VISION ZERO
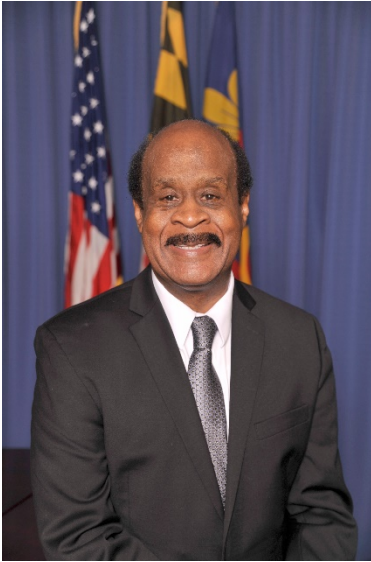
NO TRAFFIC DEATHS BY 2030
IN MONTGOMERY COUNTY

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

TWO-YEAR ACTION PLAN • NOV 2017

LETTER FROM THE COUNTY EXECUTIVE

I am pleased to present my Two-Year Vision Zero Action Plan toward eliminating severe and fatal collisions on our County roadways. Vision Zero plans recently have been adopted in several American cities. Now, Montgomery County will become one of the first counties in the United States to adopt Vision Zero.

Between 2010 and 2016, Montgomery County has prevented 250 severe and 33 fatal collisions through my Pedestrian Safety Initiative, compared with the previous five-year average. Even so, annually between 2012 and 2016, an average of 35 individuals lost their lives and 400 were severely injured on roads in Montgomery County. That is why I am broadening our good work by presenting to the Council my plan, "Vision Zero: No Traffic Deaths by 2030 in Montgomery County."

I want to recognize the Pedestrian, Bicycle, and Traffic Safety Advisory Committee as well as our departments of Transportation, Police, Fire and Rescue Service, Public Information, CountyStat, and all the other departments and community organizations that contributed to this very thoughtful plan. I also want to recognize the Montgomery County Council, which adopted the resolution for Vision Zero.

This plan reflects our strong commitment to continually upgrade our efforts to further improve safety. It reflects the need to design and implement strategies for our diverse communities.

Under this plan, the county is putting resources in place to reduce severe and fatal collisions on County roads by 35 percent for vehicle occupants, bicyclists, and pedestrians, by November 2019.

In the plan, 41 action items articulate how we can expand our priority safety efforts. These action items are organized into five key areas: Engineering, Enforcement, Education and Training, Traffic Incident Management, and Law, Policy and Advocacy.

While carrying out this two-year plan, we will continue to collect additional data and work with the public and key stakeholders to develop a systematic ten-year plan to eliminate fatalities and severe injuries on our County roadways by 2030. At the same time, we will continue working with the state of Maryland to reduce severe injuries and fatalities on state roads in our County.

Vision Zero is an audacious goal. It is one that we can all embrace and champion together in order to bring to zero the number of heartbreaking deaths and serious injuries due to traffic collisions. We have made progress. With Vision Zero, we can do even better.

ACKNOWLEDGEMENTS

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" Road traffic crashes are predictable and therefore preventable ... the time to act is <u>now</u>.

Road users everywhere deserve better and safer road travel.

World Health Organization, 2004 "

ZERO

WHAT IS VISION ZERO?

The Vision Zero concept for roadway safety was created in Sweden in 1997 and is widely credited for significant reductions in fatal and severe collisions on Sweden's roads, despite increased driving, biking, and transit use.[1] Vision Zero came to the US in 2000 with Washington State adopting its Target Zero plan.[2] In 2014, New York City became the first city to adopt Vision Zero, and the idea has since taken off.[3] As of October 2017, Vision Zero has spread to 31 jurisdictions across the US.[4] Vision Zero policies generally share six common principles:

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. Advancements in vehicle design and technology, roadway engineering, personal electronic devices, etc., are necessary components for avoiding the impacts of human errors.

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.

SPEED IS A MAJOR FACTOR IN CRASH SURVIVABILITY FOR PEDESTRIANS

Source: Brian Tefft, "Impact Speed and a Pedestrian's Risk of Severe Injury or Death," *AAA Foundation for Traffic Safety*, 2011

HOW IS VISION ZERO DIFFERENT?

A new approach to roadway engineering is needed to eliminate severe and fatal collisions, as traditional methods will lead to traditional results.

In Vision Zero, transportation agencies employ a safe system approach to eliminate severe and fatal traffic collisions. According to the International Transport Forum, a safe systems approach,

> *"... is a holistic and proactive approach to road safety, managed so the elements of the road transport system combine and interact to guide users to act safely and to prevent crashes – and when crashes occur, ensure that impact forces do not exceed the limits that result in serious injury or death."* (p. 157)

CRASH, NOT ACCIDENT

Traffic crashes are not inevitable accidents. Vision Zero communities study the environmental and behavioral factors that lead to severe and fatal collisions and use leading practices to create a safer system for all roadway users.

The safe system approach differs from traditional methods in the following ways:

Traditional Road Safety Approach	Versus	Safe System Approach
Try to prevent all crashes	**What is the problem?**	Prevent crashes from resulting in fatalities and severe injury
Reduce the number of fatalities and serious injuries	**What is the appropriate goal?**	Zero fatalities and severe injuries
Reactive to incidents Incremental approach to reduce the problem	**What are the major planning approaches?**	Proactively target and treat risk Systematic approach to build a safe road system
Non-compliant road users	**What causes the problem?**	People make mistakes and people are physically fragile/vulnerable in crashes. Varying quality and design of infrastructure and operating speeds provides inconsistent guidance to users about what is safe use behavior.
Individual road users	**Who is ultimately responsible?**	Shared responsibility by individuals with system designers
The system is composed of isolated interventions	**How does the system work?**	Different elements of a safe system combine to produce a summary effect greater than the sum of the individual treatments – so that if one part of the system fails, other parts provide protection.

Source: "Zero Road Deaths and Serious Injuries: Leading a Paradigm Shift to a Safe System," *OECD/ITF*, 2016.

Going forward, Montgomery County is committed to a safe systems approach to build infrastructure that provides safe passage for all road users.

WHY IS VISION ZERO IMPORTANT? WHY ADOPT IT NOW?

The status quo on our roads in Montgomery County and across the United States is unacceptable. The United States is an outlier for traffic fatalities compared to other high-income countries.[5] On average, more than 35 people lost their lives and 400 were severely injured on roads in Montgomery County, Maryland, annually between 2012 and 2016. These are not *accidents* and they are not an inevitable "cost of doing business" in the modern world. Behind every traffic safety statistic is a real person whose life is forever changed in one moment. No one in our community should have to grieve the loss of a loved one as the result of a traffic collision. That is why Montgomery County is committed to Vision Zero.

Montgomery County will be one of the first county governments in the United States to adopt a Vision Zero plan. Vision Zero will build upon the successes of the County Executive's 2008 Pedestrian Safety Initiative, a strategic safety plan which incorporated many tenets of Vision Zero.[6] From 2010 to 2016, the County has prevented 250 severe and 33 fatal collisions through the Pedestrian Safety Initiative compared to the five-year average before the initiative began.

ROADWAY FATALITY RATES BY COUNTRY, 2013

Country	Fatalities per 100k Pop.
Russia	18.9
US	**10.6**
Poland	10.3
Greece	9.1
Canada	6.0
Australia	5.4
Japan	4.7
Germany	4.3
UK	2.9
Sweden	2.8
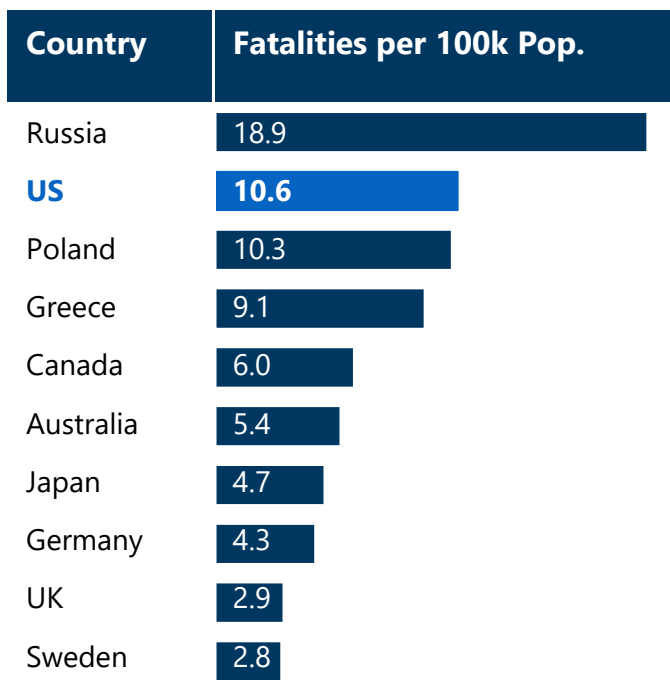
Source: "Global Health Observatory Data Repository", *World Health Organization*, 2017.

MONTGOMERY COUNTY TRAFFIC FATALITY RATE COMPARED TO US, MD, AND FAIRFAX COUNTY
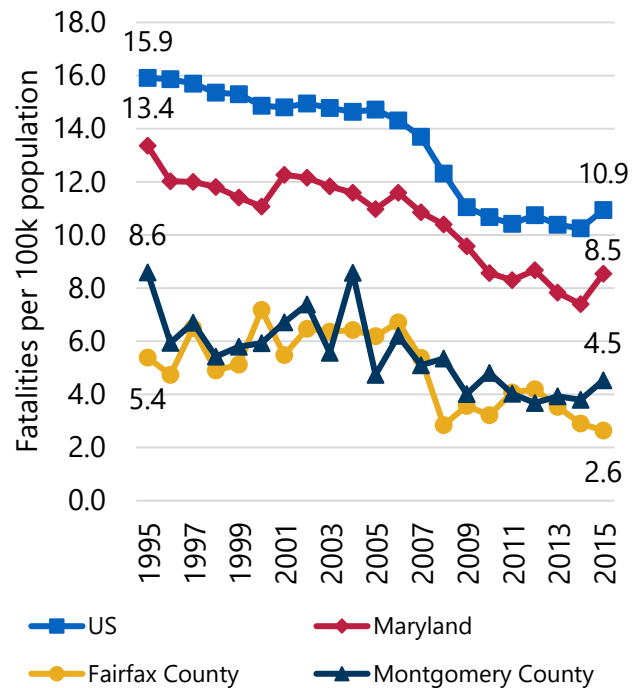
Source: "Fatality Analysis Reporting System," *NHTSA*, 2017.

THE CURRENT STATE OF ROADWAY SAFETY: DATA ANALYSIS

Montgomery County has the opportunity to be one of the first counties in the United States to adopt a Vision Zero strategy. Most jurisdictions that have adopted Vision Zero are major cities where the population density and roadway network allow for more uniform strategies across the jurisdiction. Montgomery County, by contrast, cannot rely on a one-size-fits-all solution given the diversity of our neighborhoods that vary from urban Silver Spring to suburban Germantown to rural Poolesville. In addition, the State of Maryland has primary jurisdiction over major roadways where 53% of severe and fatal collisions occur. To eliminate severe and fatal collisions, countermeasures and education campaigns will be tailored to the unique environments that exist in the County by utilizing county, state, and federal data.

SEVERE AND FATAL COLLISIONS

OVERALL TREND

In developing this Two-Year Action Plan, collision data collected by the Montgomery County Police Department (MCPD) covering 2012 to 2016 were analyzed. There were 1,849 collisions that resulted in 1,996 severe injuries and 174 fatalities to drivers, passengers, pedestrians, and bicyclists. During this period, the number of severe collisions declined 37%, but fatal collisions increased 58%. The majority of the increase was for vehicle occupants.

The data presented in this plan does not include every severe and fatal collision that occurred in the County during the analysis period. The main areas excluded are the interstates, I-495 and I-270, and the City of Takoma Park. These areas were omitted for two reasons. First, MCPD's records did not include reports from the departments listed in the right column in the table below. Second, this action plan is designed to focus on areas where the County Government can best use its resources on roadways it maintains and can do enforcement.

Reports Included	Reports Not Included
Montgomery County PD	MD State Police
Rockville PD	MD Transit Authority
Gaithersburg PD	Takoma Park
	M-NCPPC Park Police
	Chevy Chase Police

SEVERE COLLISIONS, 2012-2016

FATAL COLLISIONS, 2012-2016

■ Vehicle Occupant ■ Pedestrian ■ Cyclist
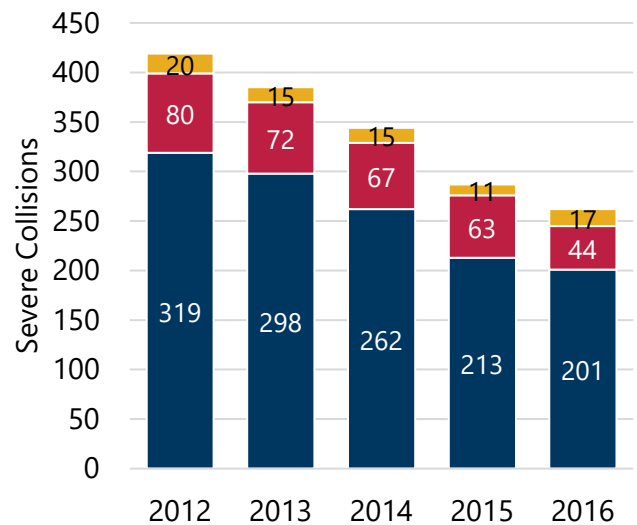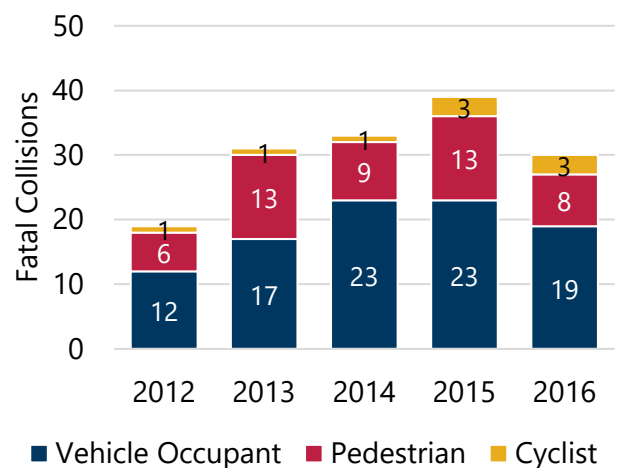
COLLISION REDUCTION TARGETS

To get to zero severe and fatal collisions on our roadways by 2030, the County has set ambitious interim targets. By the end of the Two-Year Action Plan, severe and fatal collisions for all roadway users will be reduced by 35%. By 2022, severe and fatal collisions will be cut in half.

The reduction targets were set using the five-year average from 2012 to 2016 as a baseline. The most significant reductions are in the middle years, 2022 through 2025, as completed engineering projects start to bear fruit. In the final four years, the pace slows to 5% per year reductions as the last few collisions will be the toughest to eliminate.

2019	2024	2030
End of 2-Year Plan	**Halfway to 2030**	**Vision Zero**
35% Reduction	70% Reduction	100% Reduction

Severe and Fatal Collisions

Vehicle Occupant: 2018: 222, 2019: 180, 2020: 166, 2021: 153, 2022: 139, 2023: 111, 2024: 83, 2025: 69, 2026: 55, 2027: 42, 2028: 28, 2029: 14, 2030: 0

Pedestrian: 2018: 60, 2019: 49, 2020: 45, 2021: 41, 2022: 38, 2023: 30, 2024: 23, 2025: 19, 2026: 15, 2027: 11, 2028: 8, 2029: 4, 2030: 0

Cyclist: 2018: 14, 2019: 11, 2020: 10, 2021: 10, 2022: 9, 2023: 7, 2024: 5, 2025: 4, 2026: 3, 2027: 3, 2028: 4, 2029: 1, 2030: 0

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Target	-20%	-35%	-40%	-45%	-50%	-60%	-70%	-75%	-80%	-85%	-90%	-95%	-100%

Legend: Vehicle Occupant, Pedestrian, Cyclist

HIGH INJURY NETWORK

The map below highlights the roadway segments with 5 or more severe or fatal collisions and one or more collisions per mile per year. Numbered segments display the highest risk road segments, which collectively account for 13% of non-interstate collisions, but only 0.7% of the entire roadway network. These high risk roadways make up the County's high injury network and will be the first areas scrutinized for potential engineering improvements. High injury network roadways were concentrated in Mid-County (Wheaton, Glenmont, Aspen Hill) and UpCounty (Germantown and Gaithersburg) regions.

Legend

Crash Rate

— Low
— Low – Medium
— Medium
— Medium – High
— High

Priority Corridors

1-10 County Maintained
1-10 State Maintained

Basemap Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
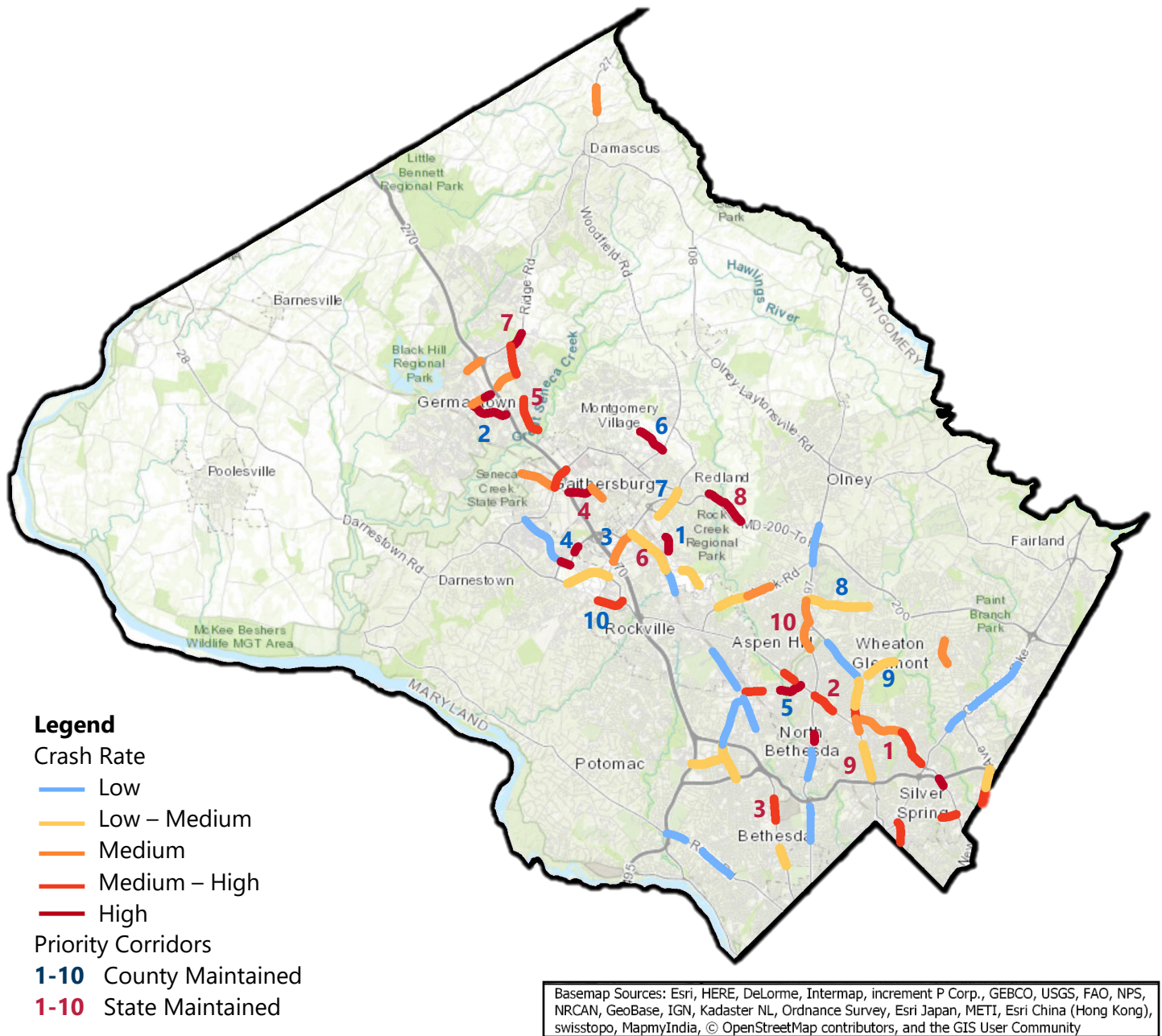
PRIORITY CORRIDORS FOR COUNTY AND STATE MAINTAINED ROADWAYS

Roadway Owner		Roadway	Total Collisions	Collisions per Mile per Year	Collisions per 100M VMT**
County	1	**Crabbs Branch Way** From Reland Rd to Indianola Dr	9	3.8	51.9
	2	**Middlebrook Rd*** From Germantown Rd to I-270	15	2.6	33.1
	3	**Shady Grove Rd** From Frederick Rd to I-270	14	2.7	18.3
	4	**Sam Eig Hwy** From Fields Rd to Diamondback Dr	5	4.9	42.8
	5	**Randolph Rd*** From Veirs Mill Rd to Rock Creek Park	9	2.6	30.7
	6	**Snouffer School Rd** From Woodfield Rd to Flower Hill Way	9	2.0	25.4
	7	**Shady Grove Rd** From Metro Access Rd to Midcounty Hwy	11	2.3	12.9
	8	**Bel Pre Rd*** From Layhill Rd to Georgia Ave	10	1.0	12.5
	9	**Randolph Rd** From Kemp Mill Rd to Gllenallan Ave	9	2.0	13.6
	10	**Darnestown Rd** From W Montgomery Ave to Shady Grove Rd	6	1.5	20.4
State	1	**University Blvd W*** From Georgia Ave to Colesville Rd	30	2.2	18.5
	2	**Veirs Mill Rd** From Connecticut Ave to Newport Mill Rd	12	3.3	24.5
	3	**Rockville Pike** From Jones Bridge Rd to Cedar Ln	12	3.6	22.1
	4	**W Diamond Ave** From I-270 to Water St	5	1.6	44.4
	5	**Frederick Rd** From Middlebrook Rd to Wheatfield Dr	13	2.3	18.8
	6	**Frederick Rd** From Gude Dr to Shady Grove Rd	15	1.9	11.9
	7	**Ridge Rd** From Frederick Rd to Brink Rd	9	3.3	28.6
	8	**Muncaster Mill Rd** From ICC (MD-200) to Olde Mill Run	10	1.5	24.7
	9	**Georgia Ave** From Forest Glen Rd to Plyers Mill Rd	14	2.7	12.5
	10	**Connecticut Ave*** From Matthew Henson Trail to Georgia Ave	11	2.4	18.0

*Roadway overlaps with High Incidence Area for Pedestrian Safety Initiative   **VMT = Vehicle Miles Traveled

SEVERE AND FATAL COLLISIONS BY ROADWAY CHARACTERISTICS

Severe and fatal collisions are concentrated on the County's busiest, fastest, and widest roads. All severe and fatal collisions occurred on 18% of the roadway network.

52% of all severe and fatal collisions occurred on principal arterial roads (highways such as Georgia Ave and Rockville Pike). Principal arterials carried 50% of the County's traffic.

Roadway Type	% of Crashes	% of VMT	% of Total Mileage
Residential	11%	11%	75%
Collector	12%	14%	11%
Minor Arterial	25%	25%	8%
Principal Arterial	52%	50%	6%
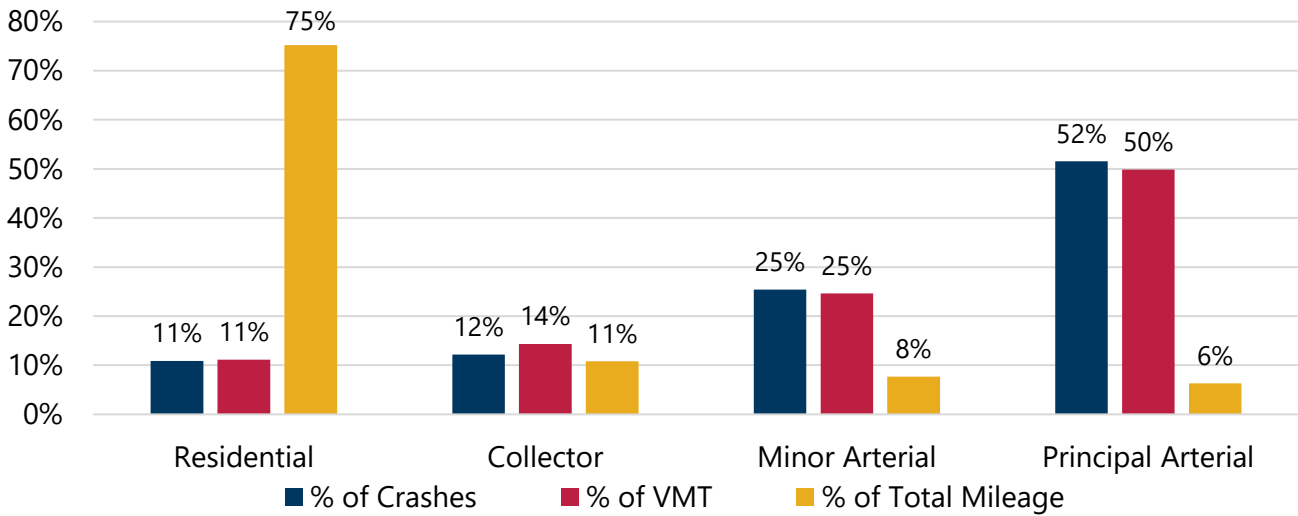
69% of severe and 76% of fatal collisions occurred on roadways with speeds 35 MPH or above.

Mode	<35 MPH Severe	≥35 MPH Severe	<35 MPH Fatal	≥35 MPH Fatal
Car	27%	73%	24%	76%
Pedestrian	47%	53%	20%	80%
Bicycle	47%	53%	44%	56%
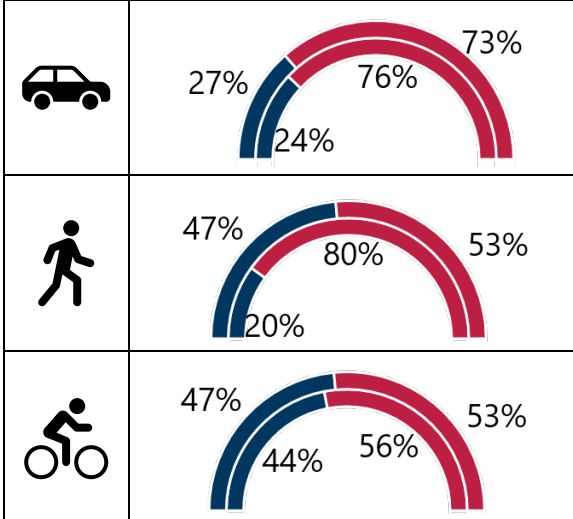
Key: Outer loop = % of Severe
Inner loop = % of Fatal
<35 MPH   ≥35 MPH

53% of all severe and fatal collisions occurred on State roadways. State roads accounted for 52% of the County's non-interstate vehicle miles traveled.

Percent of Severe and Fatal Collisions

Ownership	Car	Pedestrian	Bicycle
State	57%	44%	41%
County	37%	30%	47%
Municipal	3%	6%	6%
Parking Area		18%	

Legend: State, County, Municipal, Parking Area, Private Drive, Other Public
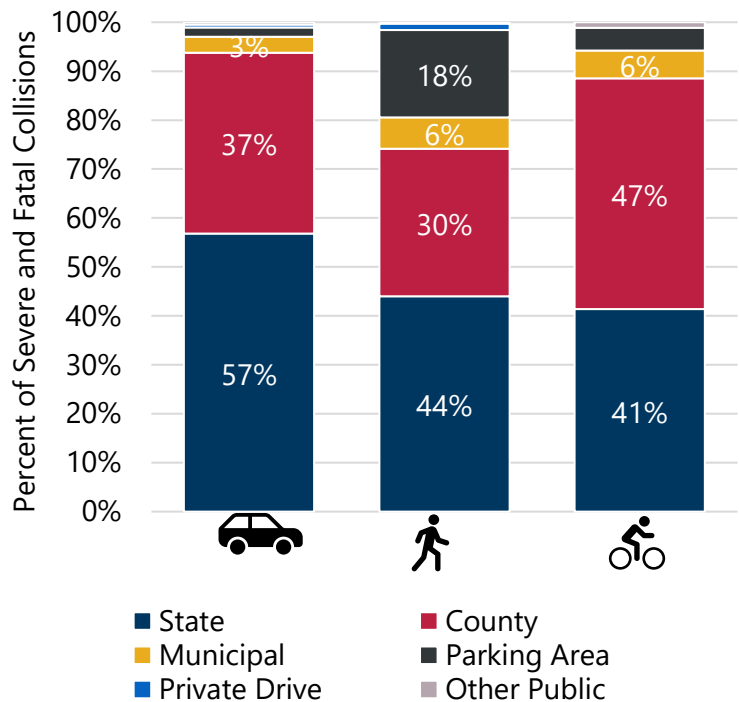
EQUITY AND SEVERE AND FATAL COLLISIONS

Eliminating severe and fatal collisions requires acknowledging and acting on the fact that certain communities are impacted more than others. Communities with higher rates of poverty, persons of color, and younger residents have higher collision rates in the County. To address this inequity, the County will prioritize its resources to invest in the communities most affected by traffic collisions and proactively engage with community members to address their concerns.
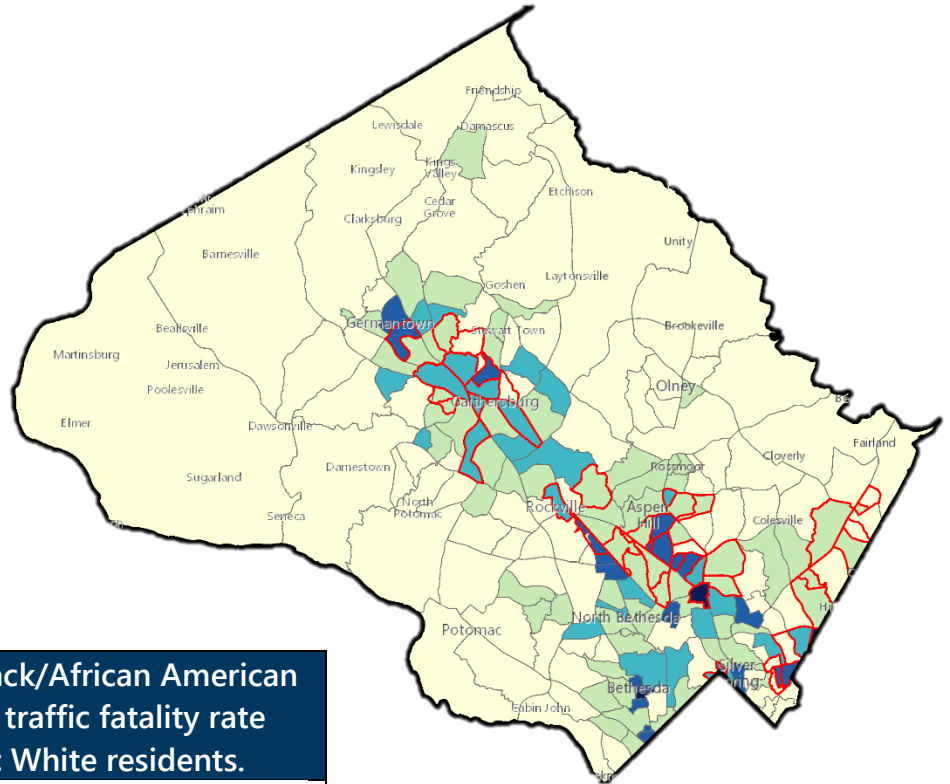
Basemap Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Hispanic and Non-Hispanic Black/African American residents have a 33% higher traffic fatality rate compared to Non-Hispanic White residents.

	All Traffic Deaths	Pedestrians	Vehicle Occupants
Hispanic	6.2	2.9	3.2
Black or African American	6.3	1.6	4.3
White	4.5	0.9	3.4

Fatalities per 100k Population
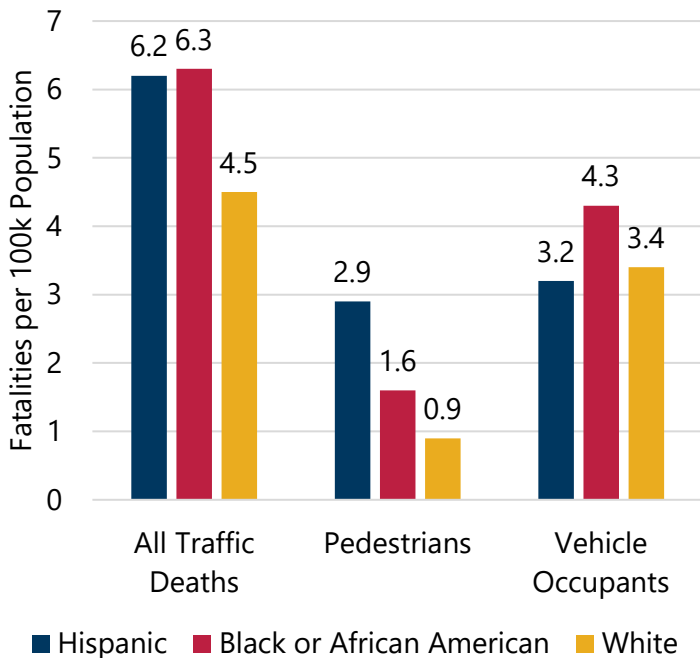
Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 2011-2015 on CDC WONDER Online Database, released December 2016.
Note: Rates for cyclists and Asian/Pacific Islander not shown due to rates that fell below the reporting threshold.

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

COLLISION FACTORS SUMMARY

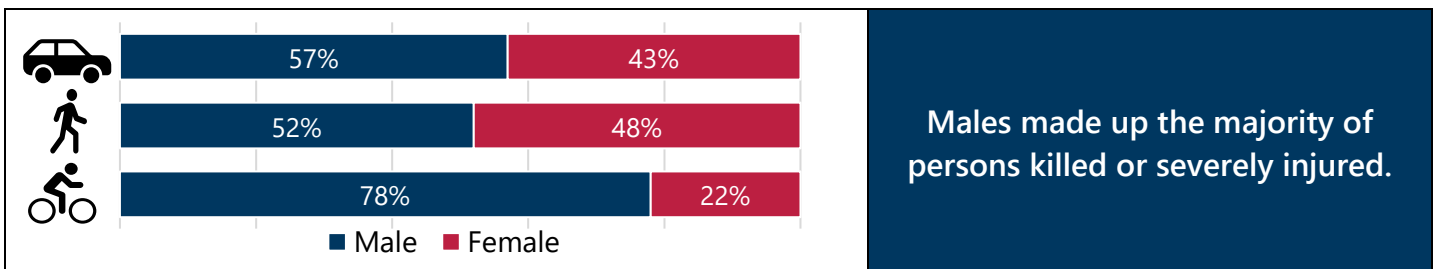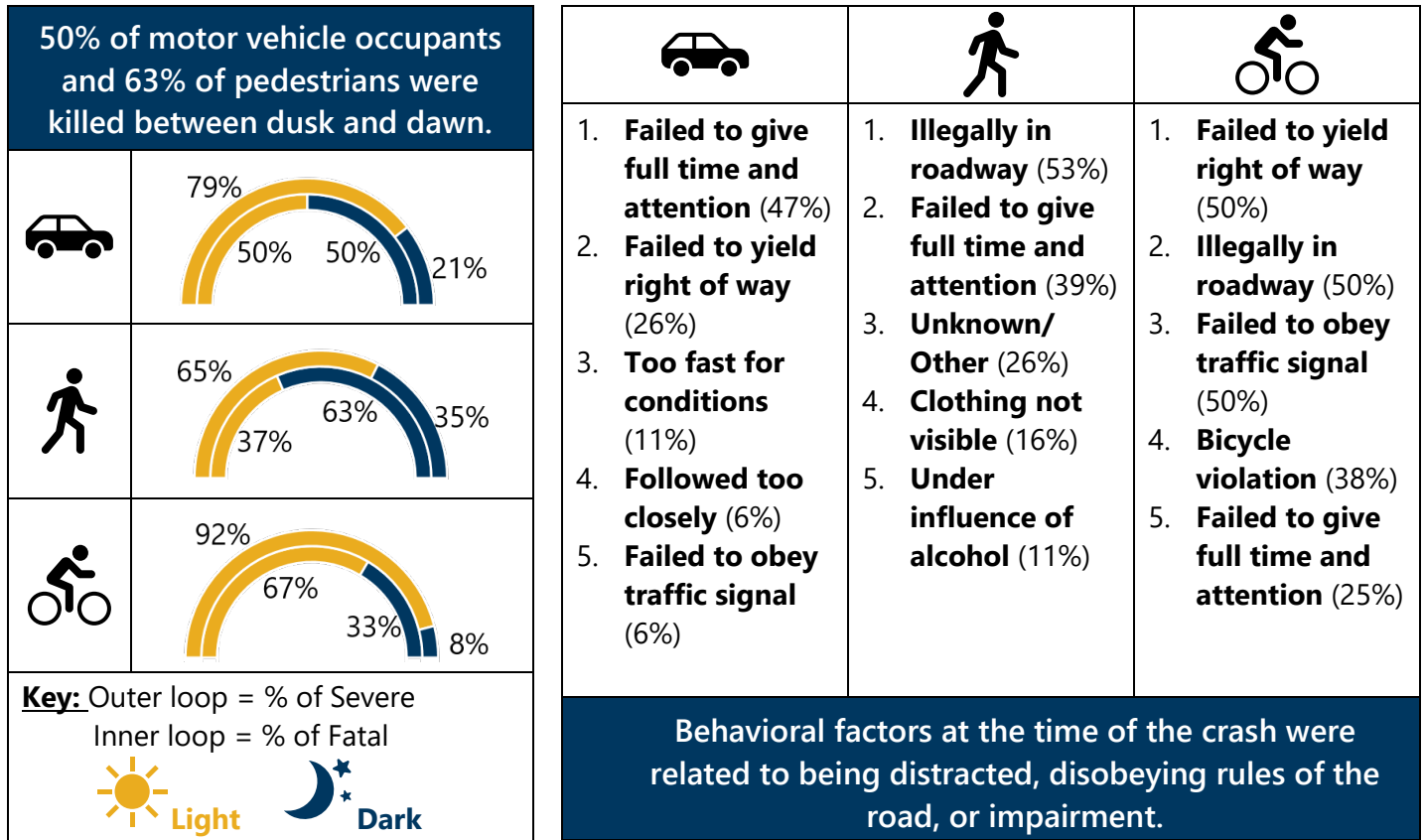Education and enforcement are most effective when targeted towards the environmental and behavioral factors that contribute to a collision. Further details about the factors highlighted below can be found in the supplemental data analysis document available on the County's Vision Zero website.

50% of motor vehicle occupants and 63% of pedestrians were killed between dusk and dawn.

Motor vehicle occupants: 79% / 50% (Light), 50% / 21% (Dark)

Pedestrians: 65% / 37% (Light), 63% / 35% (Dark)

Cyclists: 92% / 67% (Light), 33% / 8% (Dark)

Key: Outer loop = % of Severe
Inner loop = % of Fatal

☀ **Light**   🌙 **Dark**

🚗	🚶 (Pedestrian)	🚴 (Cyclist)
1. **Failed to give full time and attention** (47%) 2. **Failed to yield right of way** (26%) 3. **Too fast for conditions** (11%) 4. **Followed too closely** (6%) 5. **Failed to obey traffic signal** (6%)	1. **Illegally in roadway** (53%) 2. **Failed to give full time and attention** (39%) 3. **Unknown/ Other** (26%) 4. **Clothing not visible** (16%) 5. **Under influence of alcohol** (11%)	1. **Failed to yield right of way** (50%) 2. **Illegally in roadway** (50%) 3. **Failed to obey traffic signal** (50%) 4. **Bicycle violation** (38%) 5. **Failed to give full time and attention** (25%)

Behavioral factors at the time of the crash were related to being distracted, disobeying rules of the road, or impairment.

Car: Male 57% / Female 43%
Pedestrian: Male 52% / Female 48%
Cyclist: Male 78% / Female 22%

■ Male ■ Female

Males made up the majority of persons killed or severely injured.

Our youngest and oldest residents were most at risk for severe and fatal collisions.	🚗	🚶	🚴
	1. **13-19**: 275 2. **80+**: 259 3. **20-29**: 256	1. **20-29**: 53 2. **80+**: 47 3. **60-69**: 46	1. **10-19**: 18 2. **50-59**: 10 3. **70-79**: 9

Key: Rates are total collisions per 100,000 registered drivers for drivers and per 100,000 residents for pedestrians and cyclists

MOTOR VEHICLE OCCUPANT COLLISIONS

MOST COMMON COLLISION TYPES

In half of fatal collisions, the driver did not collide with another vehicle. Left turns were 10 times more likely to restult in a severe or fatal collision compared to right turns.

Same Direction Rear End		Left Turn		Straight Movement Angle		Single Vehicle	
Severe	Fatal	Severe	Fatal	Severe	Fatal	Severe	Fatal
27%	3%	19%	11%	19%	15%	18%	50%

SAFETY EQUIPMENT USED

Seatbelt use was three times lower in fatal crashes compared to severe crashes.		Severe	87%	13%
		Fatal	56%	44%
Helmet use for motorcycle and moped operators was nearly equal for both crash types.		Severe	84%	16%
		Fatal	87%	13%

Key: ▮ Used safety equipment ▮ Did not use safety gear

PEDESTRIAN AND CYCLIST COLLISIONS WITH MOTOR VEHICLES - MOVEMENT

	🚶	🚴	
Top 3 Motor Vehicle Movements	1. **Constant speed**: 40% 2. **Left turn**: 14% 3. **Accelerating**: 8%	1. **Constant speed**: 36% 2. **Left turn**: 18% 3. **Right turn**: 17%	Pedestrians are more likely to be severly injured or killed from left-turning vs right-turning motor vehicles. Cyclists had equal liklihood of injury from left and right turns.
Top 3 Ped/Bike Movements	1. **Cross/enter at Intersection**: 40% 2. **Cross/enter not at Intersection**: 22% 3. **Other**: 11%	1. **Cross/enter at Intersection**: 42% 2. **Riding with traffic**: 25% 3. **Riding against traffic**: 25%	

ACTION PLAN DEVELOPMENT

The Two-Year Action Plan is the result of a yearlong process that included several critical sources of input:

1. Review of previous roadway safety efforts in the County
2. Review of promising practices from other Vision Zero communities
3. Analysis of collision data to identify trends and significant issues to inform the plan
4. Consultation with County departments and agencies; the Pedestrian, Bicycle, and Traffic Safety Advisory Committee; and other stakeholders and interested parties

Every community that has adopted Vision Zero has grappled with the challenge of balancing short-term, immediate responses with a measured, long-term data-informed approach towards systematically eliminating fatal and severe crashes. The Two-Year Action Plan sets out to bridge the desire to react quickly and the equally important need to build up a knowledge base in order to take a long-term, proactive approach. Experience from around the world tells us that Vision Zero works best when it is firmly driven by reliable and consistent data, and when traffic safety is seen as a multi-disciplinary issue in which everyone in the community has a stake. This plan lays out a series of actions that will establish a solid foundation for a longer-term strategy, and allow rapid response to issues that do not require additional in-depth analysis. The plan is also a natural extension of existing County programs and initiatives related to traffic safety.

PREVIOUS ROADWAY SAFETY ACCOMPLISHMENTS

While Vision Zero is new to Montgomery County, the principles behind Vision Zero are not. The County Executive has prioritized safe streets and an effective and efficient transportation network since taking office in 2007. In December 2007, the County Executive launched the Pedestrian Safety Initiative.[7] The initiative identified seven strategies that County departments would utilize to reduce the number of pedestrian collisions in the County. Based on collision data, the County identified 17 high incidence areas (HIAs) for targeted engineering, education, and enforcement activities. The strategy, actions, and results have been reviewed each year in a CountyStat session with representatives from the Office of the County Executive, Department of Transportation, Police Department, and Public Information Office to ensure the initiative was being implemented with fidelity and emerging issues were being adequately addressed.

Since 2008, Montgomery County has experienced dramatic decreases in the number of severe and fatal pedestrian collisions. In the five years prior to the initiative, Montgomery County averaged 110 severe and 15 fatal collisions annually. From 2010-2016, the average dropped to 75 severe (32% decrease) and 10 fatalities (33% decrease). Progress would not have been possible without dedicated funding and a clear strategy for improving the pedestrian environment in the County. Some of the key activities undertaken for the Pedestrian Safety Initiative include:

ENGINEERING

- Completed 3,083 bus stop improvements and 245 new Americans with Disabilities Act (ADA) accessibility improvements
- Retimed traffic signals to increase pedestrian crossing times
- Increased the County's existing 90 miles of bicycle infrastructure by adding bicycle-only infrastructure such as the Nebel St. buffered bicycle lanes in the Pike District
- Implemented traffic calming projects which resulted in reductions in speeding and a 44% reduction in pedestrian collisions
- Implemented projects in high incidence areas (HIAs) leading to a 52% reduction in pedestrian collisions in those HIAs
- Constructed 30 miles of new sidewalk segments

ENFORCEMENT

- Targeted high-visibility enforcement in HIAs and around schools in coordination with Department of Transportation education efforts. From 2012 to 2016, MCPD increased the number of citations and warnings given to drivers violating pedestrian safety by 379% and pedestrians by 56%
- Utilized speed, red-light, and bus cameras to curb unsafe driver behavior. During the 2016 -2017 school year, the new bus cameras resulted in 15,446 citations for failing to stop for children walking to or leaving the bus

EDUCATION

- The Public Information Office developed an outreach strategy for private parking lots in 2012 after seeing that 20% of pedestrian collisions occurred in those lots from 2008 to 2011
- Conducted targeted education campaigns for drivers and pedestrians in high incidence areas
- Worked with regional partners through annual Street Smart campaigns to urge drivers and pedestrians to engage in safe driving and walking
- Educated elementary and middle school students through the Safe Routes to School initiative to promote walking or biking
- Reached out to high school students through the innovative You Only Live Once (YOLO) walk safe campaign that included social media and school partnering

Education in Action: Above is an example from the Department of Transportation's outreach for the new rectangular rapid flash beacons (RRFBs) installed along Bel Pre Road. On the left is a postcard sent to households in the area and the right is a photo from the on-street outreach event.
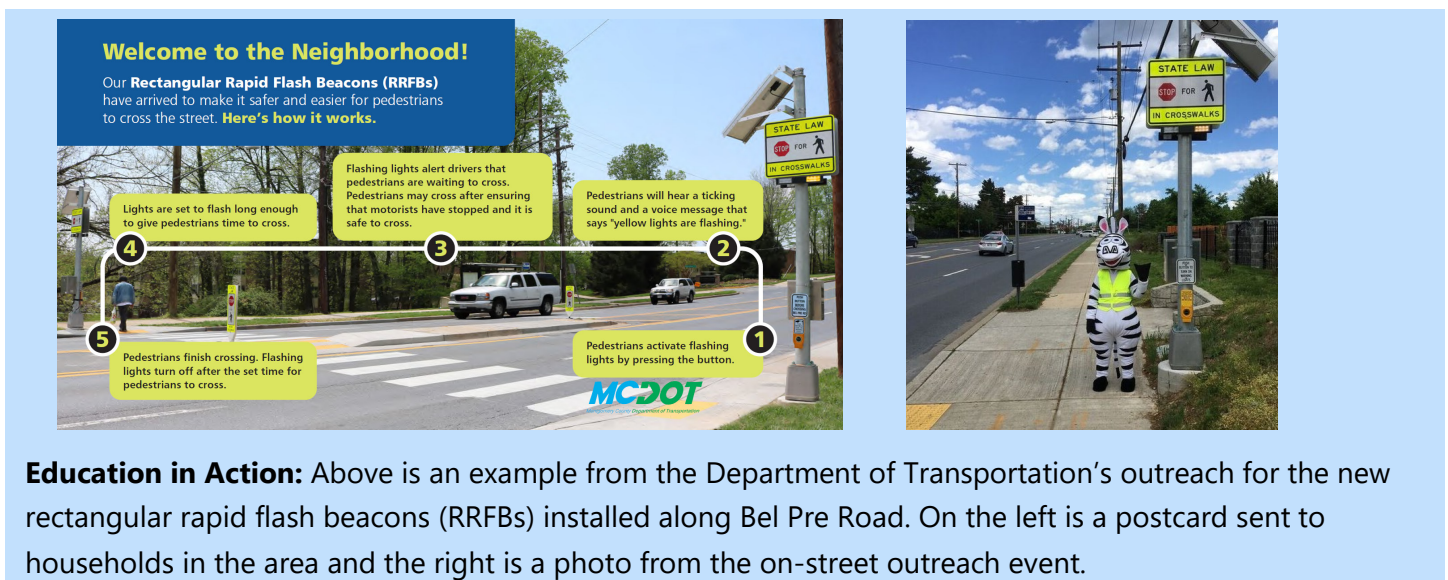
STAKEHOLDER AND COMMUNITY ENGAGEMENT

The County Government and community stakeholders broke out into six focus areas to create the Two-Year Action Plan. Dedicated staff, volunteers and community members met to discuss key issues, share information about existing programs and opportunities, and develop recommended action items for inclusion in the plan. The six focus groups were:

1. Aggressive and impaired driving
2. Distracted driving and occupant protection
3. Pedestrians and bicyclists
4. Traffic incident management
5. Vehicle technology
6. Roadway infrastructure

Focus areas 1-3 were tied to issues identified in the County's collision data. Aggressive, distracted, and impaired driving were the primary causes for fatal and severe injury crashes in the County. Pedestrians and bicyclists were over-represented in the crash data relative to the percentage of trips made by the two modes. Focus areas 4-6 were identified for their potential to reduce fatal and severe injury crashes moving forward. For example, the deployment of collision avoidance technology and the development of "smart roads" has the potential to reduce or eliminate severe crashes in the future.

While most focus group stakeholders represented County departments, all focus groups included participation from the public and outside government agencies. Stakeholders outside Montgomery County Government included, but were not limited to, the Montgomery County Planning Department, Maryland State Highway Administration, Maryland Highway Safety Office, members of the Pedestrian, Bicycle, and Traffic Safety Advisory Committee (PBTSAC), Action

Committee for Transit (ACT), and the Washington Area Bicyclist Association (WABA).

Each focus area was asked to identify action items that would contribute to the County's goal of zero severe or fatal collisions by 2030. The resulting list of actions was reviewed and synthesized into five categories: Engineering; Enforcement; Education and Training; Traffic Incident Management; and Law, Policy, and Advocacy.

Meeting of Traffic Incident Management Group

Going forward, the County is committed to improving stakeholder engagement – including broader public engagement, partnership with the Maryland State Highway Administration, leadership by County departments and outside agencies not traditionally involved in roadway safety, input from advocacy groups, business owners and other institutions located in Montgomery County, and other stakeholders that are yet to be identified. This engagement will take place through public meetings and hearings, interactive information technology, social media, and other venues. As we proceed with the major activities included in the Two-Year Action Plan, we will actively reach out to these stakeholders, and will develop longer term engagement strategies and actions to be captured in the Ten-Year Action Plan.

VISION ZERO AND MARYLAND'S STRATEGIC HIGHWAY SAFETY PLAN

Montgomery County will never reach zero severe or fatal collisions without a strong partnership and commitment from the State of Maryland. The State of Maryland has primary jurisdiction over 17% of non-interstate lane miles in the County and 52% of all non-interstate vehicle miles traveled, which account for 53% of the County's severe and fatal collisions.

The Two-Year Action Plan is designed to be the County's local counterpart to the State of Maryland's 2016-2020 Strategic Highway Safety Plan (SHSP). The County's planning mirrored the SHSP in numerous ways, including:

- Stating that traffic collisions are tragic, preventable occurrences
- Using a data-informed process to identify needs and countermeasures on roadways
- Setting reduction targets for severe and fatal traffic collisions
- Employing strategies built around engineering, education, enforcement, and emergency medical services
- Adopting similar focus areas, which are listed in the table on the right

Read the State of Maryland's 2016-2020 Strategic Highway Safety Plan at towardzerodeathsmd.com

STATE AND COUNTY FOCUS GROUP AREAS

State SHSP Focus Areas	County Vision Zero Focus Areas
Aggressive driving	Aggressive and impaired driving
Impaired driving	
Distracted driving	Distracted driving and occupant protection
Occupant protection	
Pedestrians & bicyclists	Pedestrians & bicyclists
Highway infrastructure	Roadway infrastructure
	Traffic incident management
	Vehicle technology

Montgomery County's Two-Year Vision Zero Action Plan sets a more aggressive timeline for safety improvements and endeavors to be a model for the State and other counties in Maryland. The County plan aims to eliminate severe and fatal collisions by 2030 whereas the SHSP sets a 50% reduction from a 2008 baseline by 2030. The County will meet its goals through completion of specific actions by set deadlines rather than the SHSP's approach of setting broad strategies for each focus group.

The County remains engaged with the State to create safe environments on all roadways. County employees are leading and participating in the State's emphasis areas, using data to highlight areas of concern on State maintained roadways, and identifying projects where the County and State can make significant improvements.

ROAD TO VISION ZERO

January 2002
Blue Ribbon Panel Report on Pedestrian and Traffic Safety Released

December 2007
Pedestrian Safety Initiative Launched
(Full funding started in July 2009)

October 2015
MCDOT adopts "Moving Forward Together" vision document

February 2016
County Council adopts Vision Zero Resolution

June 2016
County Executive establishes Vision Zero Steering Committee

September 2016
1st Vision Zero stakeholder meeting

November 2016
Focus area stakeholder groups meet to develop Action Plan

July 2017
1st Action Plan draft reviewed by PBTSAC

November 2017
Two-Year Action Plan Approved

January 2018 to January 2019
Outreach and input to build 10-Year Plan

January 2019
Vision Zero 1-Year Progress Report

July 2019
1st Draft of 10-Year Plan

2019 and Beyond
Annual updates to 10-Year Plan strategies and annual progress reports

2030
Zero traffic fatalities and severe injuries

TWO-YEAR ACTION PLAN

Adopting a Vision Zero policy is challenging. The goal of zero appears impractical, and yet no higher number is acceptable. Balancing immediate action with long-term strategy demands focus and patience in equal measure. Additionally, Vision Zero requires a new way of doing business from agencies and staff that have been working diligently in this field for years. The Action Plan includes items that will require new investments, but the real value of Vision Zero lies in its ability to re-orient and re-focus existing programs and projects with a data-informed, safe systems approach that makes more effective use of current resources.

To reach the goal of zero severe and fatal collisions by 2030, the Action Plan lays out specific activities with deadlines for implementation. All 41 action items are built around five key action areas: Engineering; Enforcement; Education and Training; Traffic Incident Management; and Law, Policy, and Advocacy.

ENGINEERING

- **LEAD:** Department of Transportation
- **KEY OUTCOME:** Reduction in severe and fatal collisions in the High Injury Network

ENFORCEMENT

- **LEAD:** Police Department
- **KEY OUTCOME:** Hours of dedicated enforcement for factors contributing to severe and fatal collisions

EDUCATION AND TRAINING

- **LEAD:** Public Information Office
- **KEY OUTCOME:** Increased awareness of dangerous driving, biking, and walking behaviors

TRAFFIC INCIDENT MANAGEMENT

- **LEAD:** Fire and Rescue Service
- **KEY OUTCOME:** Maintain response times for traffic collisions with injuries based on department standards

LAW, POLICY, & ADVOCACY

- **LEAD:** Vision Zero Steering Committee
- **KEY OUTCOME:** Passage of significant laws and policies required to implement Vision Zero

LEAD:
Department of Transportation

📈 Key Outcome:
Reduction in severe and fatal collisions in the High Injury Network (HIN)

ENGINEERING

Vision Zero requires an evidence-based, safe systems approach for all of the County's transportation infrastructure. The safe systems approach prioritizes safety above all else and designs such that roadway users' mistakes do not result in severe injuries or fatalities.

ENG-1: Crash Analysis	
Lead: CountyStat (county-wide), Transportation (HIN)	**Support:** Police
Action: Undertake a detailed, multi-disciplinary Countywide crash study to provide a comprehensive understanding of traffic crash causes, contributing factors, locations, and roadway characteristics. This study should identify the high injury network (HIN) and provide the foundation for the ten-year action plan	
Why do this: Identifying collision patterns, types, and similar site characteristics is required to use our resources in a targeted manner to eliminate severe and fatal collisions.	
Deadline: Identify priority HIN projects by 1/31/2018	
Metric(s): Complete Action	

ENG-2: Update County Road Design Standards	
Lead: Transportation	**Support:** Park and Planning
Action: Establish a committee to review and revise roadway design standards and develop complete street guidelines utilizing road code and leading practices from groups such as NACTO, ITE, and AASHTO for various types of roadways within the County. The review should prioritize reducing opportunities for high-speed collisions through physical or temporal separation, reducing motor vehicle speeds where separation cannot be achieved, and developing proper environmental countermeasures (lighting, signing, signals, marking).	
Why do this: County Council Bill 33-13 requires the adoption of a complete streets policy.[8] Adoption of road design standards that align to Vision Zero goals are essential in order to identify and implement proper safety countermeasures.	
Deadline: Publish revised road designs by 11/1/2019	
Metric(s): Complete Action	

ENG-3: Expand Road Safety Audits

Lead: Transportation	Support: N/A

Action: Implement a road safety audit process for all new County road and facility projects.

Why do this: Ensure that all work performed by MCDOT has a safety-first approach

Deadline: Implement new process by 11/1/2018

Metric(s): Complete Action

ENG-4: Review Transit Stops

Lead: Transportation	Support: WMATA (Metro), State Highway Admin.

Action: Develop a program to review transit stop locations and conditions to ensure safety and accessibility. Priority will be given first to HIN locations, but all stops will be reviewed every 5 years.

Why do this: A significant number of pedestrian crashes are associated with transit users crossing to/from transit stops. Redevelopment or even small changes can modify pedestrian desire lines driving the need for continual reevaluation.

Deadline: Develop program review requirements by 5/1/2018

Metric(s): Percentage of transit stops with safe crossings, Number of severe and fatal collisions related to going to or leaving a transit stop

ENG-5: Evaluate Trail Crossings and Intersections

Lead: Transportation	Support: Park and Planning, State Highway Admin.

Action: Evaluate trail crossings and intersections with safety as a priority. Crossings identified as high risk (high posted speed, multiple lanes, and roadway median) will be transformed first.

Why do this: Ensure that vulnerable users (pedestrians and cyclists) can cross safely

Deadline: Develop list of priority trail crossings and intersections for modification by 11/1/2018

Metric(s): Percentage of trails and intersections with safe crossings, Number of severe and fatal collisions at trail crossings and intersections

ENG-6: State/County Project Collaboration

Lead: Transportation	Support: State Highway Admin.

Action: Identify, at minimum, two high injury areas where the County and State can jointly implement safety improvement projects

Why do this: The majority of severe and fatal collisions occur on state-maintained roads. These joint projects will encourage a positive working relationship.

Deadline: Identify potential project areas by 1/31/2018

Metric(s): Number of severe and fatal collisions occurring in the high injury network

ENG-7: Improve Pedestrian Signals	
Lead: Transportation	**Support:** State Highway Admin.
Action: Complete a comprehensive review of pedestrian timings at the 750+ County-maintained signalized intersections to ensure they meet the revised walking speed standard. Use latest technology and standards to implement innovative pedestrian and bicycle signals (such as leading pedestrian interval, HAWK beacon, Barnes dance, etc.) to provide effective and safe crossings.	
Why do this: Pedestrian signals must allow enough time for all pedestrians to cross safely	
Deadline: All pedestrian signals retimed to 3.5 feet/second by November 2019	
Metric(s): Percentage of pedestrian signals meeting walking speed standards	

ENG-8: Accelerate Sidewalk Building	
Lead: Transportation	**Support:** State Highway Admin.
Action: Using the sidewalk inventory as a guide, accelerate the sidewalk building program with priority projects in the high injury network	
Why do this: Safe facilities can reduce the number of pedestrians and cyclists in the roadway	
Deadline: Publish a list identifying high priority areas lacking sidewalks by 4/1/2018 and complete priority projects by 10/1/2019	
Metric(s): Linear feet of sidewalk produced	

ENG-9: Expand Low-Stress Bicycle Network	
Lead: Transportation	**Support:** Park and Planning, State Highway Admin.
Action: Using the Bicycle Master Plan as a guide, construct new bikeway facilities to create a highly-connected, convenient and low-stress bicycling network	
Why do this: A low-stress bicycle network allows for more people to bike and create needed separation from traffic	
Deadline: Ongoing Effort	
Metric(s): Percentage of roadways defined as "low-stress" for bicycle riders	

IMPROVING DANGEROUS INTERSECTIONS

After a bicyclist fatality in October 2016, Montgomery Parks placed flex posts on Little Falls Parkway to limit the number of travel lanes at this dangerous crossing with the Capital Crescent Trail to improve safety.
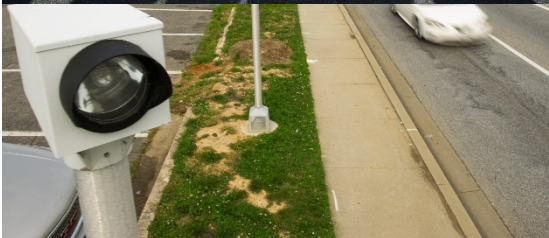
LEAD:

Montgomery County Police

📈 Key Outcome:

Hours of dedicated enforcement for factors contributing to severe and fatal collisions

ENFORCEMENT

Vision Zero needs more than improved transportation infrastructure; it requires building a culture of safety. To encourage safe behavior, Vision Zero communities utilize evidence-based law enforcement methods, both automated and with police officers.[9] For example, publicized sobriety checkpoints can reduce alcohol-related collisions by 17%.[10] Enforcement actions will be combined with education efforts to maximize impact and ensure equitable outcomes.

ENF-1: Establish Collision Review Team	
Lead: Police	**Support:** Transportation, CountyStat, Park and Planning, State Highway Admin.
Action: Establish a multi-disciplinary review team that will review each fatal crash as soon as possible after the event to identify potential actions the County can take at that or other similar locations to address safety issues. The team should look at all possible causal factors and present findings to the public.	
Why do this: The team ensures diverse perspectives are represented when determining potential counter-measures to respond to traffic fatalities.	
Deadline: Establish team and hold first meeting by 12/15/2017	
Metric(s): Complete Action	

ENF-2: Increase Enforcement Activities	
Lead: Police	**Support:** Transportation, Public Information
Action: Increase enforcement of distracted, impaired, occupant protection, and aggressive driving behaviors, as well as violations of pedestrian and bicycle safety laws. Enforcement activities should concentrate in the high injury network, during peak seasons, and specific times of day. Enforcement should be performed in conjunction with education campaigns.	
Why do this: For enforcement to be effective at curbing dangerous driving behaviors, there must be consistent high visibility enforcement	
Deadline: Ongoing Effort	
Metric(s): Hours of dedicated enforcement	

ENF-3: Expand Automated Enforcement

Lead: Police	Support: Transportation
Action: Increase the use of automated enforcement to address excessive speeds, red-light, and stopped bus violations	
Why do this: Automated enforcement has been proven to curb dangerous driving behaviors when used at appropriate locations in the County	
Deadline: Ongoing Effort	
Metric(s): Reduction in speed related crashes along Safe Speed corridors	

ENF-4: Improved Distracted Driving Detection

Lead: Police	Support: N/A
Action: Use unmarked cars to assist with aggressive and distracted driving enforcement	
Why do this: Unmarked police vehicles can be more effective at identifying distracted drivers	
Deadline: Purchase unmarked vehicles by 12/1/2018	
Metric(s): Complete Action	

ENF-5: Collaboration with Court System

Lead: Police	Support: MD Courts
Action: When possible and practical, inform judicial system regarding high visibility enforcement and its connection to traffic safety	
Why do this: Enforcement actions need to be supported and reinforced by judicial system	
Deadline: Complete initial outreach by 5/1/2018	
Metric(s): Complete Action	

POLICING AND EQUITY IN VISION ZERO

The Montgomery County Police Department is committed to maintaining respect for individual rights and human dignity in all interactions with our diverse community. As part of that promise, MCPD will carry out its high visibility enforcement efforts by:

- Collaborating with the Department of Transportation, Office of Public Information, and regional partners to combine education activity with enforcement efforts
- Use collision data to target the areas and behaviors that lead to severe and fatal collisions
- Adopt the recommendations of the equity task force as outlined in action item LPA-2
- Continue to post traffic citation data on the County's open data portal, which includes the person's race and gender
- Continue automated photo enforcement

LEAD:
Public Information Office

📈 Key Outcome:
Increased awareness of dangerous driving, biking, and walking behaviors

EDUCATION AND TRAINING

Creating a safety culture in Montgomery County is not limited to issuing warnings and citations. The County must engage the public and County employees using a variety of outreach methods to instill safe behaviors. Tied with enforcement, Montgomery County will be a safe place to get from point A to point B.

EDU-1: Create Comprehensive Outreach Strategy	
Lead: Public Information	**Support:** Transportation, Police, CountyStat
Action: Develop a communication and outreach strategy for specific groups most at risk of being involved in a severe or fatal collision (e.g. seniors, school-aged children, persons with disabilities)	
Why do this: Need a strategy to properly identify the means in which the County will perform outreach	
Deadline: Publish strategy by 5/1/2018	
Metric(s): Complete Action	

EDU-2: Expand Safe Routes to School Activities	
Lead: Transportation, Public Schools	**Support:** VZ Steering Committee
Action: Expand the County's Safe Routes to School (SRTS) activities to all schools and initiate comprehensive traffic safety education for pedestrian, bicycle, and driver safety at appropriate ages	
Why do this: Through SRTS, the County Government and Public Schools can initiate targeted education and engineering projects to improve the pedestrian environment and encourage more students to walk or bike to their school	
Deadline: Have agreement between MCPS and MCDOT to expand SRTS activities by start of 2019-2020 school year	
Metric(s): Reduction in severe and fatal collisions involving school-aged children	

EDU-3: On-bike Education Programs for Kids	
Lead: Transportation, Public Schools	**Support:** County Executive's Office, Police
Action: Establish an on-bike education program to teach bike safety skills to all elementary school children	
Why do this: School-aged children are over-represented in bicycle collisions. Working in schools is the best way to reach this group.	
Deadline: Have agreement between MCPS and MCDOT by start of 2019-2020 school year	
Metric(s): Reduction in severe and fatal collisions involving school-aged children on bicycles	

EDU-4: Vision Zero Outreach Grant Program	
Lead: VZ Steering Committee	**Support:** Public Information, County Executive's Office, Transportation, Management and Budget
Action: Establish a fund to allow government and non-governmental agencies to target education to specific at-risk groups. Groups receiving funds must have a clear link to Vision Zero, create a business plan for outreach efforts, and provide, at minimum, yearly activity reports.	
Why do this: Montgomery County Government has limited staff and resources to do targeted outreach. Non-governmental organizations in the community can utilize their existing networks to better reach specific groups.	
Deadline: Solicit proposals by 6/1/2018	
Metric(s): Increased awareness of dangerous driving, biking, and walking behaviors	

EDU-5: Safety Awareness Training for County Employees	
Lead: VZ Steering Committee	**Support:** Transportation, Police, Public Schools, Park and Planning, County Executive's Office
Action: Educate key staff in MCDOT, MCPD, MCPS, M-NCPPC, and the County Executive's Office on the tenants of Vision Zero either in formal presentations, roll calls, senior management meetings, etc.	
Why do this: Frontline employees must be aware of Vision Zero in order to build the culture of safety and accountability.	
Deadline: Complete first round of awareness trainings by 11/1/2018	
Metric(s): Number of County employees given training	

EDU-6: Cross-Departmental Team Building	
Lead: VZ Steering Committee	**Support:** Transportation, Police, Public Schools, Park and Planning, County Executive's Office
Action: Create opportunities for team building and communication across departments participating in Vision Zero	
Why do this: Need to create cross collaboration opportunities in order to reinforce the culture change required to implement Vision Zero	
Deadline: Hold at least two collaboration events by 11/1/2018	
Metric(s): Number of collaboration events held each year	

EDU-7: Raise Awareness of Sleep and Safety	
Lead: Fire and Rescue, Police, Transportation	**Support:** Public Information
Action: Use County programs to increase awareness of the safety impacts of sleep apnea, fatigue, drowsy driving and vehicle operation by those medically at risk, as well as older drivers	
Why do this: Impaired driving is not limited to drug and alcohol use. Drivers should be aware of when they are too fatigued to drive.	
Deadline: Complete first round of awareness trainings by 11/1/2018	
Metric(s): Number of County employees given training	

REGIONAL STREET SMART CAMPAIGN

This photo from the spring 2017 Street Smart campaign kickoff highlights safety messages that can be seen around the DC region. Learn more about regional efforts to create safer streets at bestreetsmart.net.

EDU-8: Future Technology Task Force	
Lead: Chief Innovation Officer	**Support:** Transportation, Police, Public Information, General Services
Action: Establish a future technology task force to keep track and report on new technologies and methods that can improve the County's Vision Zero efforts. The task force should report on, but not be limited to, new roadway countermeasures, safety enforcement, driverless vehicles, and new vehicle technology.	
Why do this: The County must stay abreast of what is happening with vehicle and roadway technology. Some advancements may help with roadway safety (collision avoidance systems) where others may cause more distractions (entertainment systems).	
Deadline: Provide first report by 12/1/2018	
Metric(s): Complete Action	

EDU-9: Training in the Community	
Lead: Public Information	**Support:** Transportation
Action: Identify major employers, TDM programs, and HOAs to deliver Vision Zero training and messaging	
Why do this: Community partners are necessary to build a culture of traffic safety in the County	
Deadline: Create outreach material and identify partners by December 2018	
Metric(s): Number of businesses/groups participating in Vision Zero programming	

LEAD:
Fire and Rescue Service
📈 Key Outcome:
Maintain response times for traffic collisions with injuries based on dept. standards

TRAFFIC INCIDENT MANAGEMENT

Montgomery County residents have access to level 1 and level 2 trauma centers and an accredited Fire and Rescue Service that can decrease the morbidity and mortality of a collision through proper transport and care.[11] The Traffic Incident Management action area will ensure that when collisions occur in the County, prompt care will be provided.

Rapid response to car collisions is crucial, but will not come at the expense of safety for first responders. Collisions are a leading cause of fatalities for both police and fire public safety employees.[12,13] The County will ensure the protection of the public and its employees through safe responses and on-scene traffic management.

TIM-1: Provide Prompt Emergency Medical Service	
Lead: Fire and Rescue	**Support:** Police
Action: Maintain time to scene and time to hospital response times that meet or exceed department standards	
Why do this: A key measure of service quality for Fire and Rescue service is a prompt response to medical emergencies	
Deadline: Ongoing effort	
Metric(s): Maintain response times for traffic collisions with injuries based on department standards	

TIM-2: Devise Safe Incident Management Plan	
Lead: Police, Fire and Rescue	**Support:** N/A
Action: Formalize a plan and training for all first responders for safe incident management	
Why do this: Ensure safe and collaborative response to traffic collisions. Secondary crashes are often more severe than the primary crash.	
Deadline: Establish plan by 11/1/2018	
Metric(s): Reduction in the number of severe or fatal collisions occurring while in transport or on-scene of a traffic crash	

TIM-3: Enhance Police Driver Training	
Lead: Police	**Support:** N/A
Action: Expand emergency response driver training program to all police officers	
Why do this: The County as an employer must provide a safe working environment for its employees. Collisions cost taxpayers due to damaged vehicles and injured employees unable to work.	
Deadline: Implement enhanced driver training program by 11/1/2019	
Metric(s): Reduction in the number of severe or fatal collisions occurring while in transport or on-scene of a traffic crash	

TIM-4: Temporary Traffic Control Devices	
Lead: Fire and Rescue	**Support:** Police
Action: Provide emergency response agencies with temporary traffic controls (e.g truck mounted attenuators and arrow boards) and suitable training to deploy these devices during emergency responses	
Why do this: Provide a safe working environment and smooth traffic control while clearing traffic crash	
Deadline: Procure traffic control devices for a pilot program by 11/1/2018	
Metric(s): Reduction in the number of severe or fatal collisions occurring while in transport or on-scene of a traffic collision	

MCFRS RESPONSE TIME STANDARDS

The Montgomery County Fire and Rescue Service is accredited through the Commission on Fire Accreditation International (CFAI) and is the only accredited service in Maryland as of September 2017. Maintaining accreditation is no small feat as MCFRS must meet 86 core competencies and report on 252 performance indicators.

As part of MCFRS' planning and accreditation requirements, the department has developed long-range response time targets. For the most severe injuries, MCFRS provides advanced life support 2 (ALS2) service. The long-range targets for ALS2 first-arriving units are as follows:

Population Density Area	Total Response Time 2022 Benchmarks for ALS2 Calls
Metropolitan	9:30
Urban	10:15
Suburban	11:00
Rural	12:00

To learn more about response time targets, population density areas, and risk assessment, read the 2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan available at http://www.montgomerycountymd.gov/mcfrs/

LEAD:
Vision Zero
Steering Committee

📈 Key Outcome:
Passage of significant laws
and policies required to
implement Vision Zero

LAW, POLICY, AND ADVOCACY

Vision Zero is an all-hands-on-deck approach that requires the participation of all levels of government and the public to reach zero severe and fatal collisions. Actions in the Law, Policy, and Advocacy area seek to improve the way traffic safety is managed in Montgomery County by changing laws and policies that do not align with Vision Zero and advocating for the necessary tools to fully enact the Vision Zero strategy. Making these changes will allow for implementation of this Action Plan and set the stage for the Ten-Year Vision Zero plan.

LPA-1: Change Policies, Regulations, and Laws	
Lead: VZ Steering Committee, Office of Intergovernmental Relations	**Support:** County Executive's Office, Transportation, Police, Public Information, Park and Planning, State Highway Admin.
Action: Identify county and state laws, policies, and regulations that are hindering the County's progress towards Vision Zero and develop strategies to update them. Emphasis should be on laws that allow for innovative engineering and ability to lower speed limits to align with leading Vision Zero practices.	
Why do this: The County must have its polices, regulations, and laws reflect a safe system approach.	
Deadline: Identify changes needed by 12/1/2017	
Metric(s): Successful passage of new laws, policies, and regulations identified by the Vision Zero Steering Committee	

LPA-2: Ensure Equity throughout Vision Zero Projects	
Lead: VZ Steering Committee	**Support:** County Executive's Office, Transportation, Police, Public Information
Action: Establish an equity task force with community members to ensure appropriate strategies, approaches, and messaging around Vision Zero	
Why do this: Equity is core to Vision Zero and needs to be prioritized in all actions	
Deadline: Establish task force by 12/31/2017	
Metric(s): Complete Action	

LPA-3: Appoint Vision Zero Coordinator

Lead: VZ Steering Committee	**Support:** N/A

Action: Appoint a Vision Zero Coordinator to oversee implementation of this plan and champion Vision Zero throughout the county

Why do this: This initiative cuts across multiple departments and agencies and needs a single point of contact to ensure all projects are moving and meeting deadlines

Deadline: Appoint interim manager in November 2017 with full-time coordinator by January 2018

Metric(s): Complete Action

LPA-4: Create Vision Zero Website

Lead: Public Information, CountyStat	**Support:** Technology Services

Action: Create a Vision Zero website that contains all Vision Zero related information

Why do this: A core piece of Vision Zero is connecting with the community. The Website should be promoted through a comprehensive public information and education campaign that encourages all residents to take ownership for providing data and input on the 10-year plan.

Deadline: Launch initial webpage with plan release, Have full page build-out by 11/30/2017

Metric(s): Complete Action

LPA-5: Create Vision Zero Feedback Map

Lead: CountyStat	**Support:** Transportation, Park and Planning, Public Information

Action: Create a Vision Zero concerns map that encourages the public to contribute information about crashes, near misses, and locations with perceived safety issues

Why do this: The concerns map can be used to supplement the County's collision data

Deadline: Publish map for public input by 11/30/2017, Update VZ Steering Committee on results quarterly

Metric(s): Complete Action

LPA-6: Create Pedestrian Master Plan

Lead: Park and Planning	**Support:** Transportation

Action: Complete a Pedestrian Master Plan for the County to address the unique issues faced by pedestrians and people with disabilities

Why do this: The County needs to have a comprehensive plan for how pedestrian facilities should be built and maintained in the County similar to the bicycle master plan

Deadline: Complete master plan by 11/1/2019

Metric(s): Complete Action

LPA-7: Publish Collision Data

Lead: Police	Support: Technology Services, CountyStat

Action: Publish collision data on dataMontgomery and create interactive views of the data for easier consumption and analysis by the public

Why do this: By opening collision data to the public, the County's progress can be tracked in near real-time and additional insights regarding crashes can be gained from the public's analysis

Deadline: Publish data by 11/1/2017

Metric(s): Complete Action

LPA-8: Improve Crash Data Collection

Lead: Police	Support: CountyStat, Transportation

Action: Improve collision data collection by MCPD through prioritization of essential data elements and improved approval/revision process

Why do this: Having key fields blank or filled out incorrectly hinders data analysis and future action plan development

Deadline: Start outreach by 11/30/2017

Metric(s): Number of reports with key data elements missing

LPA-9: Establish Peer Learning Opportunities

Lead: VZ Steering Committee	Support: County Executive's Office, Transportation, Police, Public Information

Action: Establish links with peer Vision Zero communities to create a shared learning community

Why do this: Other Vision Zero communities have lessons learned that can be used by the County

Deadline: Start outreach by 12/1/2017

Metric(s): Hold at least one annual meeting with other Vision Zero communities

LPA-10: Review Existing Traffic Safety Programs

Lead: VZ Steering Committee, CountyStat	Support: County Executive's Office, Transportation, Police, Public Information, Management and Budget

Action: Review existing traffic safety programs to determine their effectiveness in reaching the Vision Zero goal

Why do this: All traffic safety programs should align to a safe systems approach and the County must adjust any programs that do not align

Deadline: Release results by 11/1/2018

Metric(s): Complete Action

LPA-11: Work with Municipalities

Lead: VZ Steering Committee | **Support:** N/A

Action: Encourage the larger municipalities in the County (Gaithersburg, Rockville, Takoma Park) to participate or create their own Vision Zero Plan

Why do this: Working with Rockville, Gaithersburg and Takoma Park will help to address collisions that occur in those municipalities

Deadline: Complete initial outreach to municipalities by 1/1/2018

Metric(s): Complete Action

LPA-12: Engage Outside Research Partners

Lead: VZ Steering Committee | **Support:** N/A

Action: Proactively engage research organizations (such as IIHS, NIH, NHTSA) in the Vision Zero initiative to support rigorous evaluation and development of best practices

Why do this: The County has organizations that can provide expertise for implementing a safe systems approach and determining what works

Deadline: Reach out to potential research partners by 1/1/2018

Metric(s): Complete Action

LPA-13: Procure Safer Vehicles

Lead: Fleet Management, Procurement | **Support:** VZ Steering Committee

Action: Adopt new vehicle fleet purchasing policy to include purchasing specifications for crash avoidance systems, side and under-run guards, mirrors and lighting

Why do this: Collision avoidance systems can lower the probability of being in a collision. For example, vehicles equipped with automatic braking reduce rear-end crashes by 40%[14]

Deadline: Finalize policy by 11/1/2018

Metric(s): Reduction in collisions involving County-owned vehicles

LPA-14: Build the Ten-Year Action Plan

Lead: VZ Steering Committee | **Support:** N/A

Action: Initiate ten-year plan development with an open and transparent process

Why do this: The County must have a long-term plan to get to zero by 2030

Deadline: Start feedback sessions in January 2019, complete by November 2019

Metric(s): Complete Action

SHARED MISSION, SHARED ACCOUNTABILITY

CONTINUOUS COLLABORATION

The final piece of the puzzle is to ensure accountability for this Action Plan in an open, constructive, and continuous process. The County Executive's Vision Zero Steering Committee will regularly update our collective progress in a manner that allows anyone to access this vital information and provide input.

The Steering Committee, which includes representatives of MCDOT, MCPD, PIO, MCFRS, and PBTSAC, will meet monthly to oversee progress of the Two-Year Action Plan. Public agencies and community stakeholders, many of whom are responsible for elements of the Action Plan, will meet quarterly to review progress and discuss issues regarding implementation.

ACCOUNTABILITY

The Steering Committee, with the help of the stakeholders, will produce an annual progress report, participate in a yearly CountyStat accountability session, and oversee development of the Ten-Year Plan. The Steering Committee will coordinate a review of ongoing plans and policy development in the County to ensure concurrency with Vision Zero goals and objectives. The annual CountyStat session will track how well the County's efforts are affecting roadway safety by analyzing the relevant data, track the status of all action items, and assign corrective follow-up items as needed.

By tracking progress and determining what works, the County will build a strong base for developing a long-term Ten-Year Plan to eliminating severe and fatal collisions in Montgomery County by 2030.
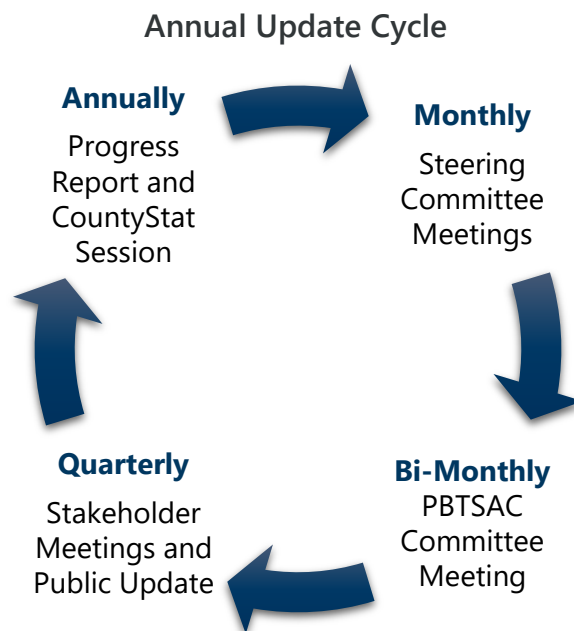
Annual Update Cycle

Annually
Progress Report and CountyStat Session

Monthly
Steering Committee Meetings

Bi-Monthly
PBTSAC Committee Meeting

Quarterly
Stakeholder Meetings and Public Update

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