

## VISION ZERO IMPLEMENTATION

UPDATE TO COUNTY COUNCIL | SEPTEMBER 20, 2022



**Roadway Safety Since COVID-19** 

## **Increased Fatality Rates Since COVID-19**



'Tragic': Driving Was Down In 2020, But Traffic Fatality Rates Surged

March 5, 2021 · 3:30 PM ET

CAMILA DOMONOSKE 

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Killed while walking: Pedestrian death rate surged during pandemic

Neal Augenstein | naugenstein@wtop.com May 20, 2021, 8:15 AM Map: Pedestrian fatalities in the U.S. reach four-decade high. See which states had the most.

More than 7,000 people were killed nationwide in 2021.

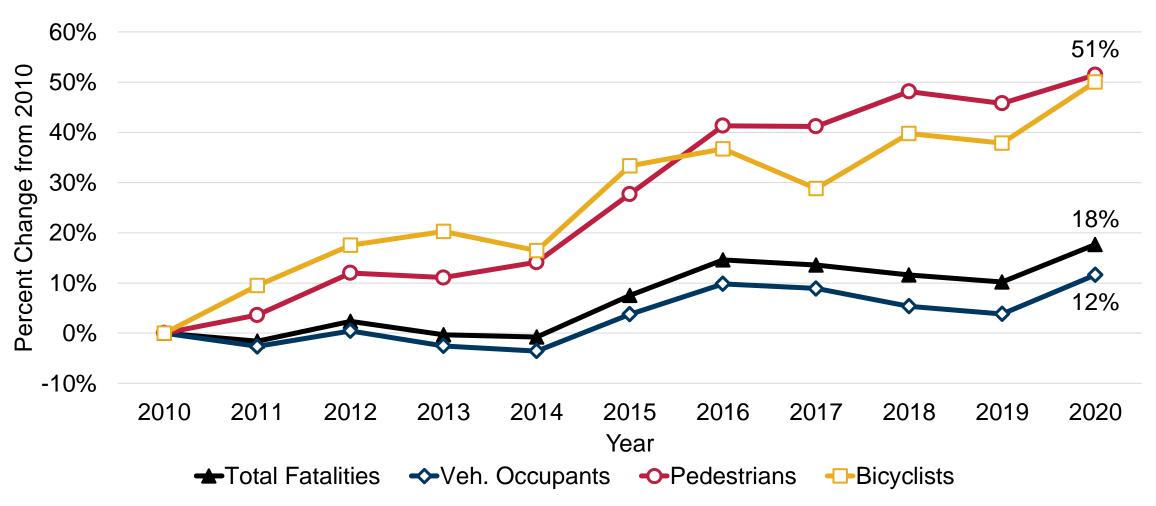
Newly Released Estimates Show Traffic Fatalities Reached a 16-Year High in 2021

## U.S. traffic deaths hit 20-year high in early 2022

"The overall numbers are still moving in the wrong direction. Now is the time for all states to double down on traffic safety," said Steven Cliff, administrator of the National Highway Traffic Safety Administration.

## Increasing Roadway Deaths across the US after Years of Progress

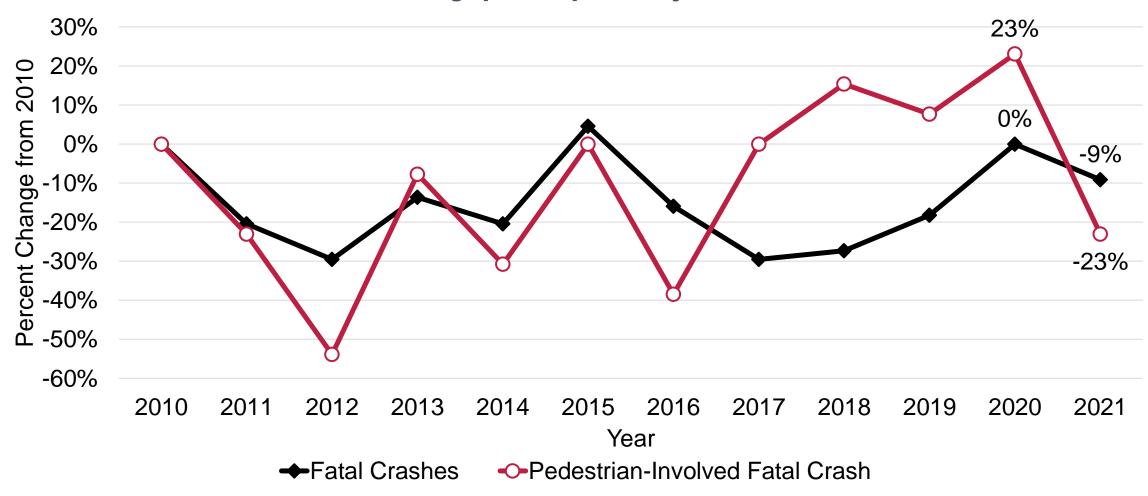
US fatal crashes involving pedestrians and cyclists increasing faster than for those in vehicles.



SOURCE: NHTSA Fatality Analysis and Reporting System (FARS). 2021 data not yet available.

## **County Roadway Fatalities Down Compared to 2010**

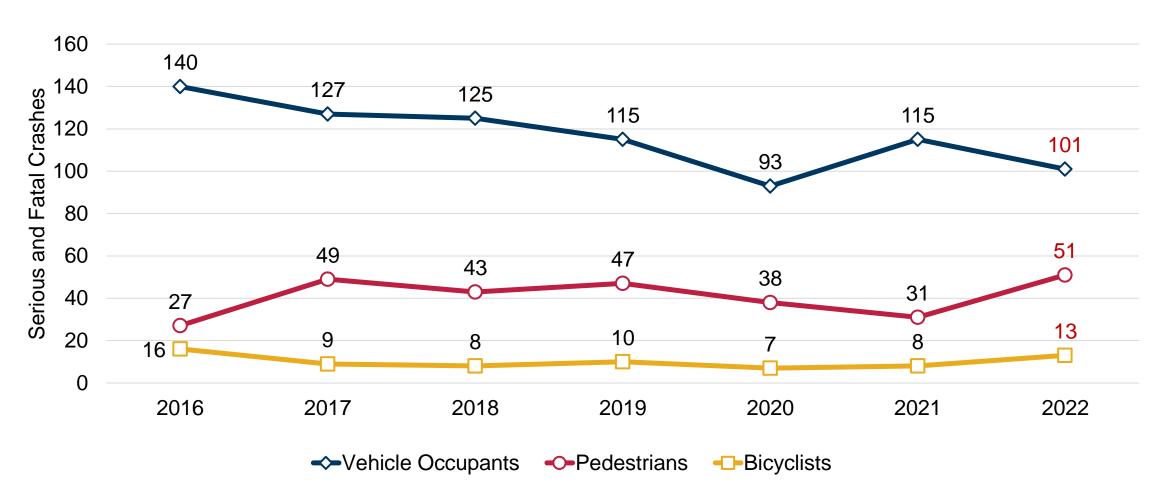
Montgomery County did not experience the large uptick seen in rest of US between 2010 and 2020, but fatal crashes have been trending up in the past five years after recent record low in 2017.



SOURCES: 2010-2020:NHTSA Fatality Analysis and Reporting System (FARS). 2021 Maryland Highway Safety Office. \*NOTE: Bicyclist fatalities excluded from chart. Averaged 1 bicyclist fatality per year.

### **Serious and Fatal Crashes**

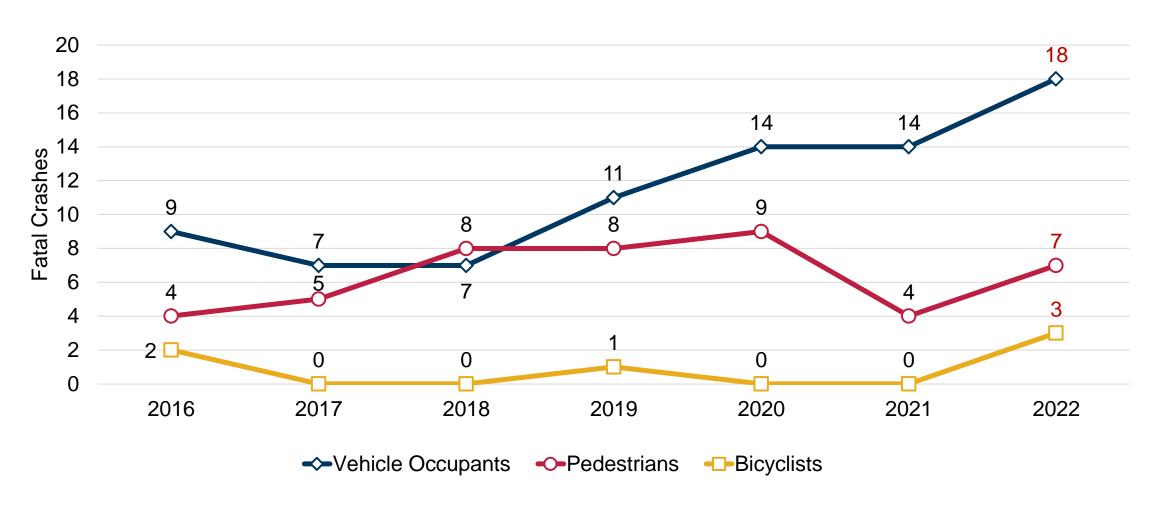
#### Comparing <u>January 1 – August 31</u> for each year



Source: MCPD. Includes MCPD, RPD, TPPD, GPD, and M-NCPPC MC reports. Data retrieved 09/08/22. Includes crashes where at least one party suffered serious or fatal injuries. 2022 data are preliminary.

### **Fatal Crashes**

#### Comparing <u>January 1 – August 31</u> for each year



Source: MCPD CRU. Data retrieved 09/08/22. Includes crashes where at least one party suffered fatal injuries. 2022 data are preliminary.

## What's happening and what can be done?

#### **During and Post-COVID**

- Increase in "triple-threat" fatal crashes involving speeding, impairment, and unrestrained occupants ejected from the vehicle.
- Increase in proportion killed or seriously injured testing positive for opioids and marijuana for all road users.
- Increase in impromptu and planned speed contests.
- Lower traffic volumes and spread out through the day more than pre-COVID.
- For 2022, more daylight fatalities (72%) compared to prior 6 years (40%) in the county.

#### **Addressing Increasing Fatal Crashes**

- Continued focus on the High Injury Network using evidence-based safety treatments.
- Addressing substance abuse and preparing for possible legalization of recreational marijuana use.
- Focused law enforcement on known dangerous driving behaviors integrated with automated enforcement.
- National effort to address increasing distractions from vehicle "infotainment systems" and vehicle design.



2030 Action Plan & FY22 Work Plan

### **ACTION PLAN & WORK PLAN**

How the long-term and short-term plans relate



<sup>\*</sup>There are 66 total tasks under Safe Streets, but 3 are also listed under Safe Transportation, so removed from chart above to avoid double counting.



**Projects Underway In FY22** 

## **Securing Outside Funding**

Working collaboratively to build competitive proposals for grants and technical assistance.

Over \$1 million secured for FY22.



#### **HSIP, SRTS, & TAP Grants**

\$720,000 for four pedestrian hybrid beacons. Our proposal represented 8/10 dollars distributed for FY22.

TAP grant for MD 187 & Cordell and a SRTS grant for MD 188 & Cordell for ped safety design / construction, respectively.

\$52,000 Kim Lamphier Bikeways grant for advancing Bethesda Trolley Trail connection to Twinbrook Metro.

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#### **Other MDOT Grants**

\$218,000 from MHSO for Police overtime focused on aggressive, impaired, and distracted driving law enforcement in FFY21.

\$360,000 from MDOT Secretary for MD 355 & MD 187 intersection safety.

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#### **MWCOG Tech. Asst.**

Advancing study and design projects through the Transportation-Land Use and Roadway Safety Programs.

MCDOT secured an inaugural Regional Roadway Safety technical assistance to advance safety audit of MD 650. MCDOT also received \$85k for improving ped/bike connections to Germantown MARC station.



#### **New Federal Support**

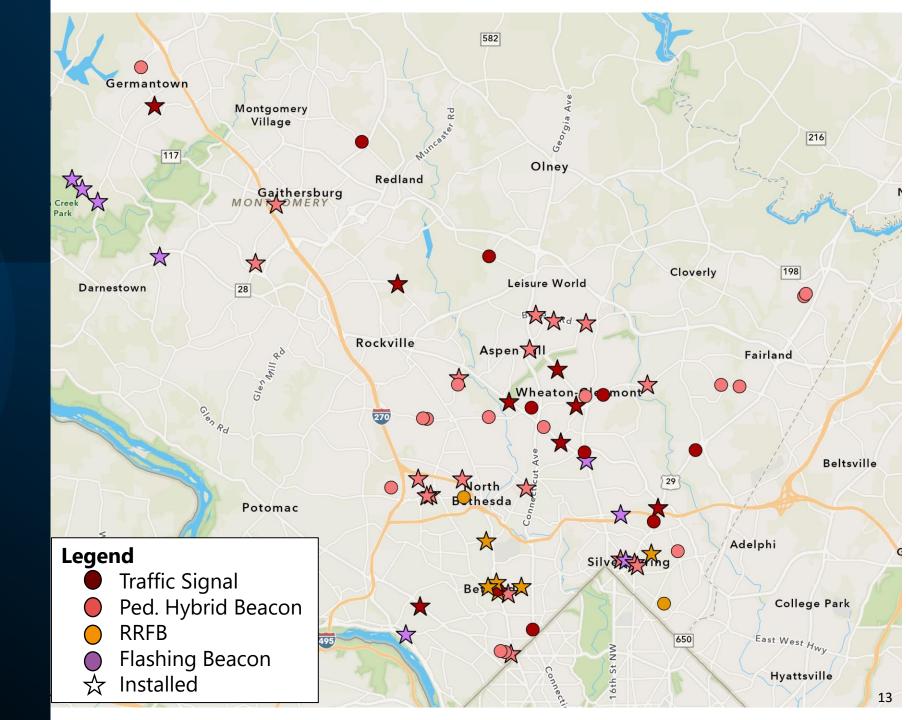
Applied for \$8 million for Germantown Safe Streets project as part of the new \$6 billion Safe Streets and Roads for All program for local governments and MPOs.

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39 new installations since onset of Vision Zero Initiative

26 additional devices scheduled

## NEW SIGNAL AND BEACON INSTALLATIONS





# Outreach for Ped. Hybrid Beacons

#### **PHBs for People Walking**

- PHB's function similarly for pedestrians and motor vehicles as a traffic signal functions with yellow and red lights.
- Pedestrians must activate the beacon by pressing the button, then waiting for the walk signal (less than 30 seconds).
- All PHBs have accessible pedestrian signals (APS) and countdown pedestrian signals (CPS).

#### **PHBs for People Driving**

- Same rules of the road yellow means "Exercise Caution" and "Prepare to Stop" and red means "Stop".
- Nuance is the beacon goes dark, which allows drivers to proceed at speed.
- Continued media and on-street outreach is progressing to build awareness of these new devices.

## High Injury Network Projects

Advancing study, design, and construction on County and State roadways based on crash risk

- Study
  - New Hampshire Ave (MD 650) in conjunction with Prince George's County between Piney Branch Rd and the Beltway.
  - Aspen Hill Bel Pre Rd, Georgia Ave, & Connecticut Ave.
  - Snouffer School Rd
- Design
  - Crabbs Branch Way (underway)
  - Randolph Rd (underway)
  - Sam Eig Hwy (underway)
- Construction
  - Shady Grove Rd (signal modifications)





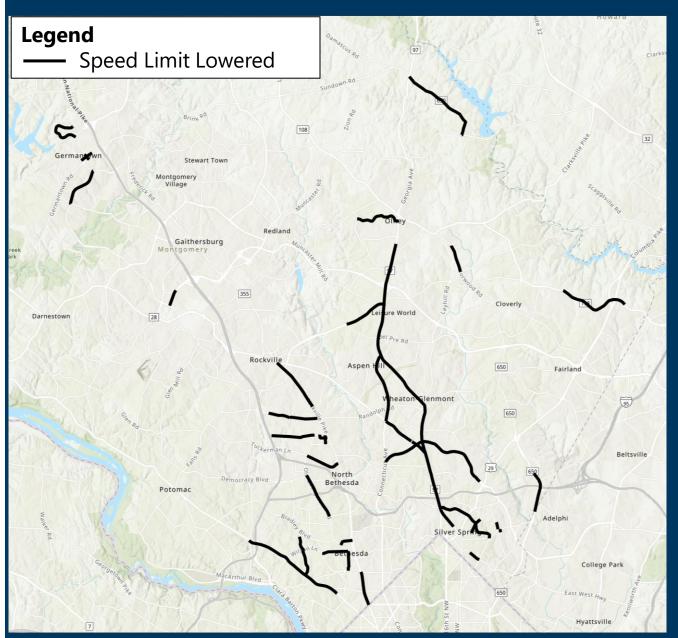
Signal changes at Shady Grove Rd & Briardale Rd with exclusive red turn phasing and backplates to address failure to yield crashes.

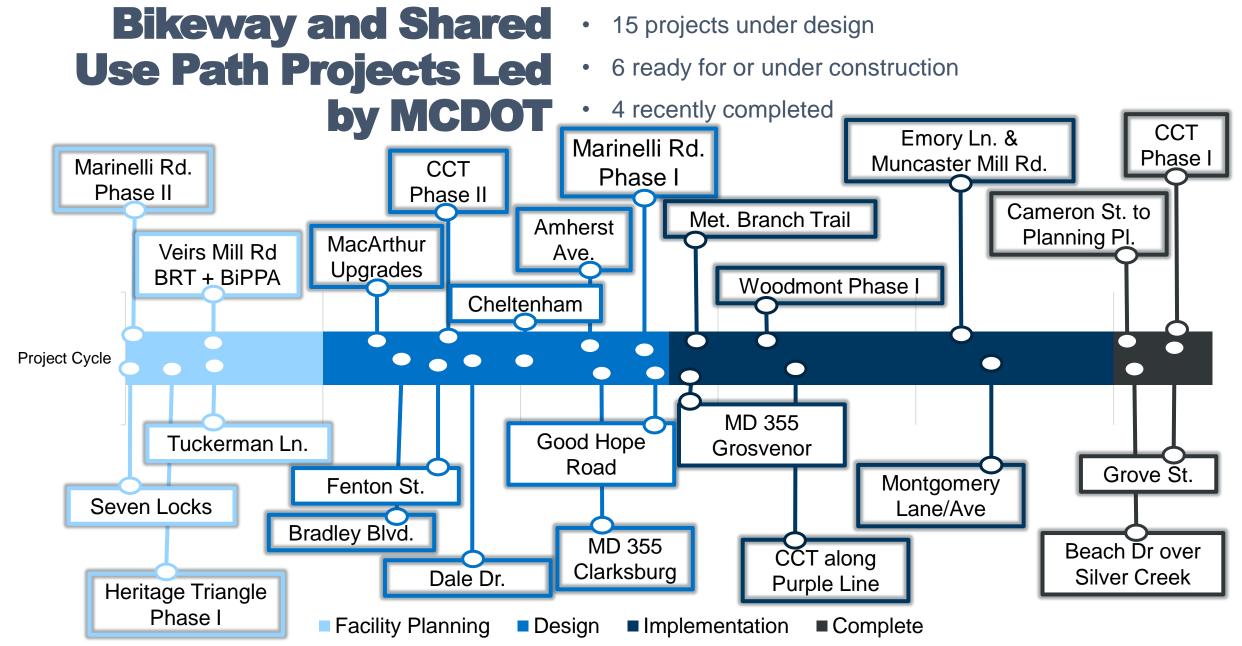
## **Speed Limit Reductions**

#### **Matching Posted Speeds to Surrounding Context**

MCDOT and MDOT SHA have lowered posted speed limits across the county to better match the posted speed limit with the surrounding community. Most speed limits lowered by MDOT SHA are along the high injury network.

The speed limit reductions are supported by design changes and law enforcement. Portions of Georgia Ave were narrowed during a repaving project to slow driver speed. Automated speed enforcement has been added to sections of Georgia Ave and Norbeck Rd after travel speeds remained elevated a year after the speed limit change.





*Note:* Placement of project does not indicate percent completion, but the current phase of the project.

### Sidewalk Installation

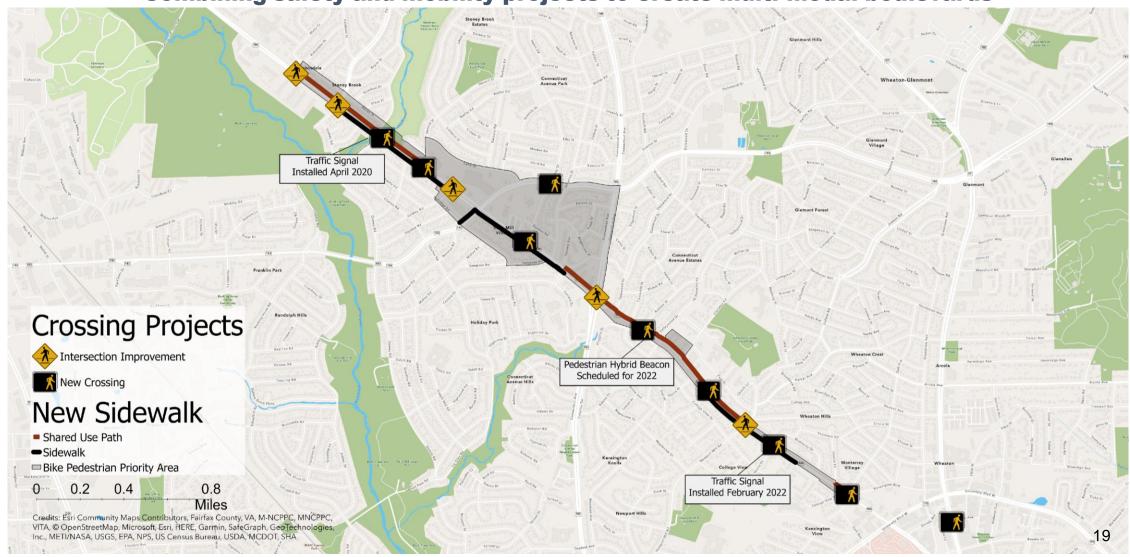
#### Requests far outpacing ability to supply

- 30,352 linear feet (5.75 miles) of sidewalk were constructed during FY22. Exceeded the 24,000 feet goal for the year.
- Program fills in gaps in neighborhoods and major roads. This year, major sidewalk construction along Oak Drive in Damascus and Rockville Pike in White Flint.
- Under the minor sidewalks program, 200-300 requests are received each year. Current funding allows about 10-15 projects to be completed per year.
- MCDOT was funded this year to complete a one-time study of sidewalk gaps and needs around County public schools.



## **Advancing BRT & Safety Projects**

Combining safety and mobility projects to create multi-modal boulevards



### Safety for People with Disabilities

Planning and Designing Streets to be Safer and More Accessible for People with Vision Disabilities

A Toolkit for Montgomery County and the Metropolitan Washington Region

First Edition
October 2021

Contract No. 21-024

Submitted by Toole Design







Outreach and Law Enforcement



#### **Community Events**

Residents were engaged throughout the year at 90 different events. A broad cross-section of Montgomery County's population had the opportunity to learn more, and ask questions about, pedestrian safety.



This outreach program educated residents at events, festivals, farmer's markets, and block parties across the county

#### YOUTH OUTREACH

MCDOT engaged school-age residents to help them understand the importance of trafc safety. MCDOT connected with students through in-person and virtual events and programs, online contests and content.

reaching nearly

**7,000** people

Connected with nearly **3.000** students on Walk to School Day

2.000 commuters at Metro transit stations and shopping areas

Held 4 Walking Wednesday events





100+ applications

**30** Vision Zero Youth Ambassadors chosen to engage in real world trafc safety projects

> Vision Zero Youth **Ambassadors**



170 contest entries ...more than four times the number for past contests

7,000+ webpage views

Heads Up Phones Down **Video Contest** 

406 views

of Bus Safety Tips on YouTube channel youtube.com/watch?v= PaN0cXZWYA



10 Bike Rodeos reaching 300+ kids!



**Bike Rodeo** Tour



Received 700+ contest entries Visited 17 schools

Nearly **6,000** webpage views

2nd Annual Art Contest

#### ADULT OUTREACH

MCDOT engaged with adults in the community through in person events, providing education about specific areas throughout the county, and mitigation strategies to help curb unsafe behaviors and ultimately decrease trafc incidents.

Engaged with

**1.000** shoppers

**Street Smart Testimonial Wall** 

Mailer sent to

**4,000** homes

**HIN Outreach** 





200 registered to attend The Ped Safety pit stop Bike to Work Day

250 resident interactions 2 events

**HAWK Outreach** 

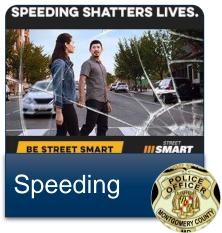
## **Central Traffic Unit (CTU)**

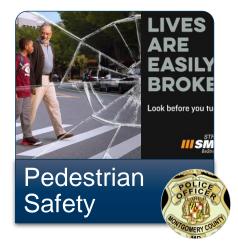
CTU started 7/4/21 to focus resources on areas of need while having some capacity for responding to community complaints.











## Purposeful, Evidence-Based Policing Practices



## **Driver Yielding to Non-Motorists**

Targeted Driver Enforcement at Crosswalks



Increased Driver Yield Rates



#### **Impaired Driving**

Publicized Sobriety Checkpoints

17% Decrease
Alcohol-Related
Crashes



#### **Speeding**

Automated Speed Enforcement

19% Reduction in Severe Collisions

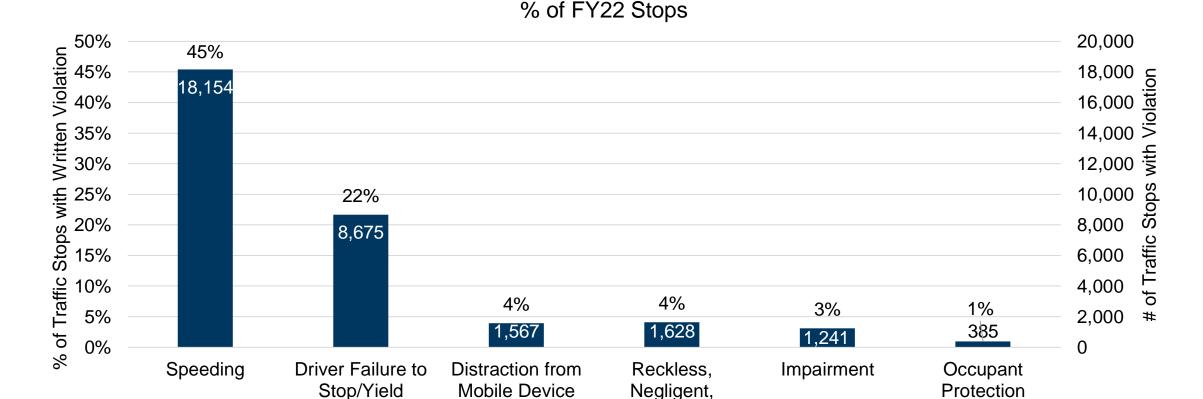


Short Term, High-Visibility Seat Belt Law Enforcement

16% Increase in Seatbelt Use

### **Focused Enforcement Efforts**

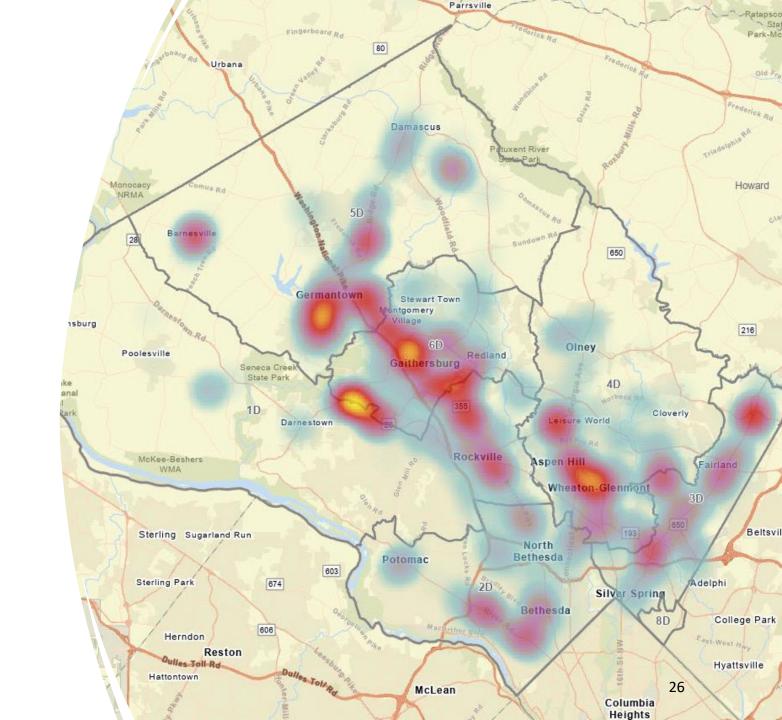
45% of 40,214 stops by MCPD officers in FY22 involved a warning or citation for speeding. 57% of all violations were issued as warnings.



Aggressive Driving

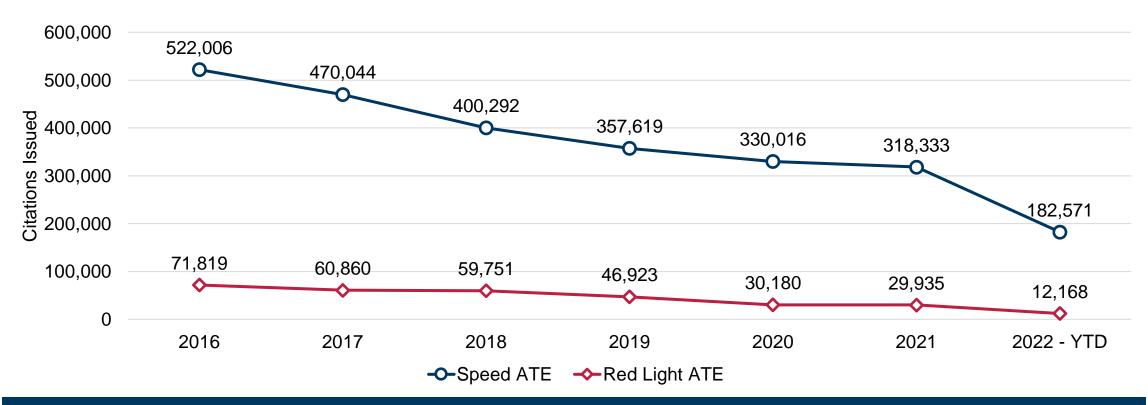
## FY22 CTU Stops Hotspots

CTU focused on speeding along arterials based on crash risk.



## Automated Speed and Red Light Enforcement

#### **Expansion of Sites and Cameras with New Contract**

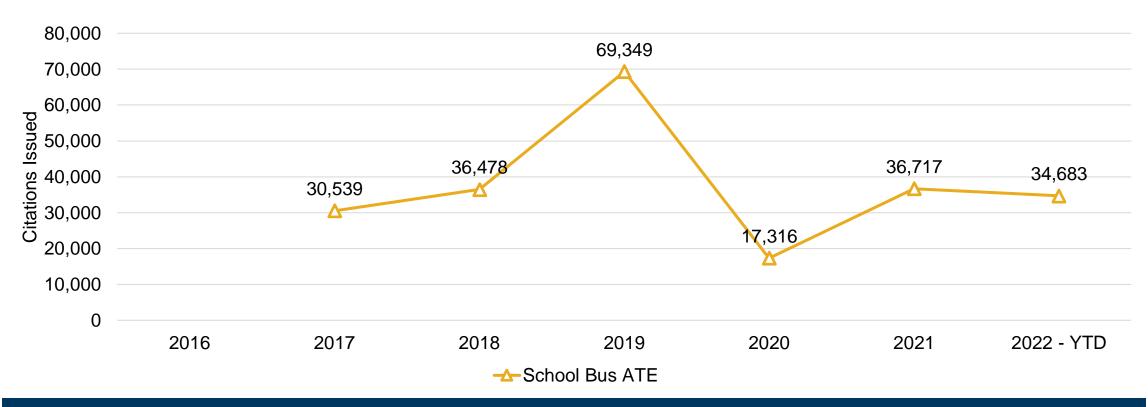


MCPD executed a new automated enforcement contract on March 31, 2022.

The new contract will not disrupt current operations and will allow the number of cameras to expand by 10 speed and 5 red light cameras a year for the life of the 5-year contract.

## **Automated Stopped Bus Enforcement**

All MCPS buses equipped with safety cameras starting in 2019



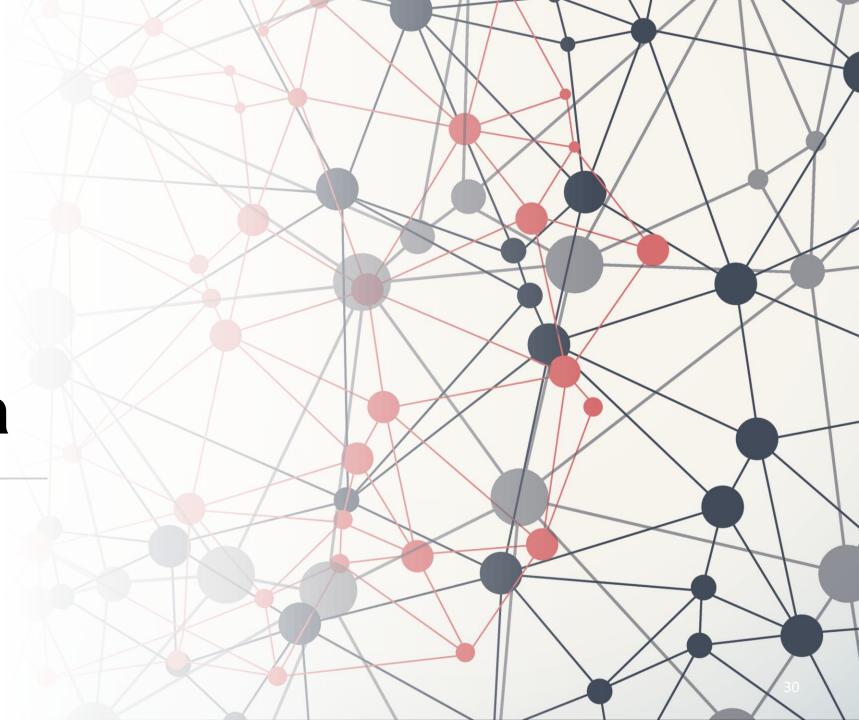
Automated enforcement for illegally passing a stopped school bus was implemented for the 2016-2017 school year. Between 2016 and 2019, MCPS equipped all school buses with cameras, leading to year-over-year increases. School closures in 2020 due to the COVID-19 pandemic resulted in fewer citations.



### **THANK YOU!**

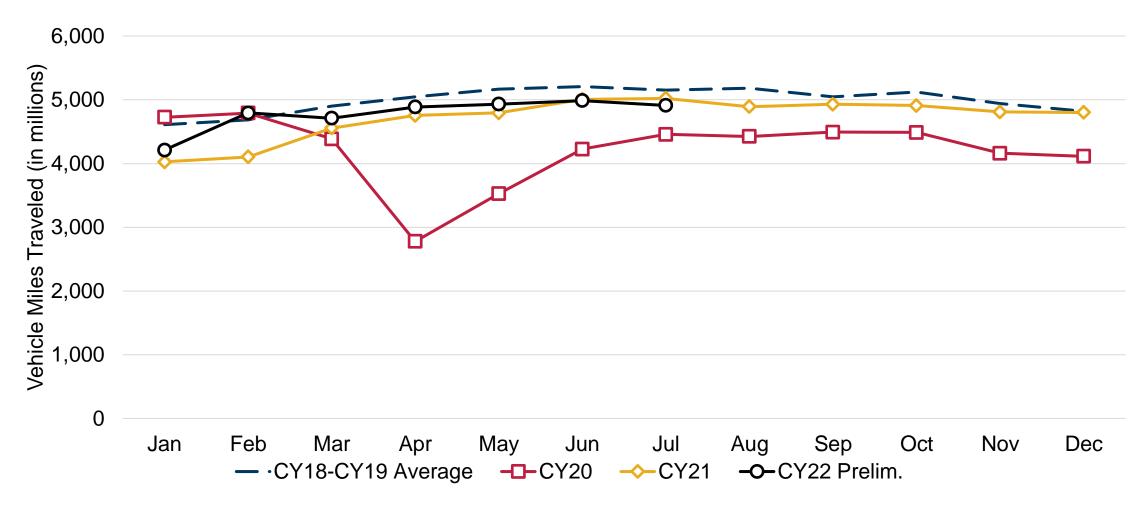
## Appendix: Additional Crash Data

Preliminary 2022 Crash and Traffic Volume Data



## **Maryland Traffic Volume**

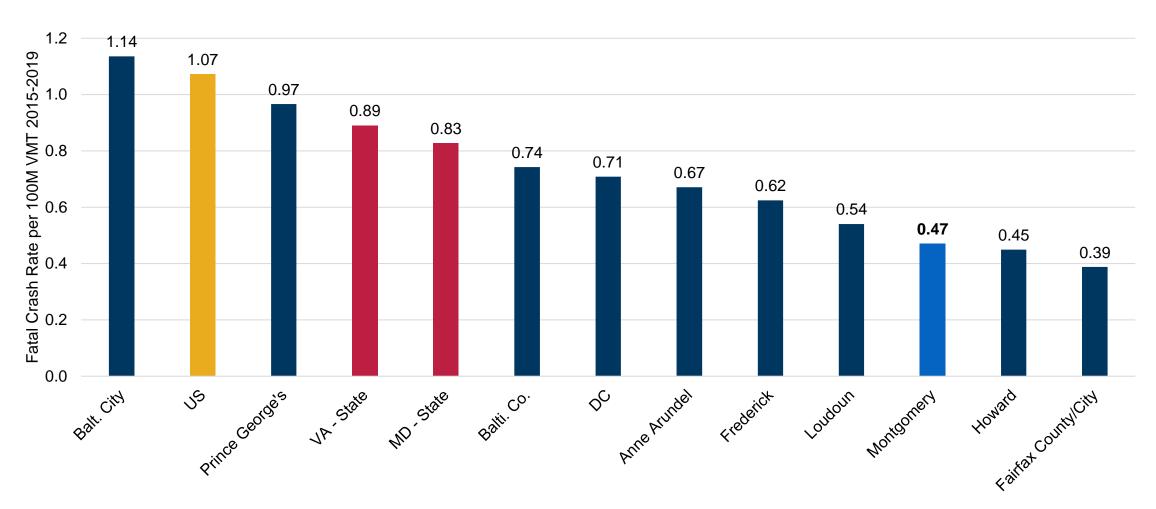
2022 through July is 4% below 2019 levels.



NOTE: This chart displays estimated monthly Vehicle Miles of Travel compared with the previous year based on data collected at approximately 51 continuous count stations throughout the State of Maryland.

### **Fatal Crash Benchmark**

Compared to 9 peer cities and counties, Montgomery County had the 3<sup>rd</sup> lowest fatal crash rate.



## Preliminary 2022 Jan – Aug Crash Totals

ALL CRASHES	2022 Jan-Aug	2021 Jan-Aug	% Change from 2021 Jan-Aug	2016 – 2019 Jan-Aug Avg.	% Change from 2016-2019 Avg.
Cyclists	77	84	-8%	89	-13%
Drivers / Passengers	5,874	5,383	+9%	7,241	-19%
Pedestrians	285	178	+60%	292	-2%
TOTAL	6,236	5,645	+10%	7,622	-18%

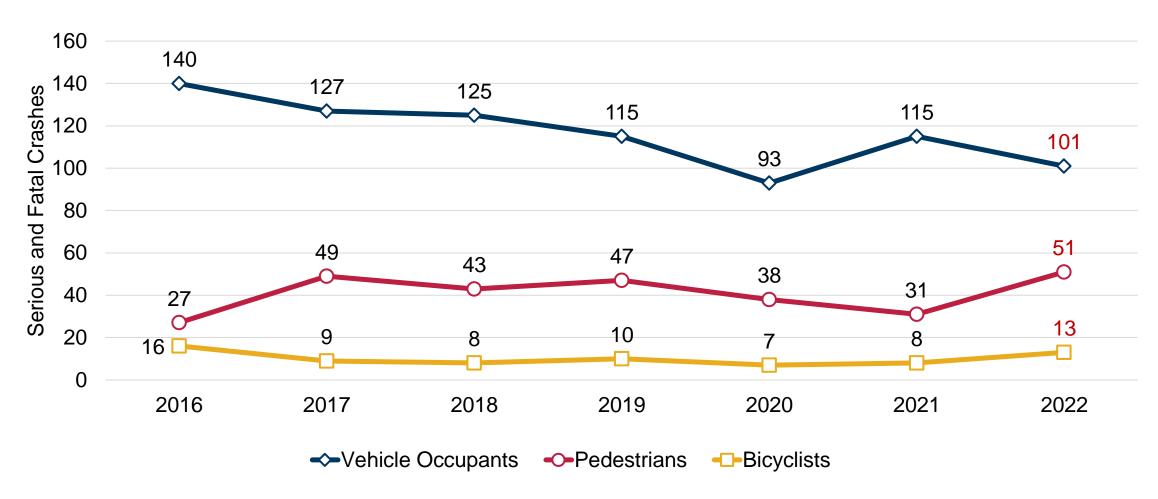
FATAL CRASHES	2022 Jan-Aug	2021 Jan-Aug	% Change from 2021 Jan-Aug	2016 – 2019 Jan-Aug Avg.	% Change from 2016-2019 Avg.
Cyclists	3	0		1	+200%
Drivers / Passengers	18	14	+29%	9	+100%
Pedestrians	7	4	+75%	6	+17%
TOTAL	28	18	+56%	16	+75%

#### NOTES:

- Red Text = The number is preliminary and subject to change. Data as of 9/8/22.
- Includes reports from MCPD, RCPD, GCPD, M-NCPPC Police, and TPPD.

### **Serious and Fatal Crashes**

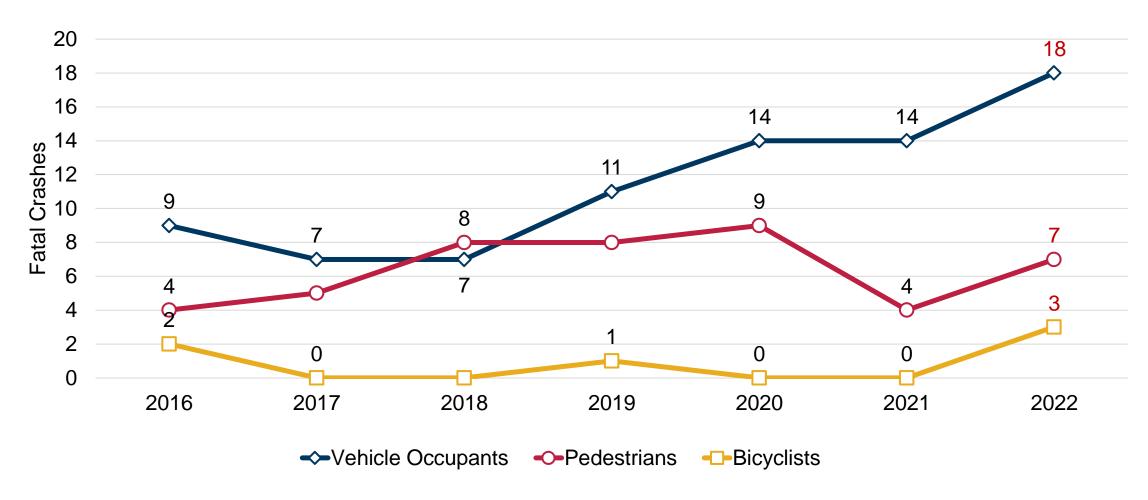
Comparing January 1 – August 31 for each year



Source: MCPD. Includes MCPD, RPD, TPPD, GPD, and M-NCPPC MC reports. Data retrieved 09/08/22. Includes crashes where at least one party suffered serious or fatal injuries. 2022 data are preliminary.

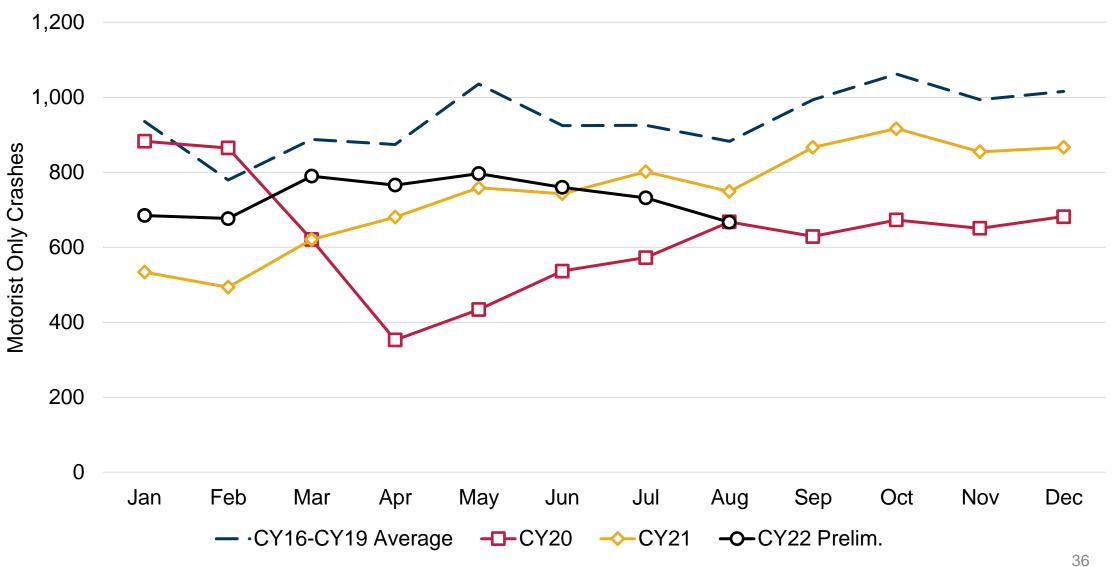
### **Fatal Crashes**

#### **Comparing January 1 – August 31** for each year

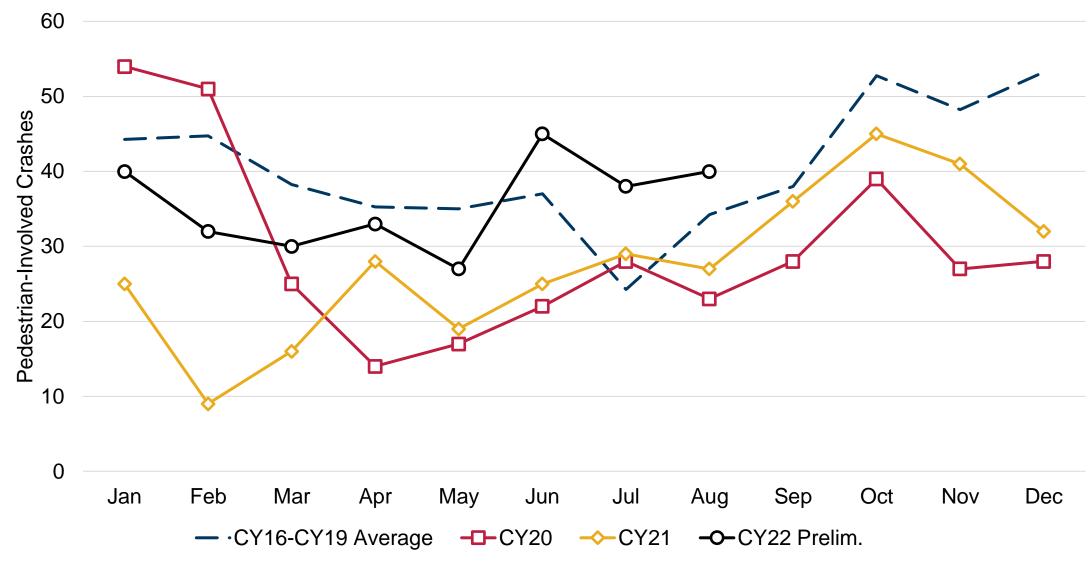


Source: MCPD CRU. Data retrieved 09/08/22. Includes crashes where at least one party suffered fatal injuries. 2022 data are preliminary.

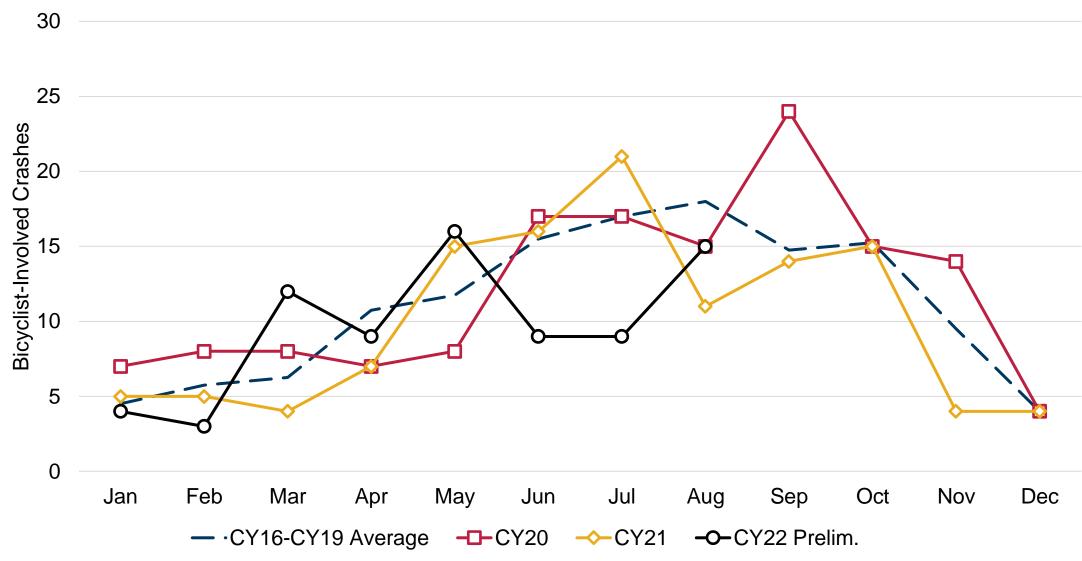
## **Motorist Only Collisions by Month**



## **Pedestrian Collisions by Month**

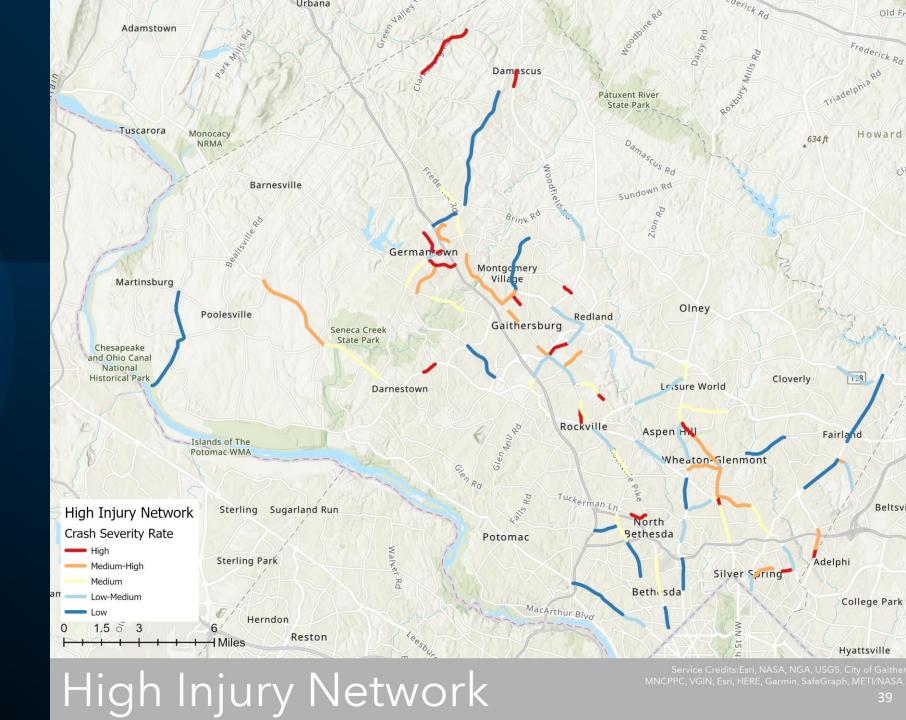


## **Bicyclist Collisions by Month**



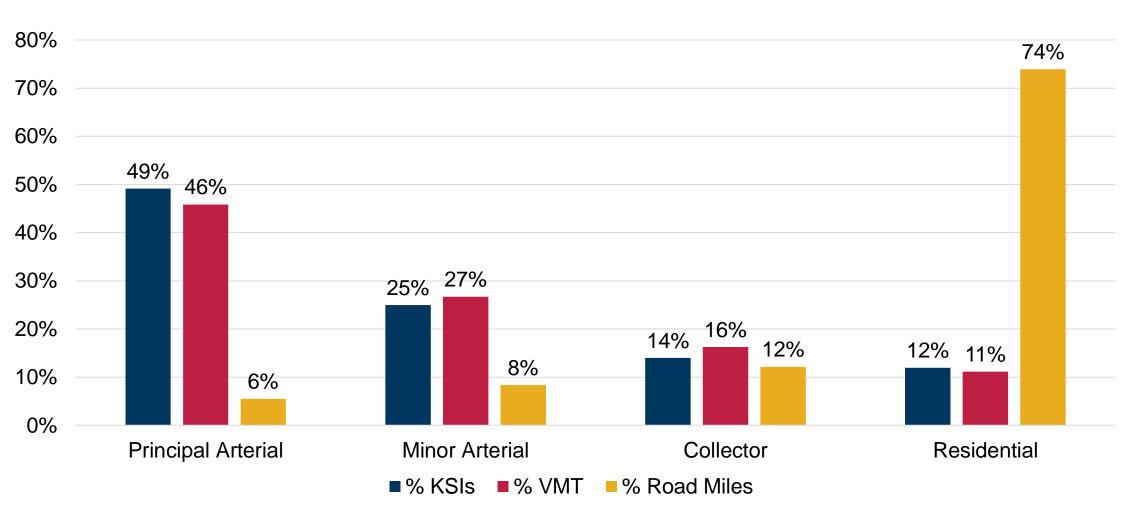
HIN roadways account for 40% of serious and fatal injury crashes, 3% of road network.

## High Injury Network



## Serious and Fatal Crashes by Road Classification

Arterials were 14% of road miles, 73% of non-interstate VMT, and 74% of severe crashes.



#### Creek Hefferson Parrsville Fingerboard Rd Urbana swick Adamstown uxent River Tuscarora Waterford Leesburg Historical Legend Severe Crash Density Sterling Sterling Park College Par Herndon Reston Equity Emphasis Area Hyattsville Hattontown McLean 267 Columbia

Bartholow

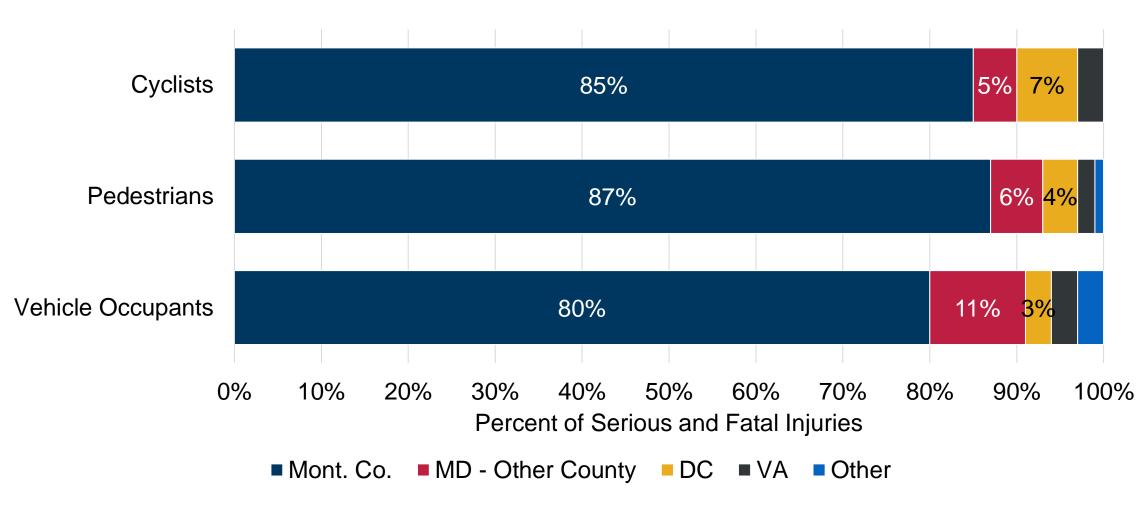
## Serious and **Fatal Crashes in Equity Emphasis** Areas

EEAs represent 7% of land, 14% of roadway mileage, 25% of the population, and 30% of serious and fatal roadway crashes.

Severe Crash Density

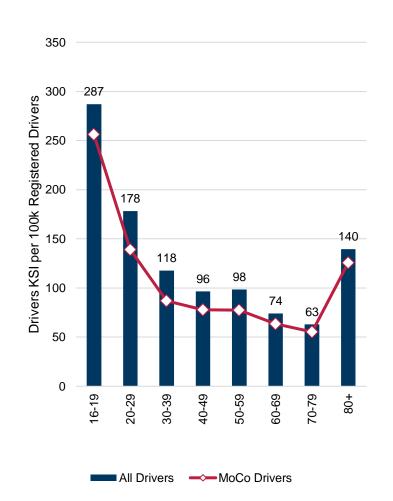
## Residency of Person Seriously Injured or Killed in Motor Vehicle Crash

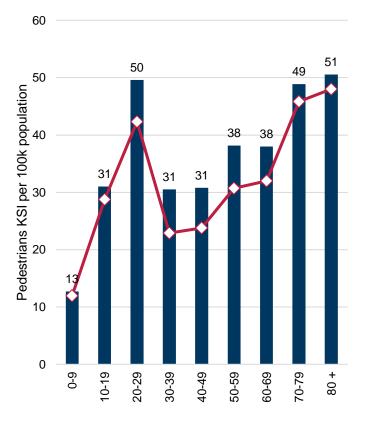
82% were Montgomery County residents.



## Age and Serious/Fatal Injury

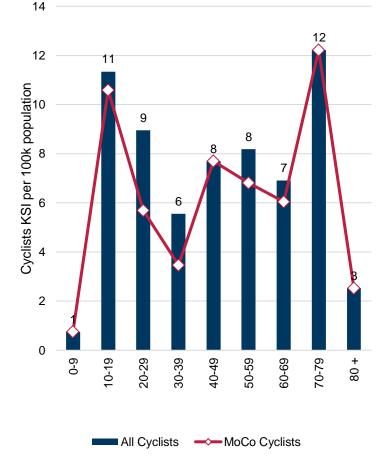
Youngest and oldest residents at most risk for serious and fatal injuries.





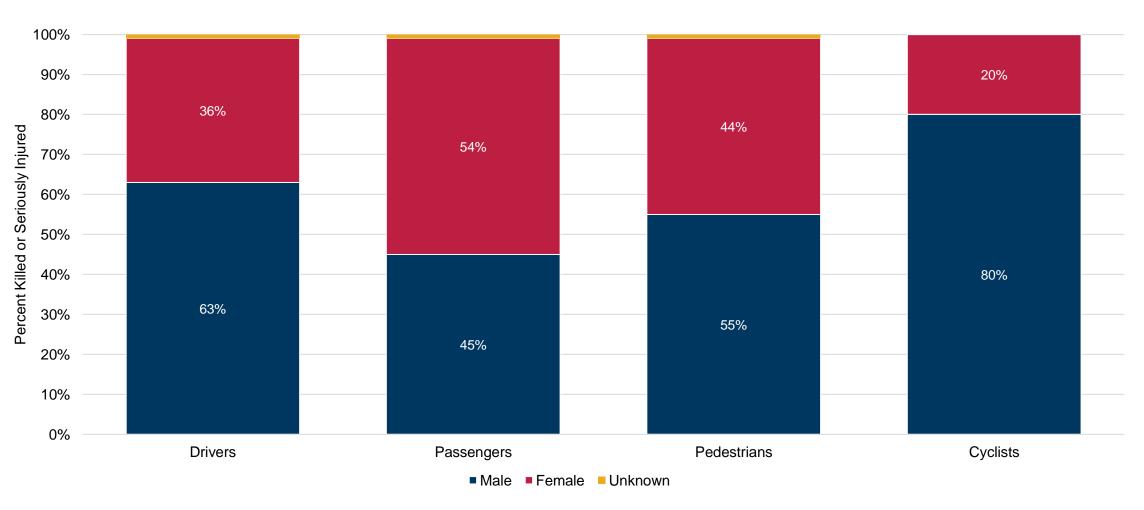
→ MoCo Peds

All Pedestrians



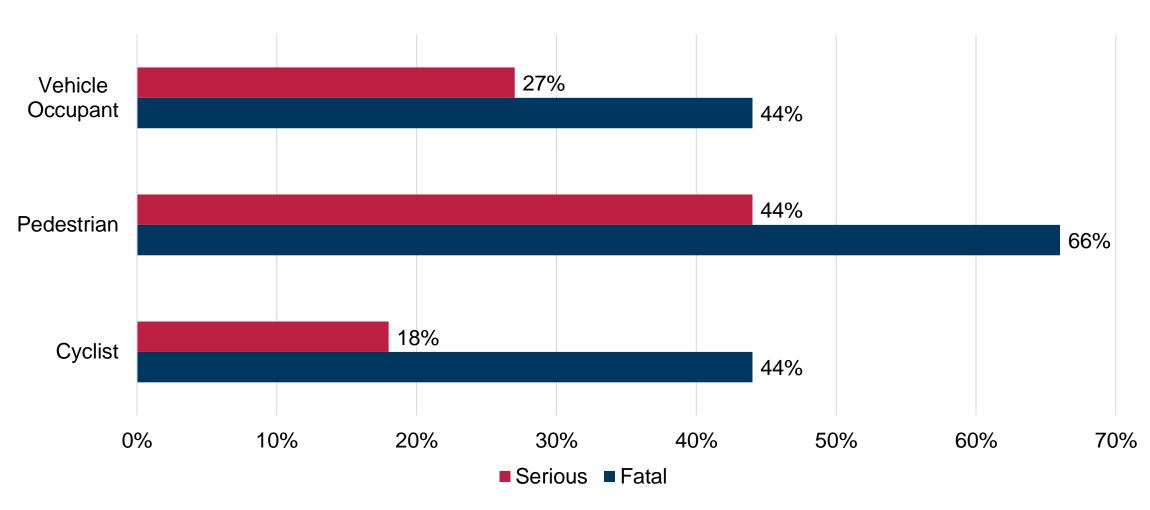
## Sex of Person Seriously Injured or Killed in Motor Vehicle Crash

Males were the majority (62%) of those seriously injured or killed.



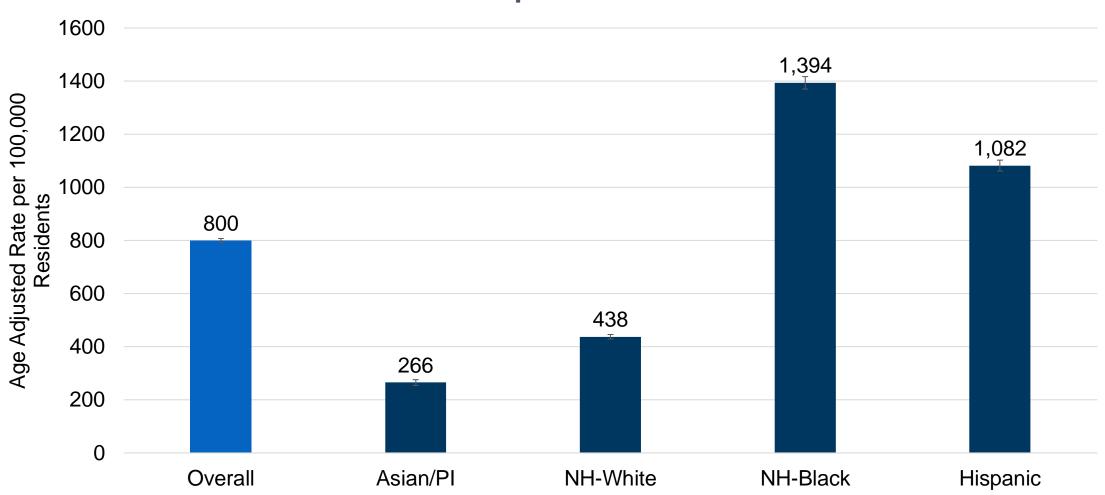
### Serious/Fatal Crashes Between Dusk and Dawn

66% of fatal pedestrian crashes occurred at night.



## ER Visits for Motor Vehicle Crashes by Ethnicity/Race 2015-2019

Black and African American Montgomery County residents had an emergency room admission rate for motor vehicle crashes 136% higher than Asian/Pacific Islander residents and 104% higher than White, Non-Hispanic residents.



## Impairment-Related Fatal Crashes

Significant increase in 2020 with return to "normal" in 2021.

