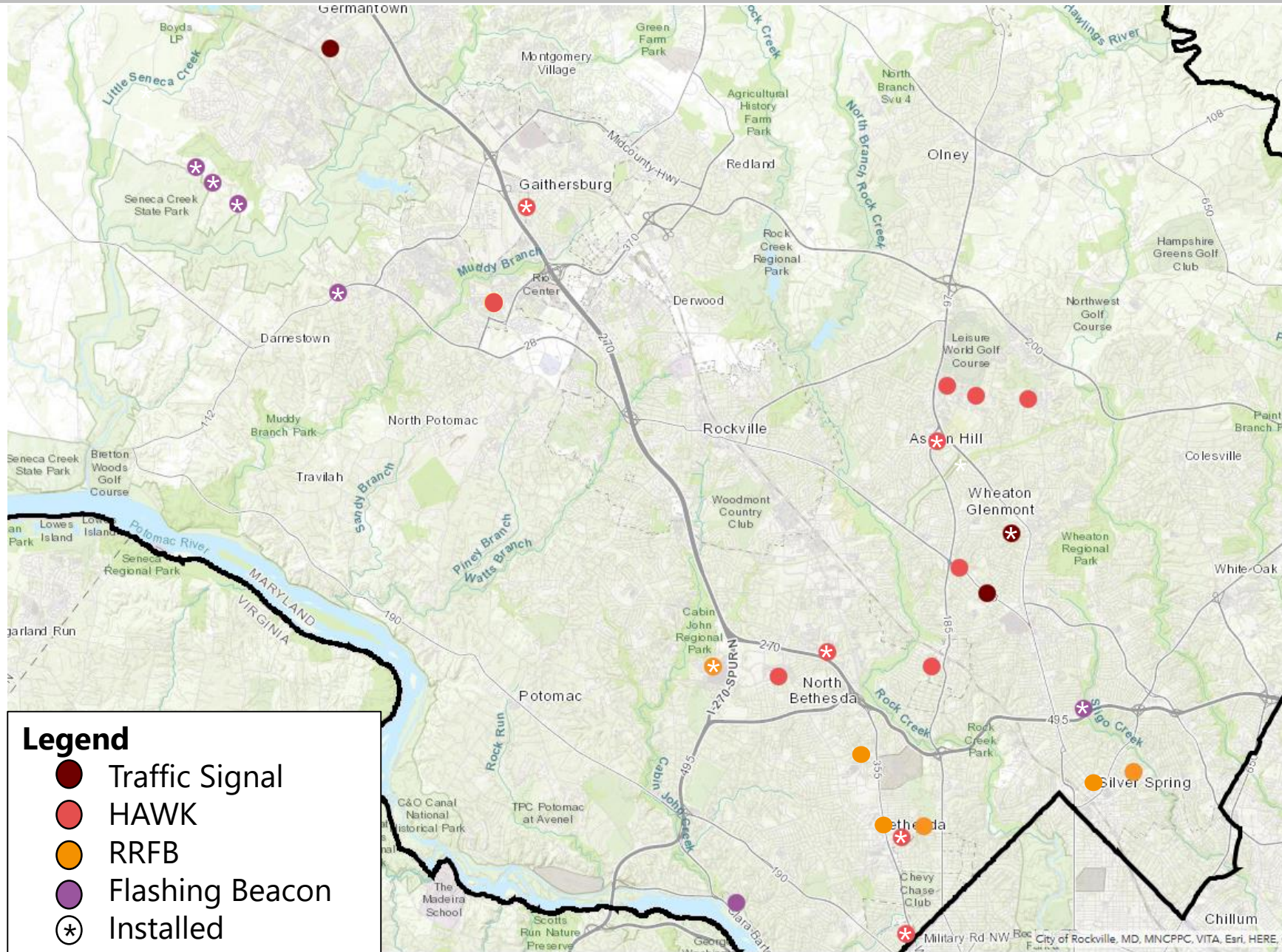
- Shady Grove Rd

### Complete Street Design:

- Crabbs Branch Way
- Sam Eig Hwy



# NEW SIGNALS AND BEACONS



## Scheduled to be installed are:

### Traffic Signal:

- Wisteria Dr & Crystal Rock Dr
- MD 586 & Norris Dr (SHA)

### HAWK Beacons:

- Willard Ave. & The Hills Plaza (Activation this winter)
- Democracy Blvd. & Walter Johnson HS
- Summit Ave & Brookfield Dr
- Bel Pre Rd (upgrade existing RRFBs)
- MD 586 & Andrew St (SHA)
- Muddy Branch & Muddy Branch Square Shopping Center

### Rectangular Rapid Flashing Beacons:

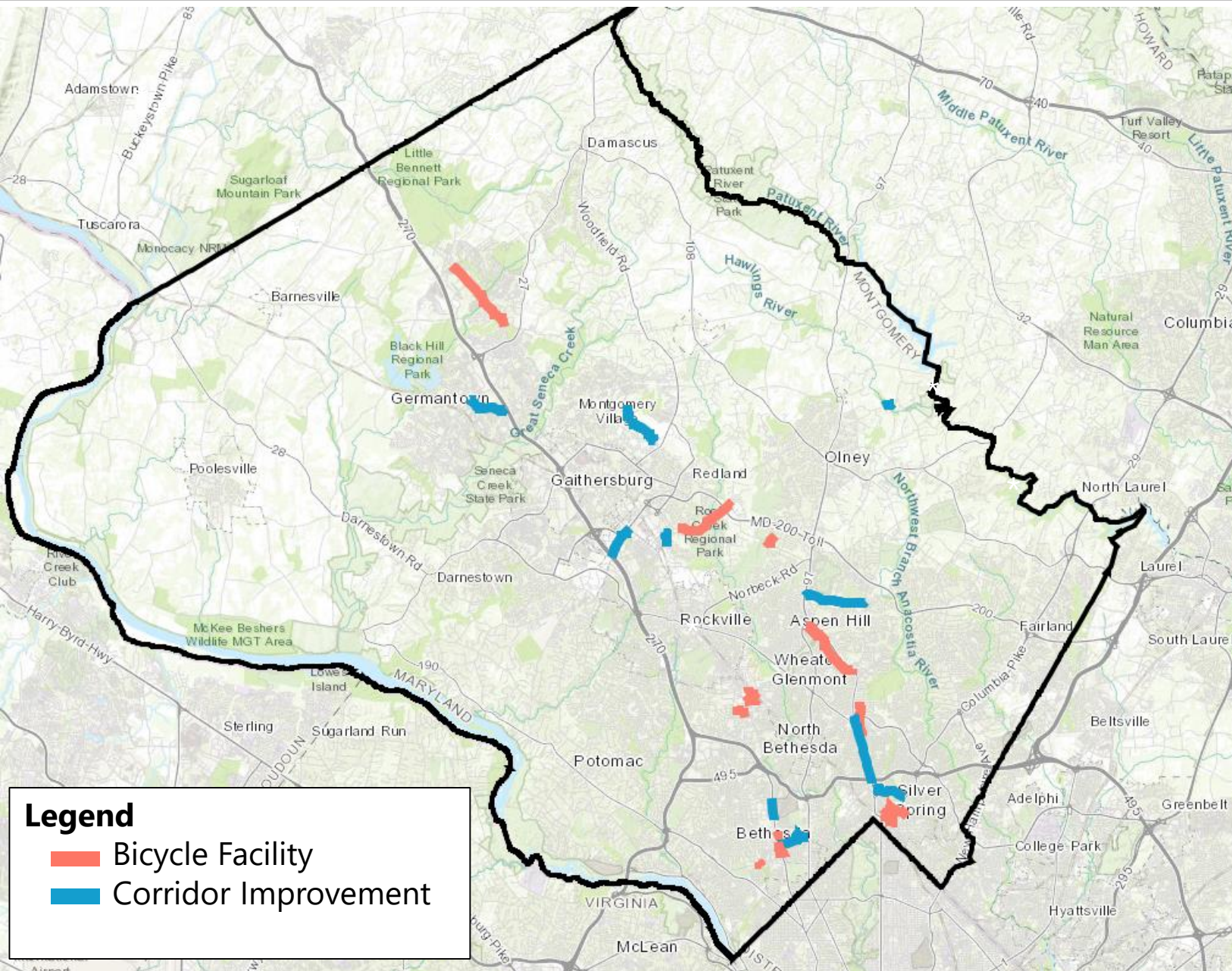
- East West Highway & Edgevale St (SHA)
- Dale Drive & Dartmouth Ave
- West Cedar Lane & Cedarcrest
- Wisconsin Ave & Commerce Lane / Avondale Street
- Georgia Ave & Fenwick Lane

### Flashing Beacon:

- MacArthur Blvd & Dunrobbin Dr



# CORRIDOR IMPROVEMENTS



## Scheduled for design and/or construction:

### Complete Street Upgrades:

- Crabbs Branch Way
- Bel Pre Rd
- Middlebrook Rd

### Signal Timing Modifications:

- Shady Grove Rd

### Bicycle Facilities:

- Capital Crescent Surface Trail
- Woodmont Ave
- Marinelli Rd
- Aspen Hill Neighborhood Greenway
- Amherst Ave (in design)

### Bus Stop Improvements:

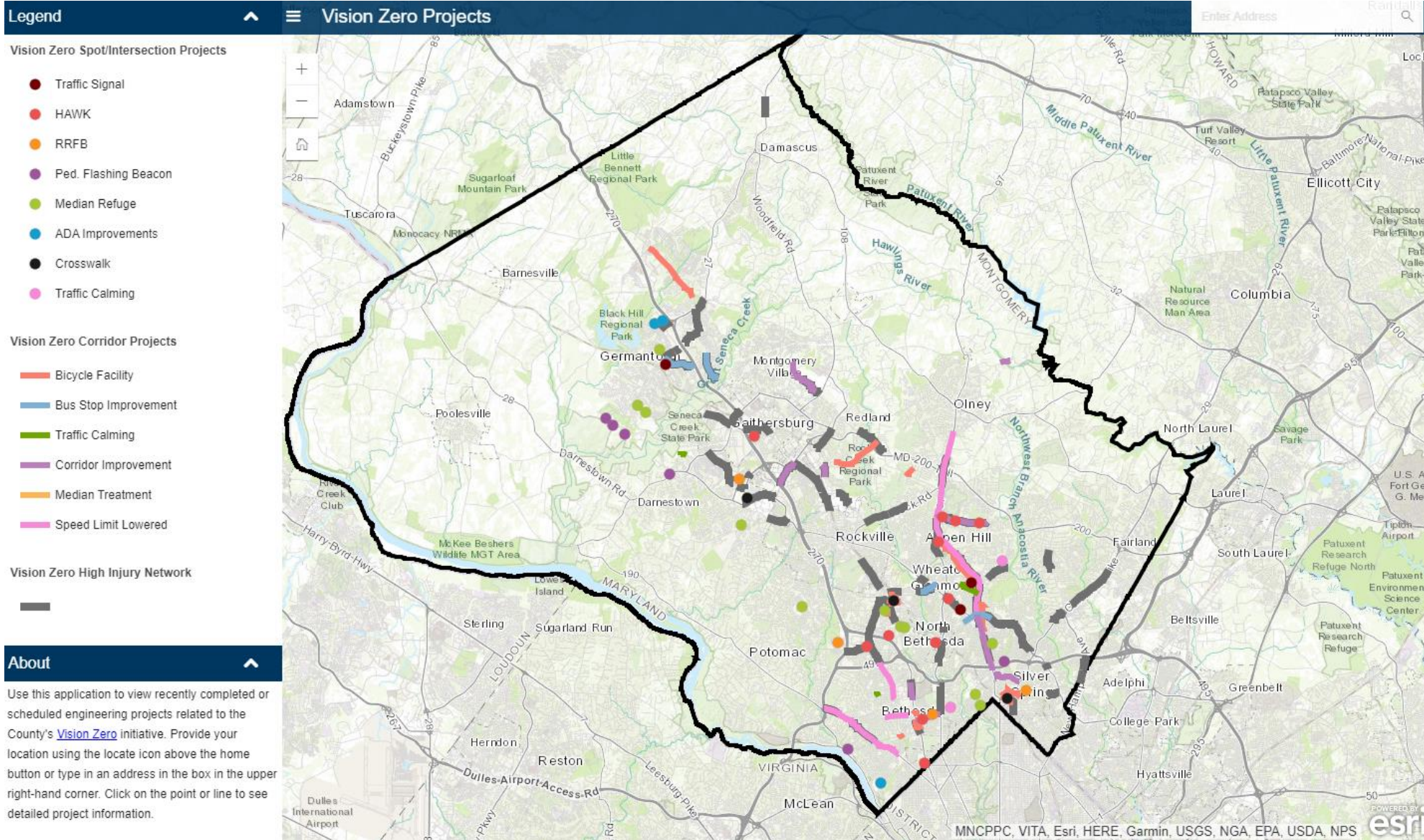
- Randolph Rd

### Trail Crossings:

- 15 additional upgrades



# VISION ZERO PROJECT MAP



MCDOT and CountyStat developed an interactive project map to highlight Vision Zero related projects happening across the county.

Since the initial launch of the map, SHA projects have been included such as speed limit reductions on major highways and signal projects.

The map can be found on the [Vision Zero homepage](#).



# HIGH VISIBILITY ENFORCEMENT

MCPD utilizes the Maryland Highway Safety Office's high visibility enforcement (HVE) calendar to perform regular stepped up enforcement all year round. MCPD utilizes analyses from MHSO, Traffic Division data analyst, and CountyStat to identify hotspots for crashes.

Enforcement is typically tied with education to inform residents of the dangerous behaviors, ways to curb the behaviors, and explain why we perform high visibility enforcement.



Distracted Driving



Seatbelt Use



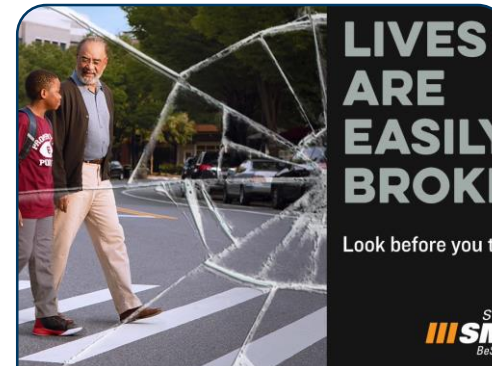
Impairment



Aggressive Driving



Speeding



Pedestrian Safety



# WHY ENFORCEMENT? CAN IT WORK?

Dangerous Behavior	Enforcement Activity	Effect on Crashes
Drivers not yielding to pedestrians at crosswalks	Targeted driver enforcement at crosswalks	↓ 23% pedestrian crashes
Impaired driving	Publicized sobriety checkpoints	↓ 17% alcohol related crashes
Driver excessive speeding	Automated speed enforcement	↓ 19% reduction in severe collisions

Sources: [NHTSA Countermeasures that Work, 8th Edition](#), [IIHS](#), [AAA Foundation for Traffic Safety](#)

If all U.S. communities had speed-camera programs like the one IIHS studied in Maryland's Montgomery County, more than **21,000 fatal or incapacitating injuries would have been prevented** in 2013.

-- IIHS Study of Montgomery County Automated Enforcement





VZ Home About Action Plan Your Participation Calendar VZ Data Equity Additional Resources Contact

## VISIONZERO

MONTGOMERY COUNTY'S GOAL TO END TRAFFIC DEATHS

### County Executive Elrich Committed to Improving Pedestrian Safety

Montgomery County Executive Marc Elrich is committed to the Vision Zero Initiative to eliminate traffic deaths in the County. He is working with many departments and agencies to create steps that will make the streets safer for pedestrians, bicyclists and drivers. One commitment is toward installing more high intensity activated crosswalk (HAWK) signal lights at key intersections around the County.

Learn more about HAWK signals



### Montgomery County's Goal to End Traffic

Montgomery County is one of the first county governments in the United States to initiate a Vision Zero plan. The County has put resources in place to reduce severe and fatal collisions on County



@VisionZeroMC

## Copy of Plan:

<http://montgomerycountymd.gov/visionzero/>



**GET  
INVOLVED**







## Service Requests

Request a fix for current roads, sidewalks, lights, pedestrian and bicycle facilities, etc.

[mc311.com](https://mc311.com)



## General Feedback

Let us know what you think about or how to improve Vision Zero Montgomery County.

Twitter [@VisionZeroMC](https://twitter.com/VisionZeroMC)  
[visionzero@montgomerycountymd.gov](mailto:visionzero@montgomerycountymd.gov)

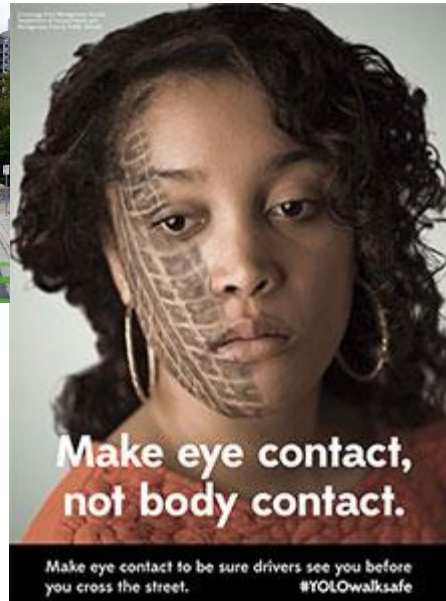


## Educational Resources

Learn about helpful safety tips that will help facilitate our Vision Zero goals.

- Starts this spring
- Will be having open houses and pop-up events to gather community feedback on ideas to get to zero by 2030
- Stay tuned for dates, times, and locations in late March!





# VISION ZERO

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

