



VISION ZERO

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

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**OUR PLAN TO ELIMINATE FATALITIES AND
SEVERE INJURIES ON OUR ROADS BY 2030**
TWO-YEAR ACTION PLAN • PRESENTATION TO N. BETHESDA TMD

2002 Blue Ribbon Panel



Montgomery County Blue Ribbon Panel On Pedestrian and Traffic Safety

FINAL REPORT

*Setting Safety in Motion:
Recommendations for Creating Walkable Communities
in Montgomery County, Maryland*

Delegate William A. Bronrott, *Chair*

January 2002



www.co.mo.md.us

2007 Pedestrian Safety Initiative



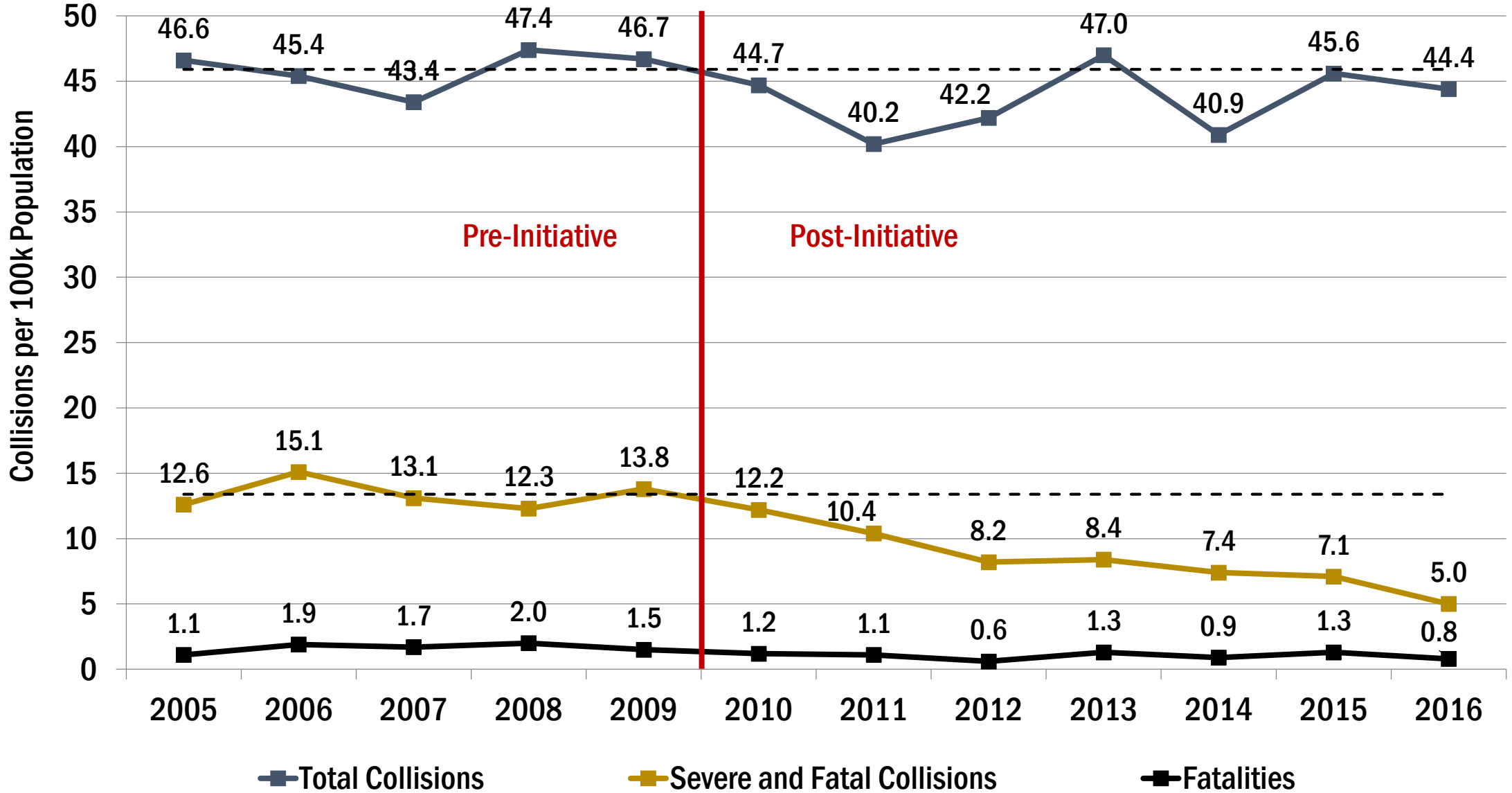
Montgomery County Executive Isiah Leggett

Pedestrian Safety Initiative

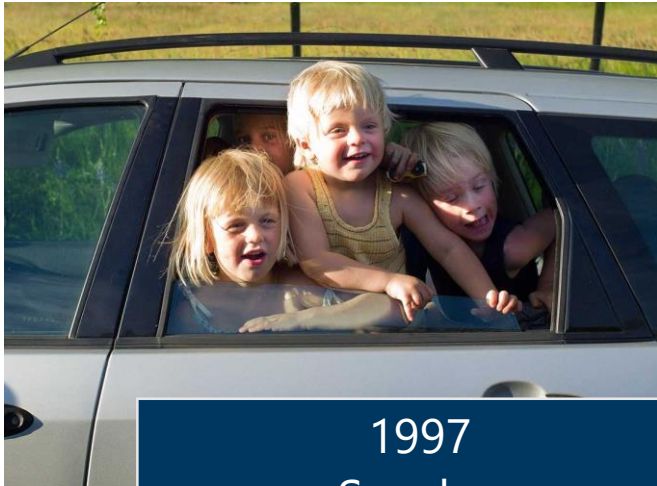
December 2007



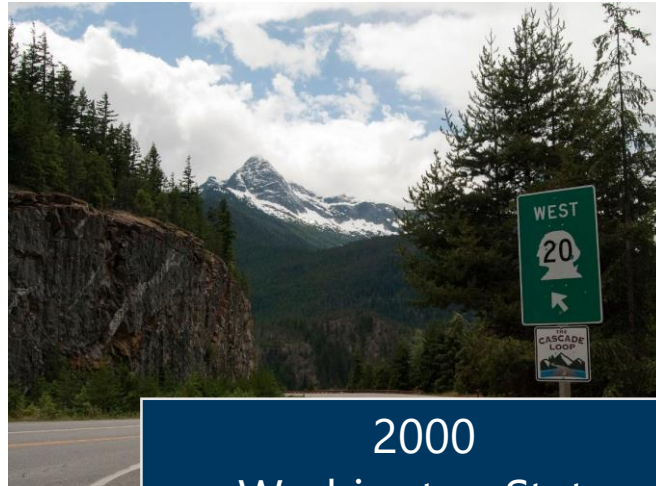
RESULTS FROM PEDESTRIAN SAFETY INITIATIVE



WHAT IS VISION ZERO?



1997
Sweden



2000
Washington State



2014
New York City

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Johna Willner/imagebank.Sweden.se

"20West," Erica Stineman (Target Zero)

"Vision Zero Turning" City of New York Taxi & Limousine Commission

Vision Zero Cities

A Vision Zero City meets the following minimum standards:

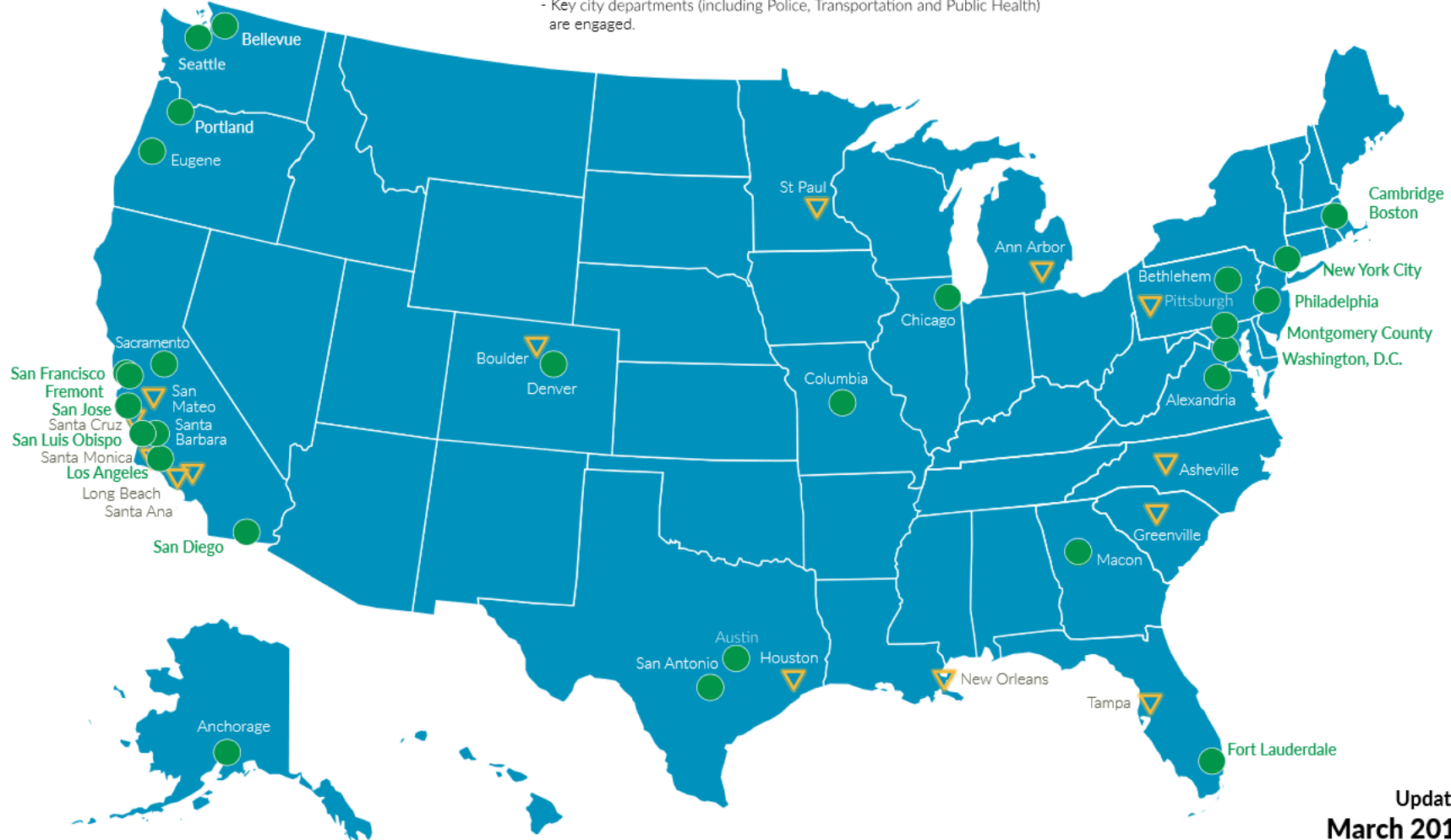
- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health)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



Vision Zero City



Considering Vision Zero



Updated
March 2017

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. Advancements in vehicle design and technology, as well as engineering advancements, personal electronic device innovations, 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 at all levels of government need to align,** making safety the highest priority for roadways.



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

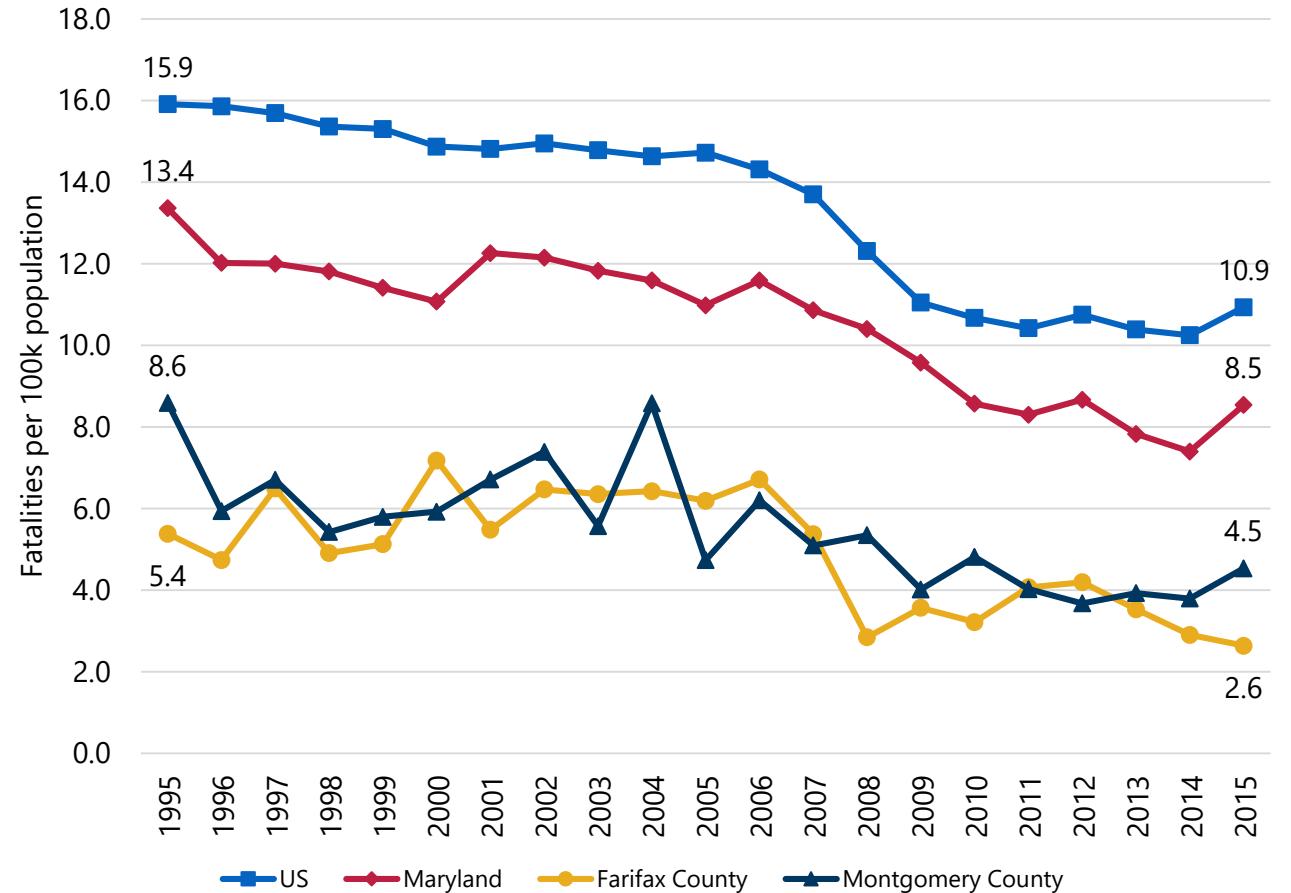
HOW IS VISION ZERO DIFFERENT?

Traditional Road Safety Approach	Versus	Safe System Approach
Try to prevent all crashes	What is the problem?	Prevent crashes from resulting in fatal and serious casualties
Reduce the number of fatalities and serious injuries	What is the appropriate goal?	Zero fatalities and serious 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.

WHY IS VISION ZERO IMPORTANT? WHY ADOPT IT NOW?

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

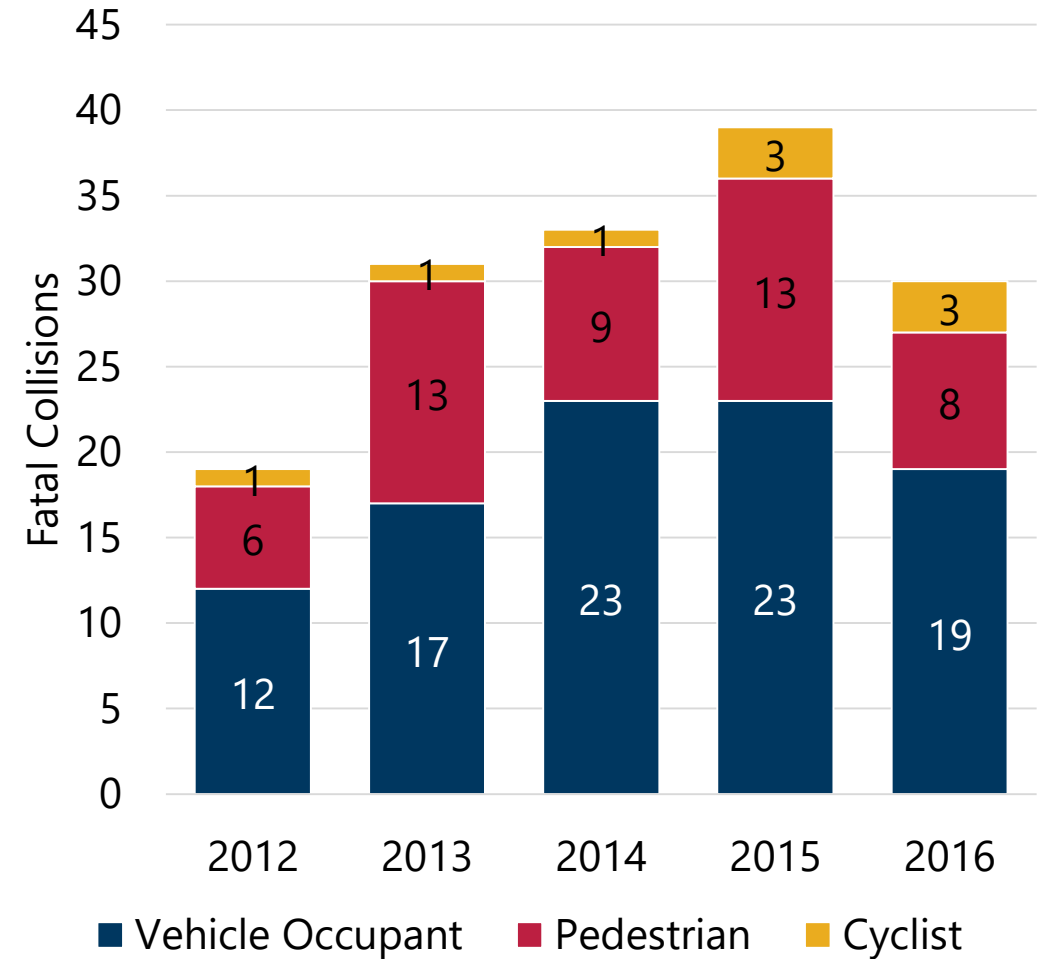
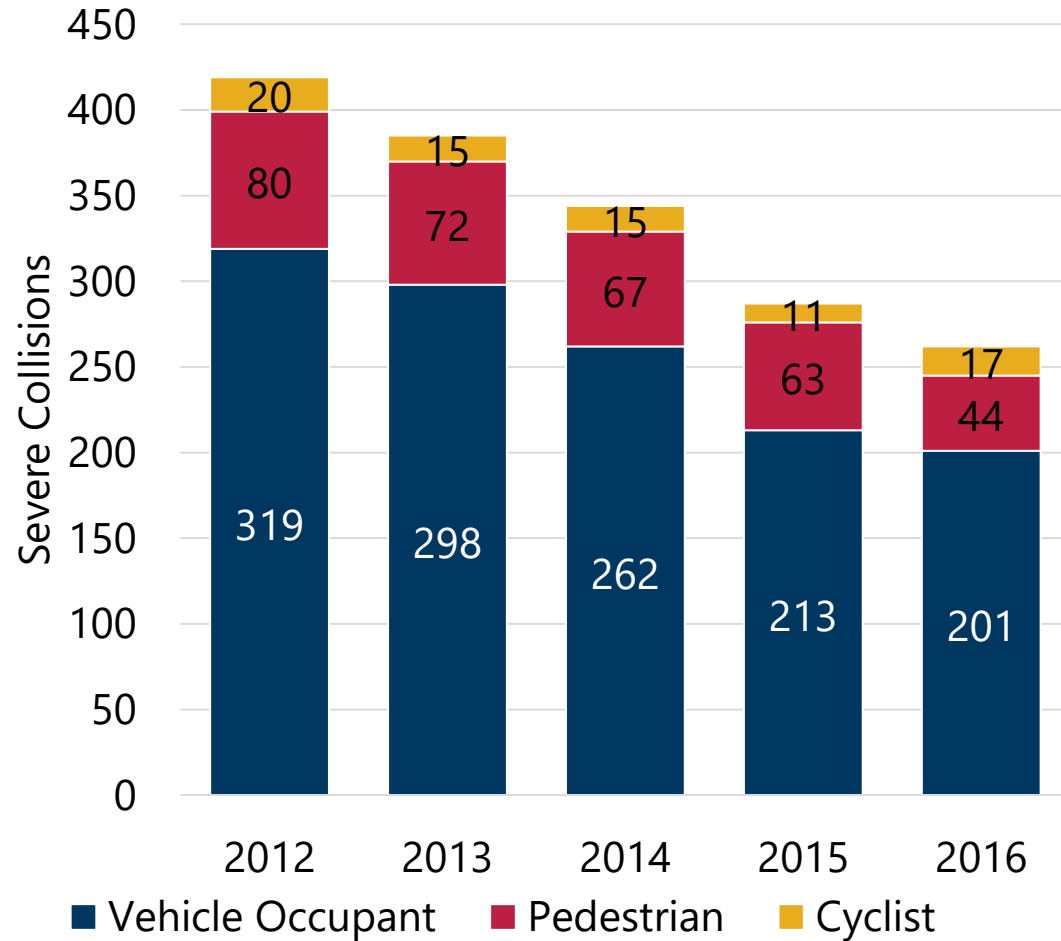
MONTGOMERY COUNTY TRAFFIC FATALITY RATE COMPARED TO US, MARYLAND, AND FAIRFAX CO



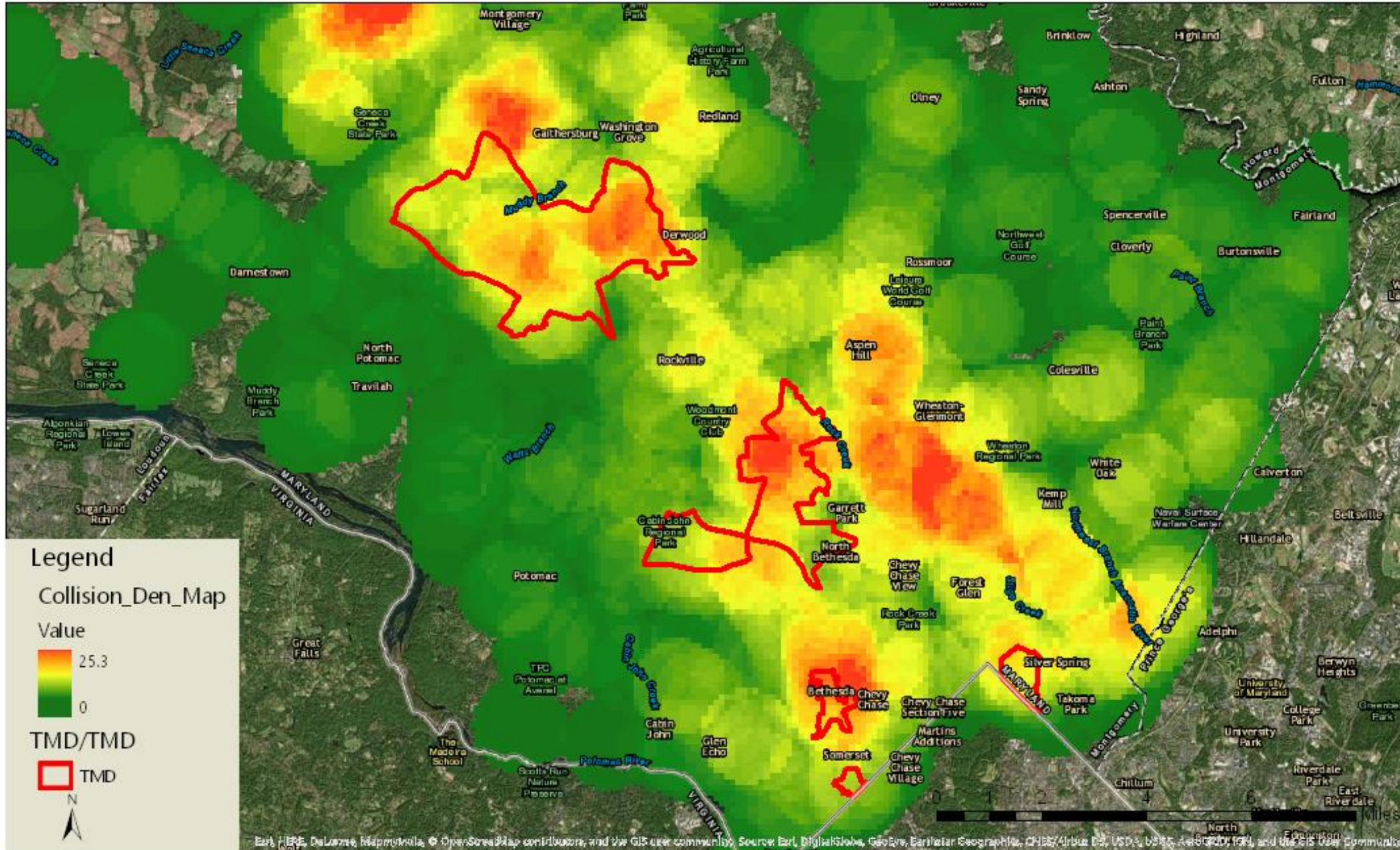
SOURCE: "Global Health Observatory Data Repository", World Health Organization, 2017.

SOURCE: "Fatality Analysis Reporting System," NHTSA, 2017;

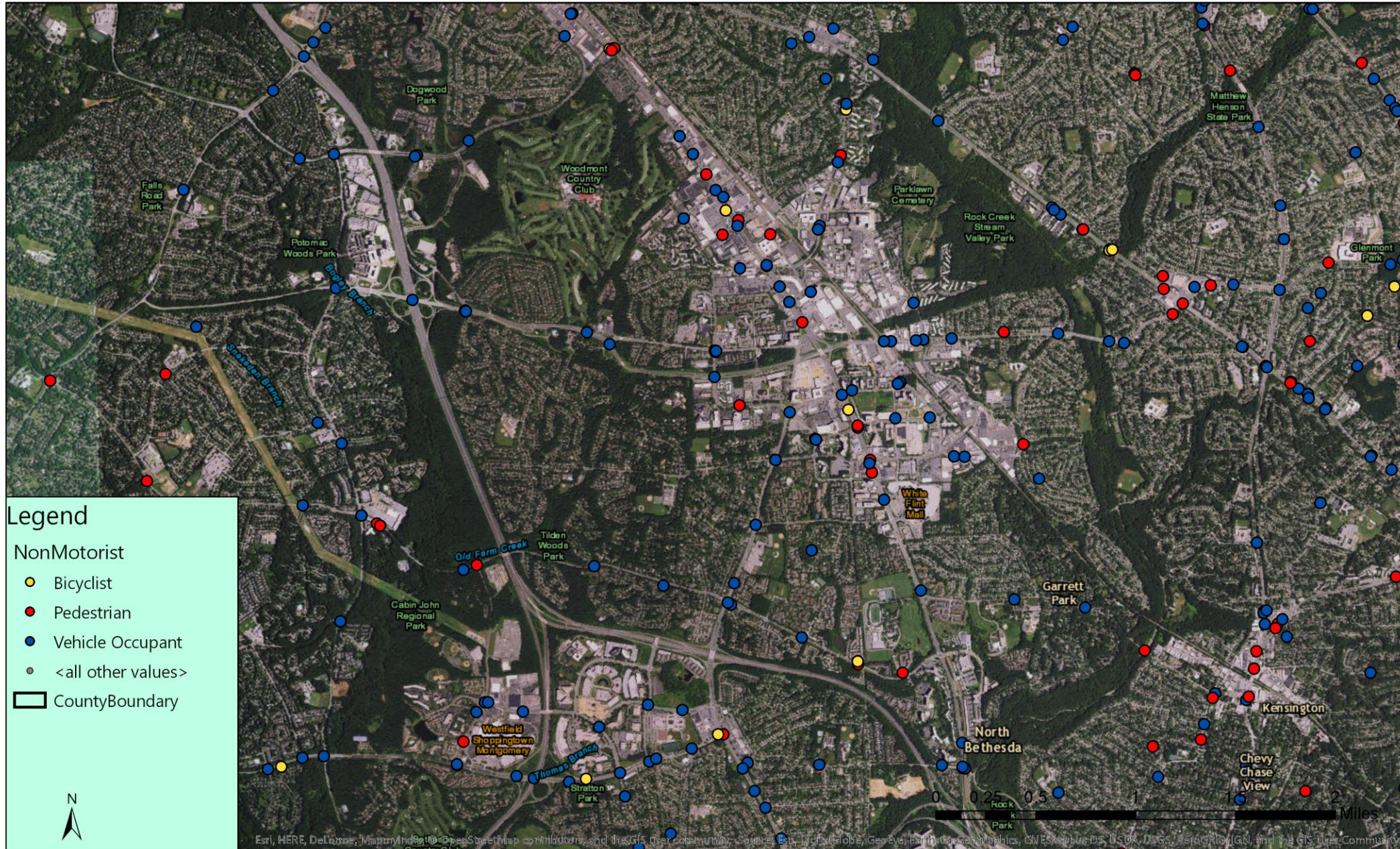
DATA ANALYSIS – 5 YEAR TREND



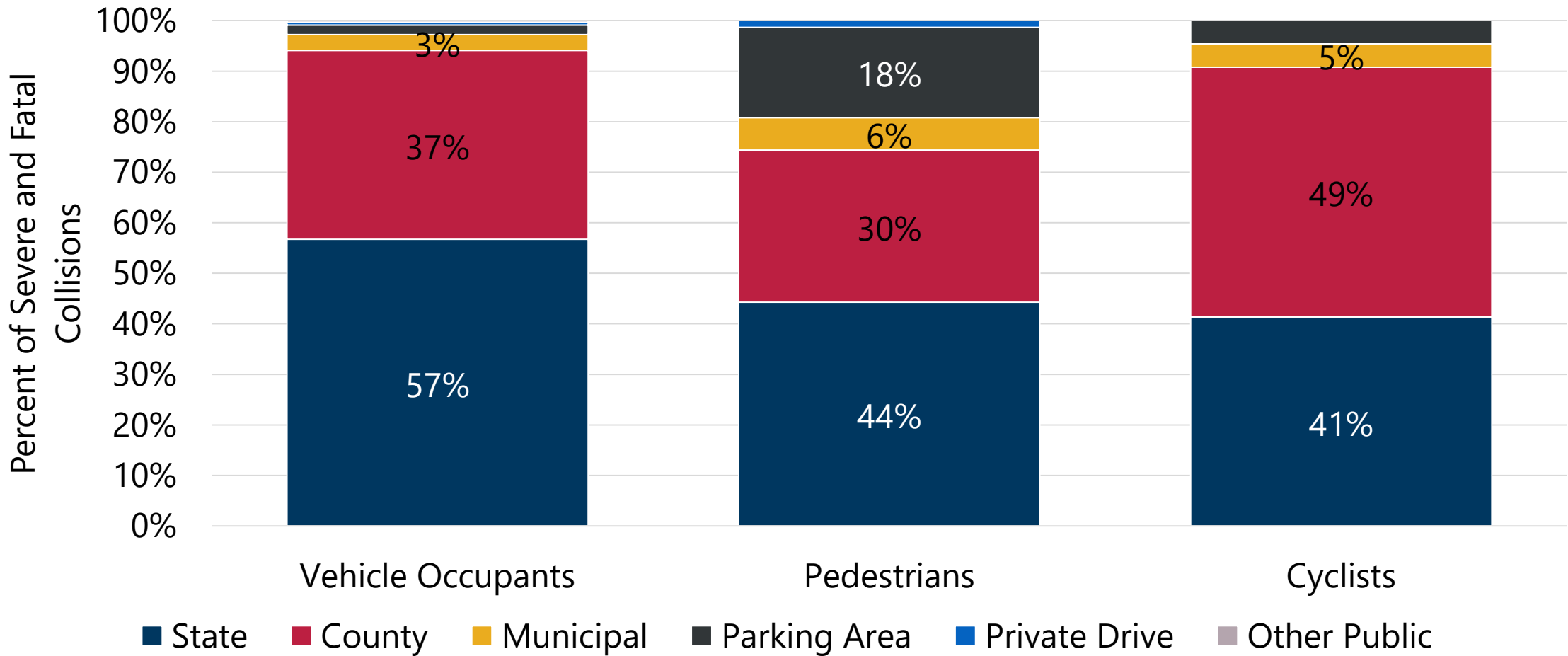
DENSITY MAP OF SEVERE AND FATAL COLLISIONS



DOT MAP OF SEVERE AND FATAL COLLISIONS



DATA ANALYSIS – COLLISIONS BY ROADWAY OWNER



	State	County	Municipal	Total
Lane Miles	1,167	4,877	773	6,817
Percent of Total	17%	72%	11%	100%

MARYLAND STRATEGIC HIGHWAY SAFETY PLAN 2016-2020

Similarities:

- State that traffic collisions are tragic, preventable occurrences
- Use a data-driven process to identify needs and countermeasures on roadways
- Set interim and long-range reduction targets for severe and fatal traffic collisions
- Employ strategies built around engineering, education, enforcement, and emergency medical services
- Adopt similar focus areas

Differences:

Montgomery County	Maryland
Eliminate traffic fatalities by 2030	Reduce traffic fatalities by 50% by 2030 from 2008 baseline
Sets specific actions	Sets broad strategies
Each action has a deadline	No deadlines to implement strategies



Engineering

- Design facilities that prioritize safety above all else
- Key Outcome: Reductions in severe and fatal collisions in High Incidence Areas (HIAs)



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

TWO-YEAR ACTION PLAN – ENGINEERING

ENG-1: Crash
Analysis

ENG-2: Revise
County Road Code

ENG-3: Expand
Road Safety Audits

ENG-4: Review
Transit Stops

ENG-5: Redesign
Trail Crossings

ENG-6:
State/County
Project
Collaboration

ENG-7: Improve
Pedestrian Signal
Timing

ENG-8: Accelerate
Sidewalk Building

ENG-9: Expand
Low-Stress Bicycle
Network

ENF-1: Establish
Collision Review
Team

ENF-2: Increase
Enforcement
Activities

ENF-3: Expand
Safety Camera
Use

ENF-4: Improve
Distracted Driving
Detection

ENF-5:
Collaboration with
Court System

TWO-YEAR ACTION PLAN – EDUCATION

EDU-1: Create
Comprehensive
Outreach Strategy

EDU-2: Expand
Safe Routes to
School Program

EDU-3: On-Bike
Education
Program for Kids

EDU-4: Fund Non-
Profit Outreach

EDU-5: Outreach
to County
Employees

EDU-6: Cross-
Departmental
Team Building

EDU-7: Raise
Awareness of
Sleep and Safety

EDU-8: Future
Technology Task
Force

EDU-9: Training in
the Community

TIM-1: Provide
Prompt Emergency
Medical Service

TIM-2: Devise Safe
Incident
Management Plan

TIM-3: Enhance
Police Driver
Training

TIM-4: Temporary
Traffic Control
Devices

TWO-YEAR ACTION PLAN – LAW, POLICY, AND ADVOCACY

LPA-1: Change Policies, Regulations, and Laws

LPA-2: Ensure Equity throughout Vision Zero Projects

LPA-3: Appoint Vision Zero Coordinator

LPA-4: Create Vision Zero Website

LPA-5: Create Vision Zero Feedback Map

LPA-6: Create Pedestrian Master Plan

LPA-7: Publish Collision Data

LPA-8: Improve Crash Data Collection

LPA-9: Establish Peer Learning Network

LPA-10: Review Existing Traffic Safety Programs

LPA-11: Work with Municipalities

LPA-12: Engage Outside Research Partners

LPA-13: Procure Safer Vehicles

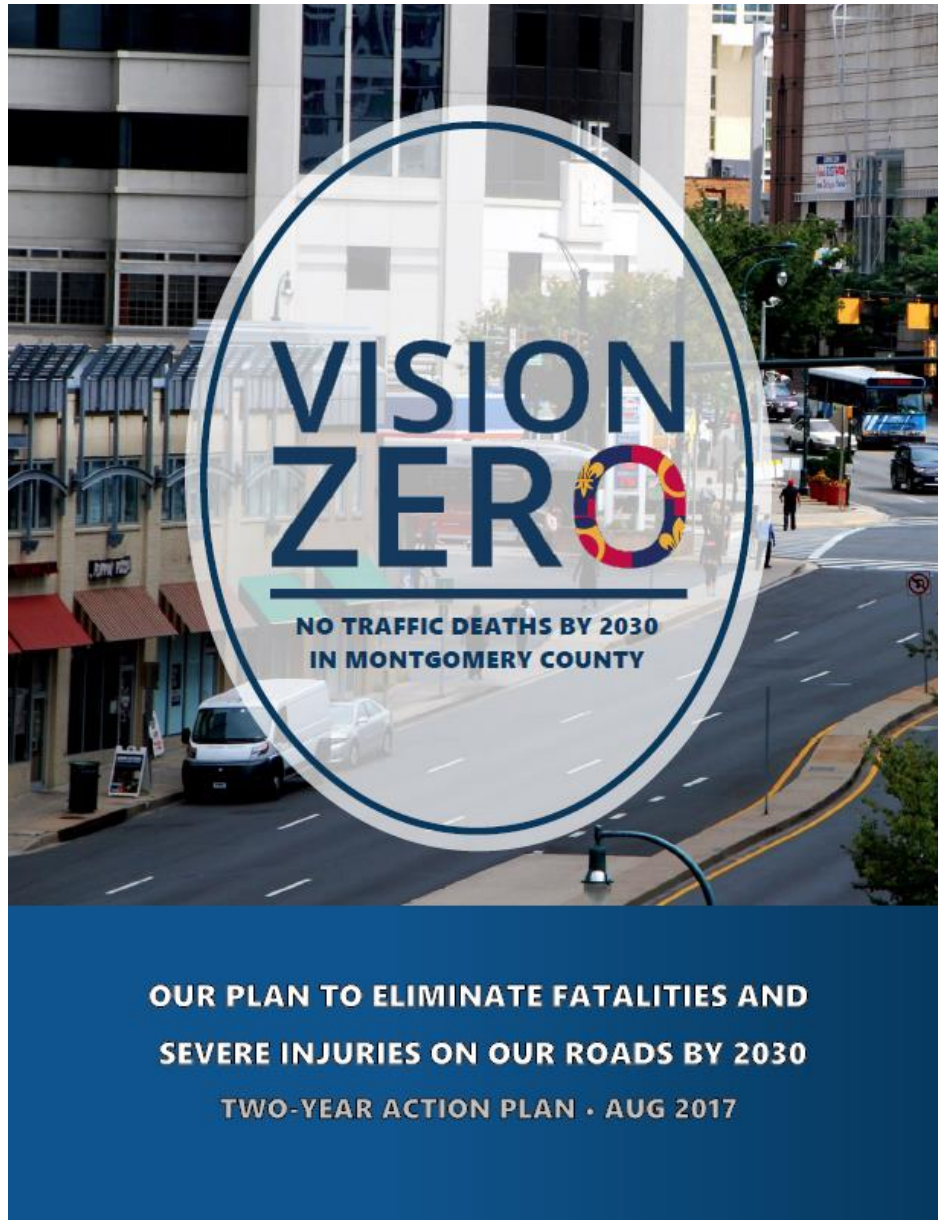
LPA-14: Build the Ten-Year Action Plan

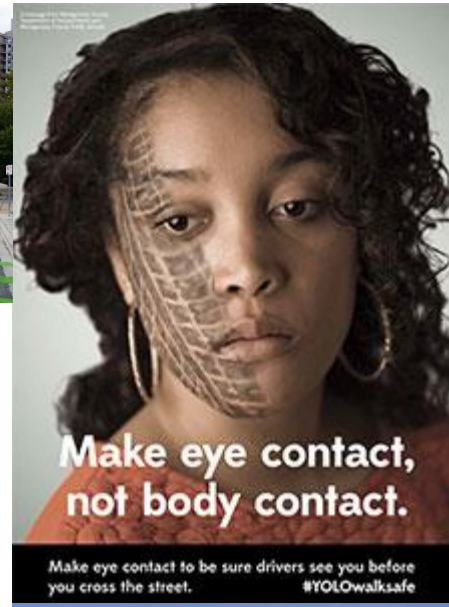
SHARED MISSION, SHARED ACCOUNTABILITY



- **Nov 1st** – Launch of Initiative
- **Late Nov/Early Dec** – Launch of Safety Feedback Map
- **Winter** – Maryland General Assembly
- **Spring** – Opportunities to get grant funding to do Vision Zero outreach

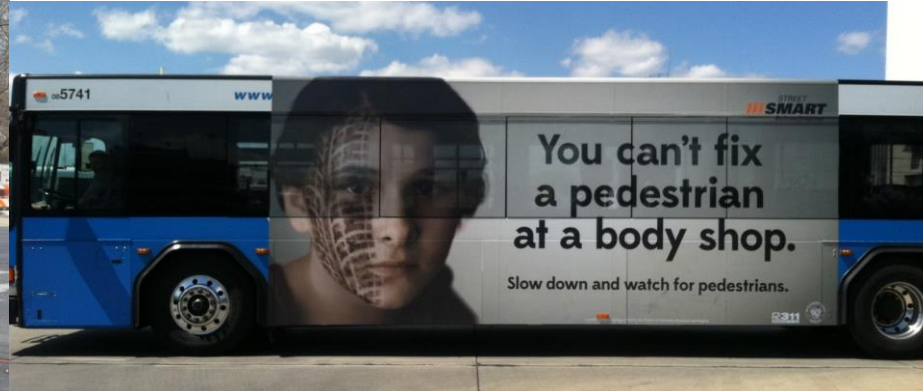
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VISION ZERO

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



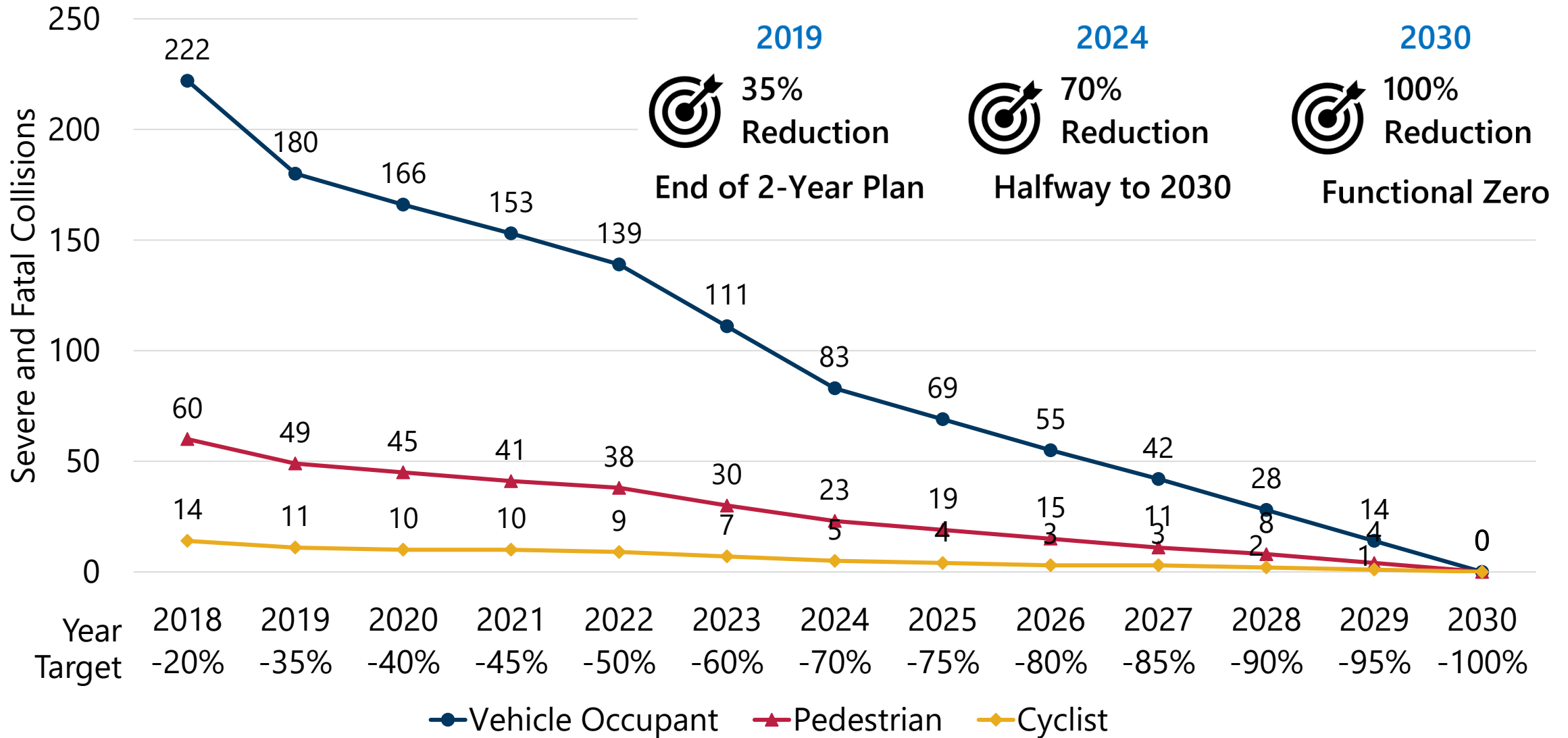
Additional Data Analysis

Why a two-step plan?

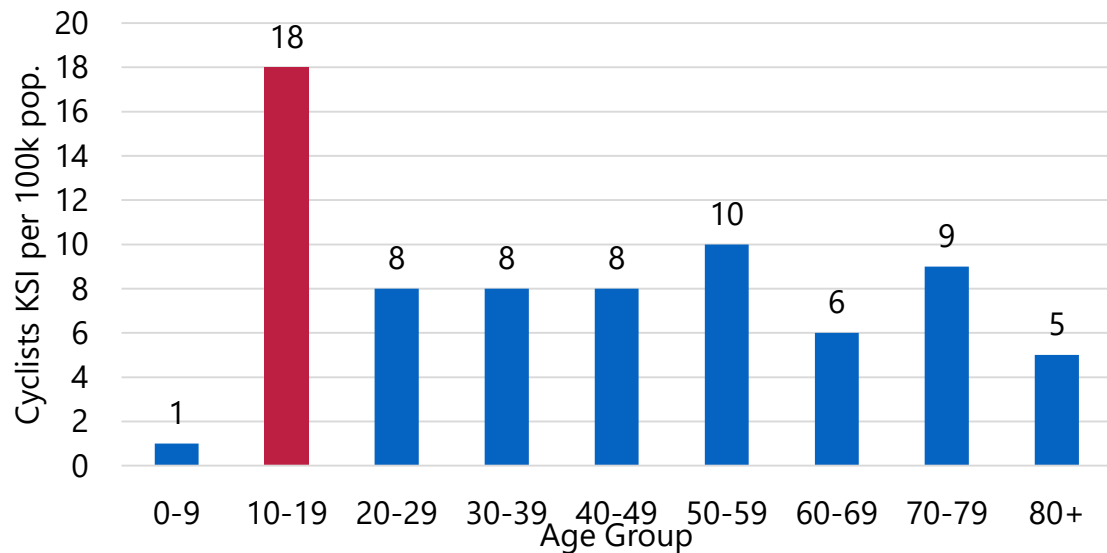
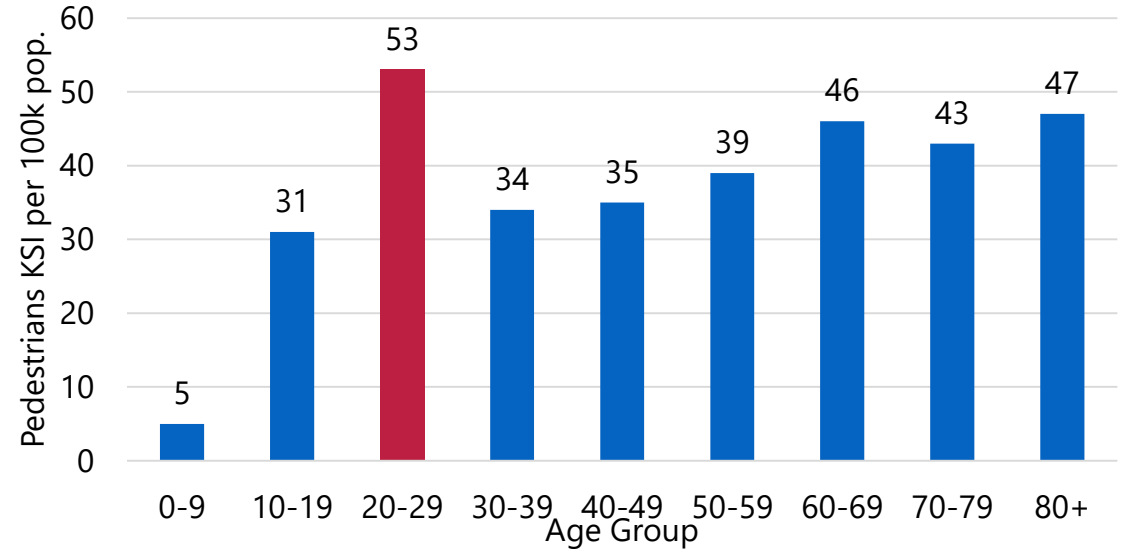
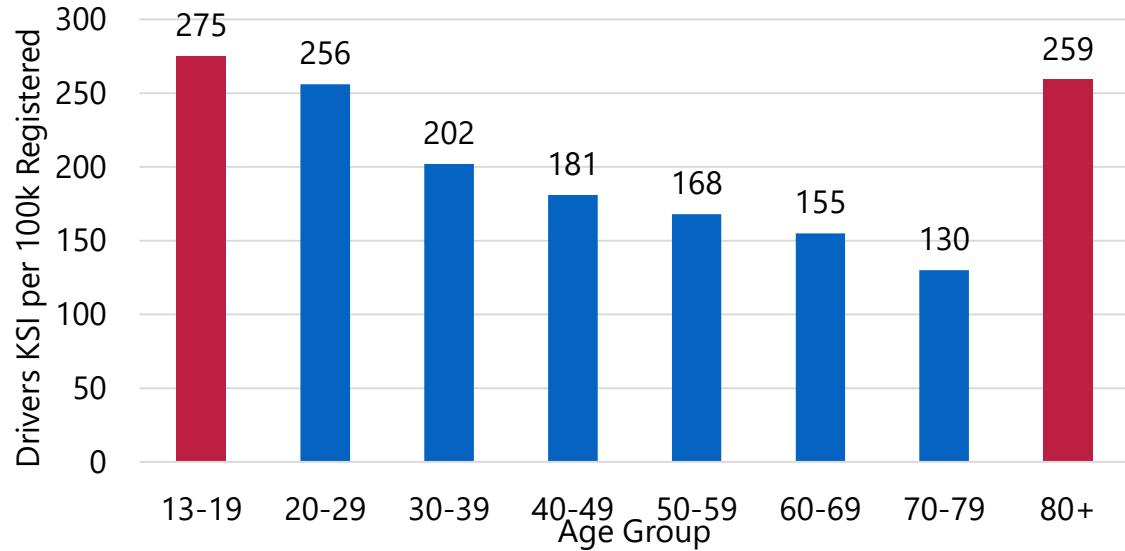
- Need to eliminate our “known unknowns” to build an even stronger plan
- Align our codes, policies, and laws to Vision Zero principles
- Determine what is or is not working for traffic safety projects
- Acknowledge major leadership changes coming in 2018 to County Executive and Council



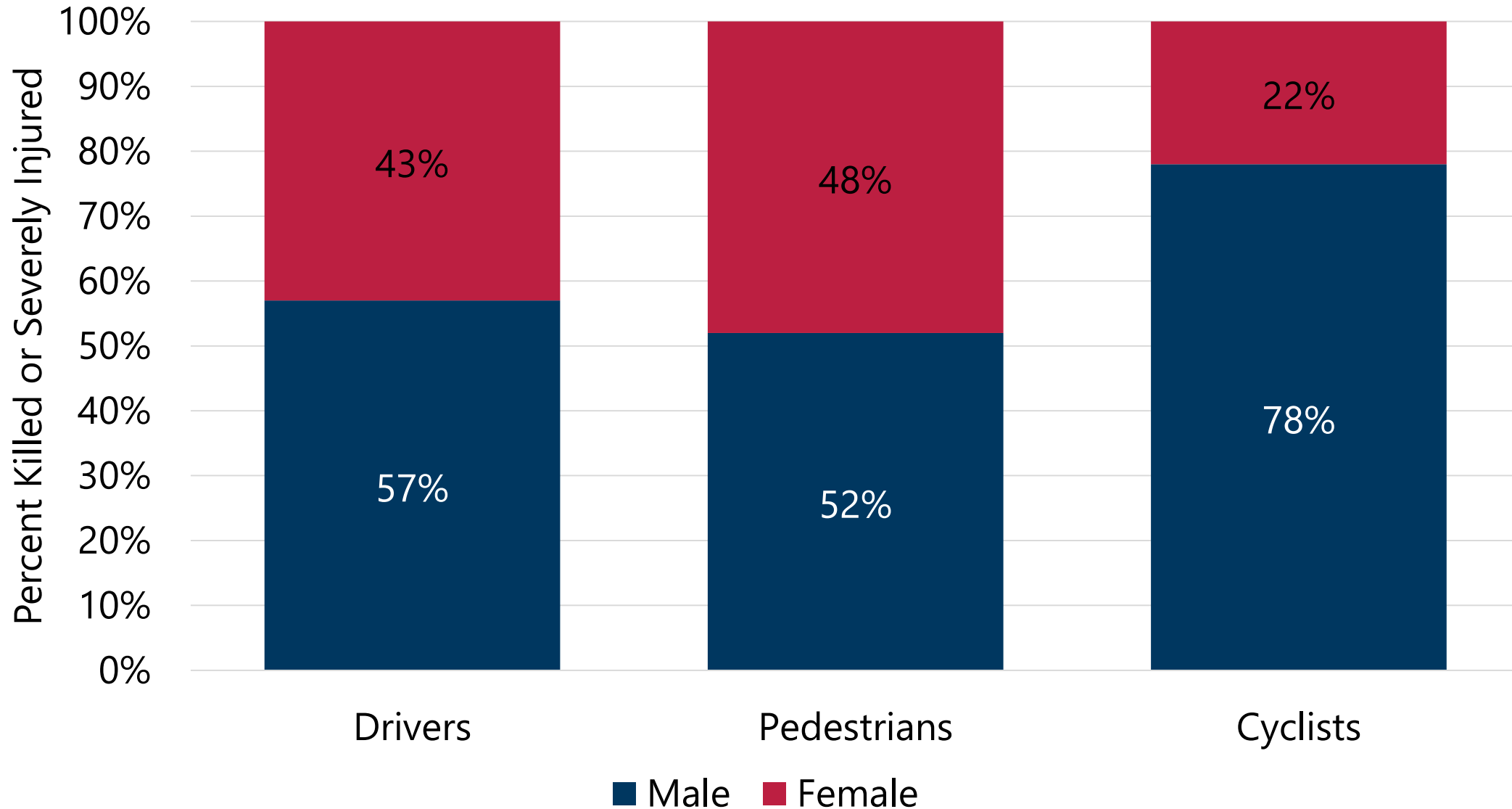
DATA ANALYSIS – REDUCTION TARGETS



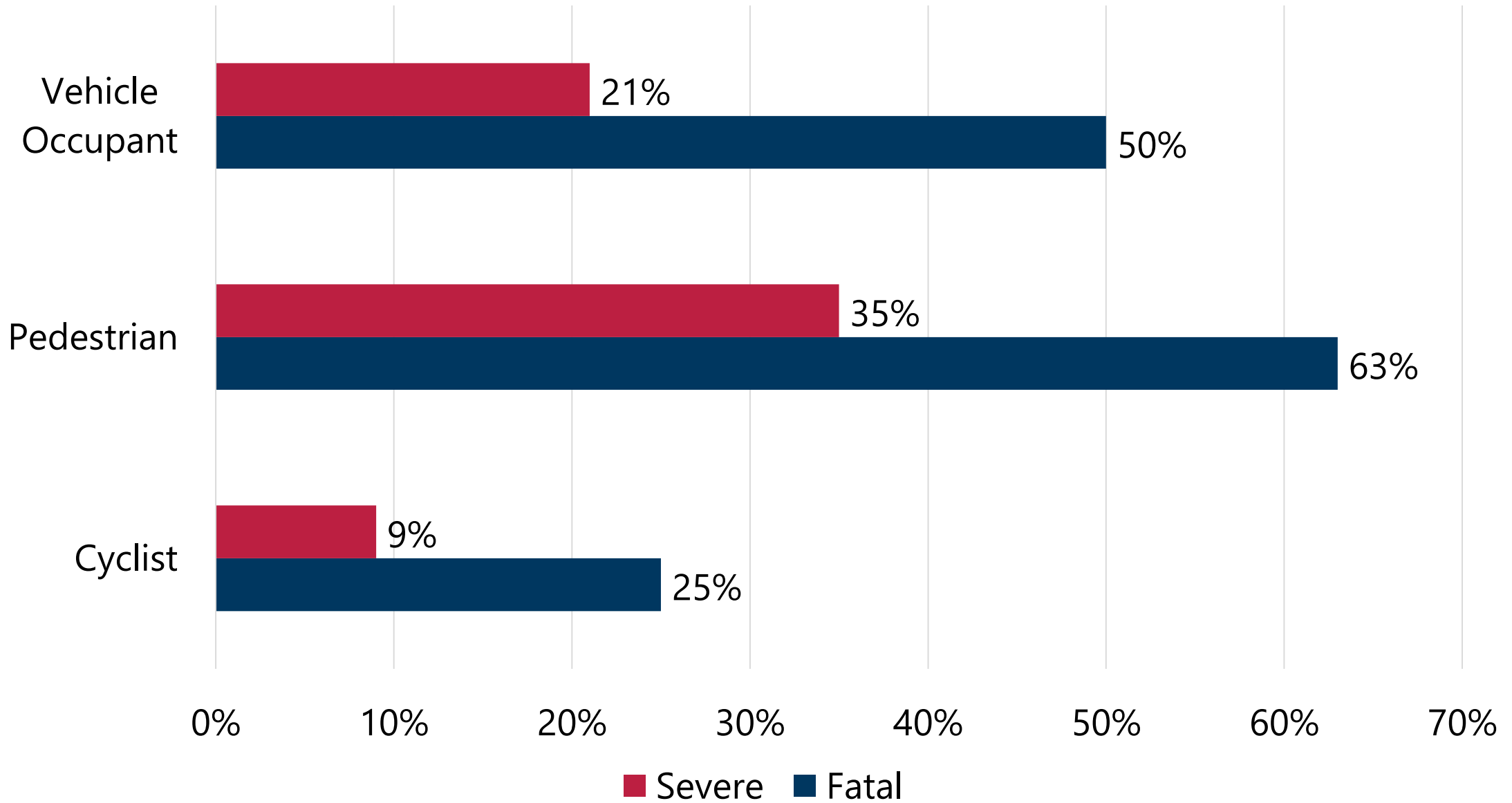
DATA ANALYSIS – AGE OF PERSON KILLED OR SEVERELY INJURED



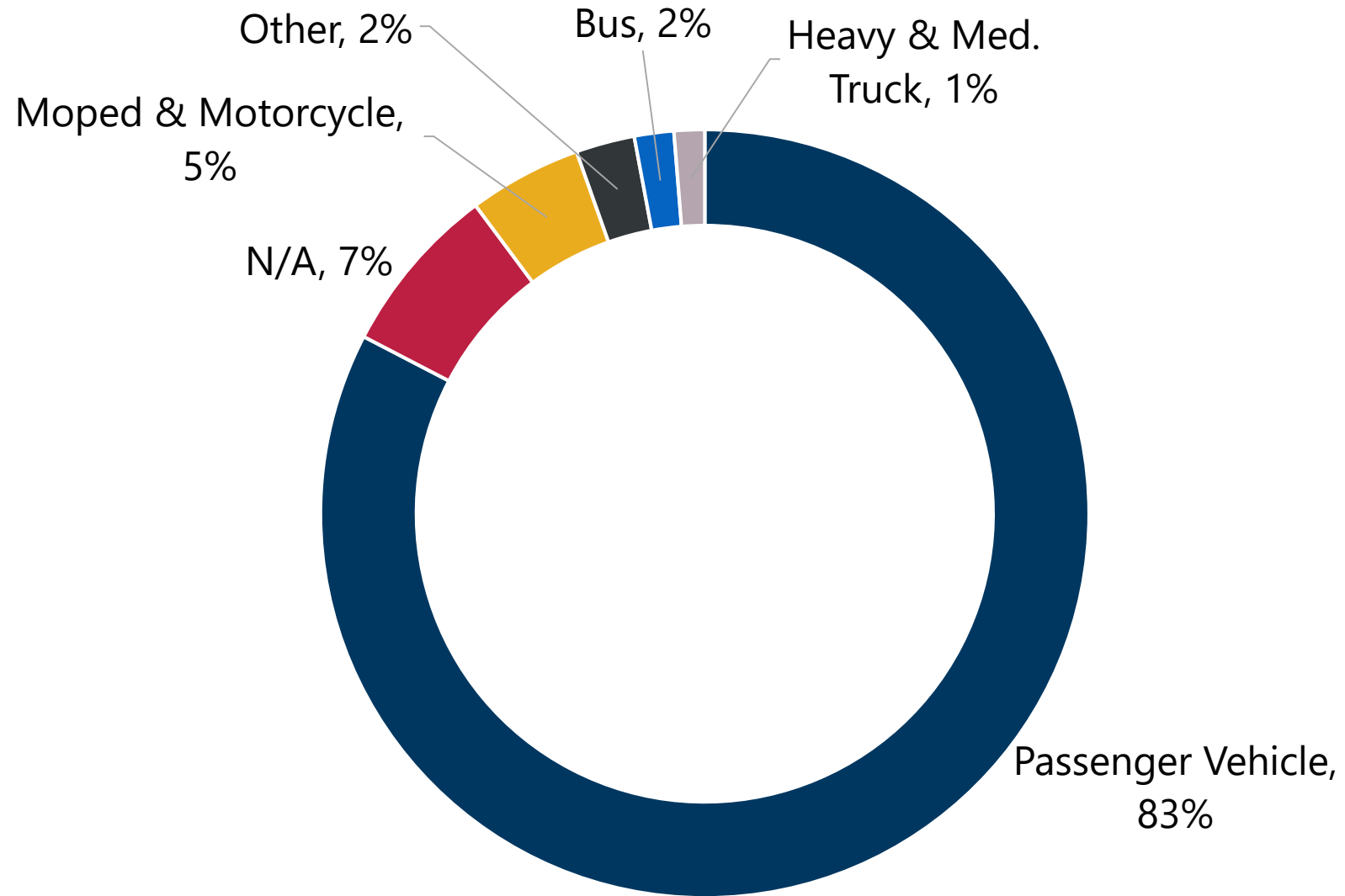
DATA ANALYSIS – SEX OF PERSON KILLED OR SEVERELY INJURED










DATA ANALYSIS – NIGHTTIME COLLISIONS

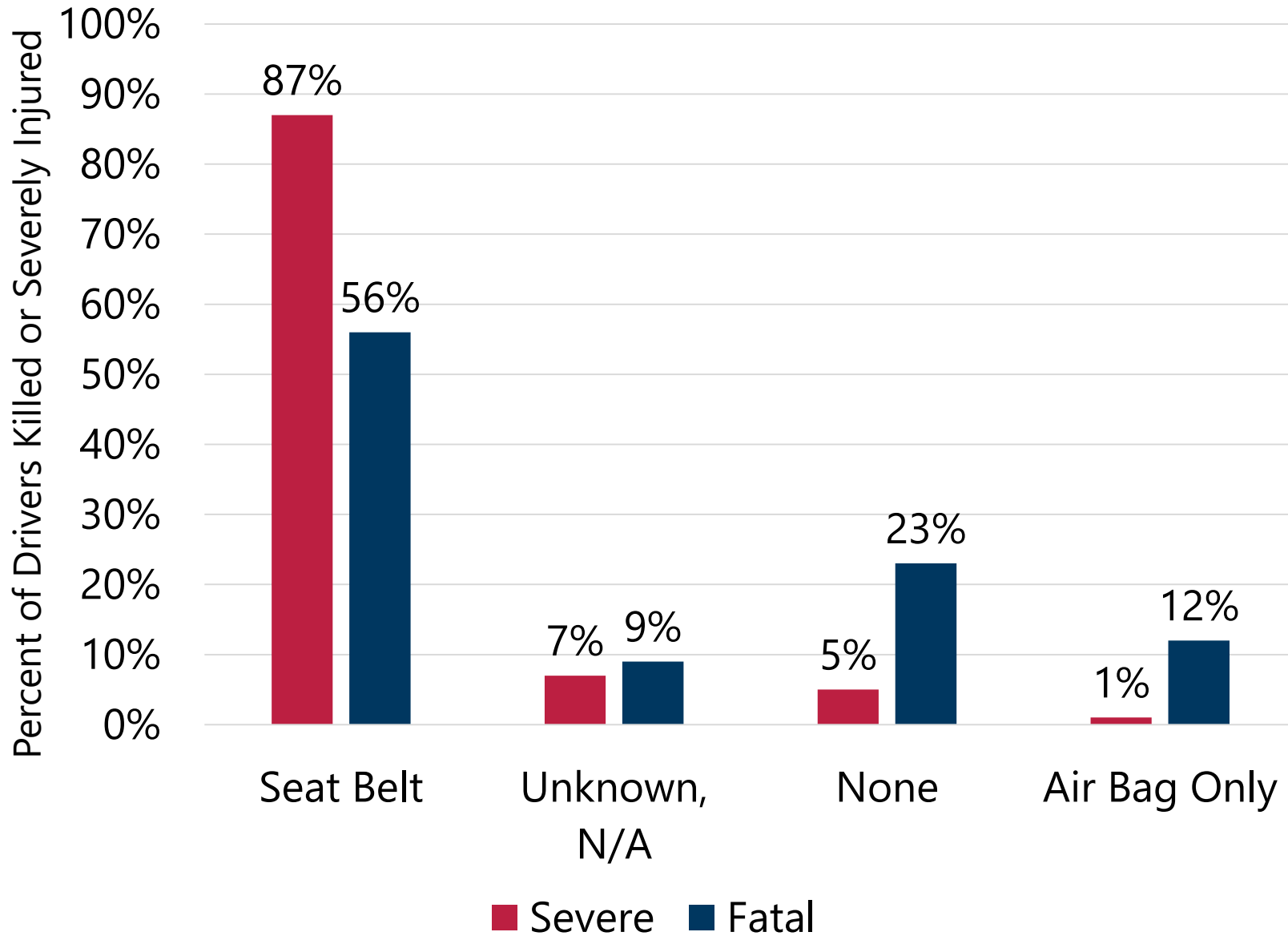


DATA ANALYSIS – VEHICLE BODY TYPE

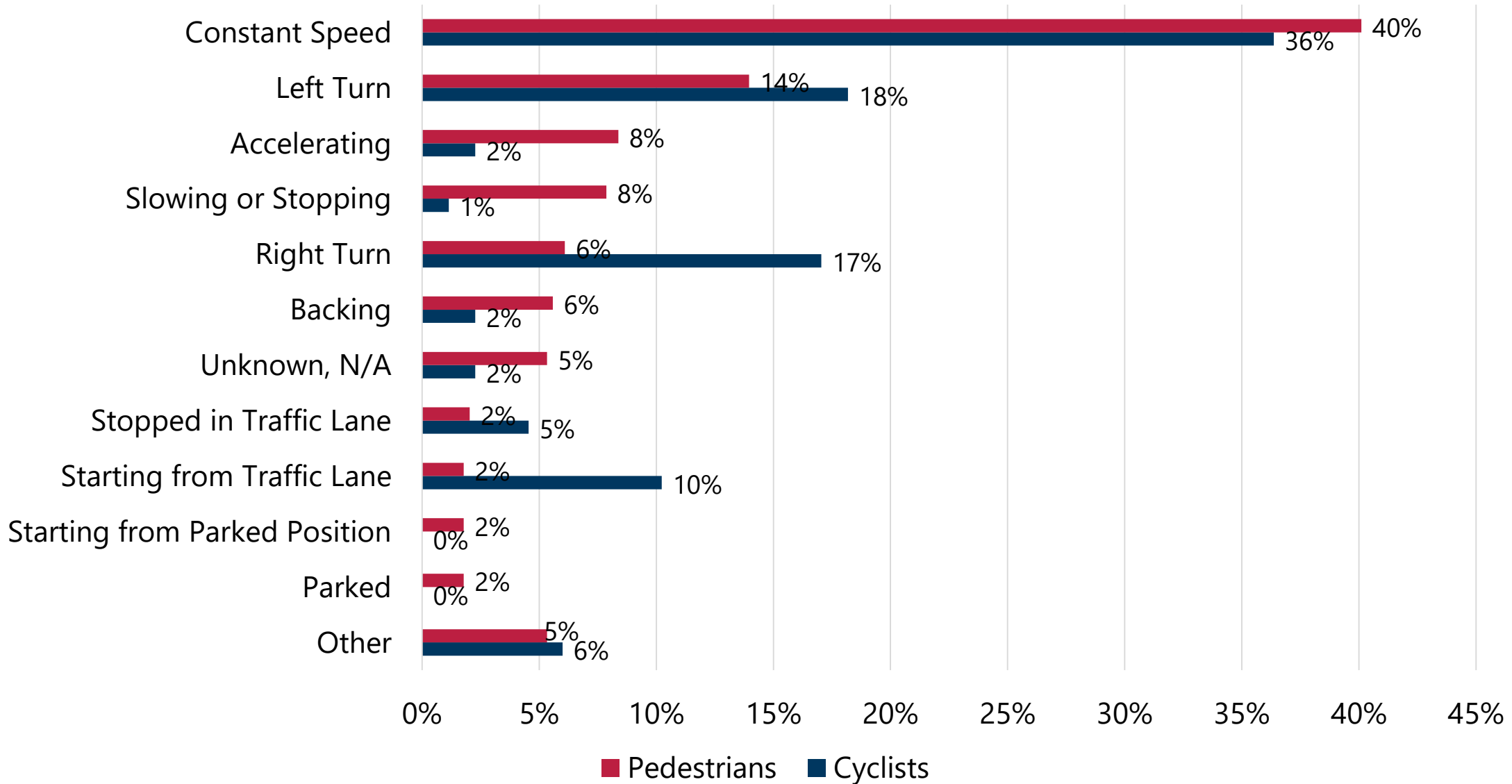


Collision Type	% of Single or Vehicle-to-Vehicle Collisions	
	Severe	Fatal
 Same Direction Rear End	27%	3%
 Left Turn	19%	11%
 Straight Movement Angle	19%	15%
 Single Vehicle	18%	50%
 Head On	7%	12%
 Sideswipe	4%	3%
Other	3%	5%
 Right Turn	2%	1%
Unknown N/A	1%	0%

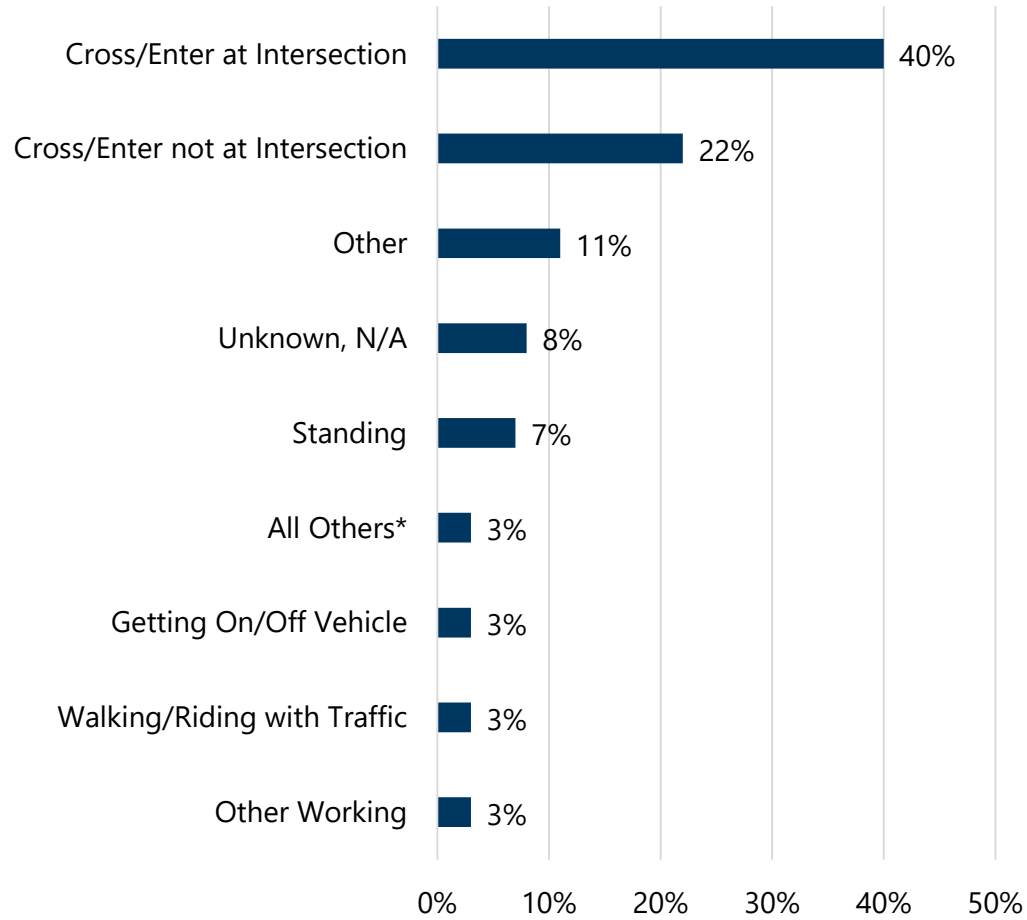




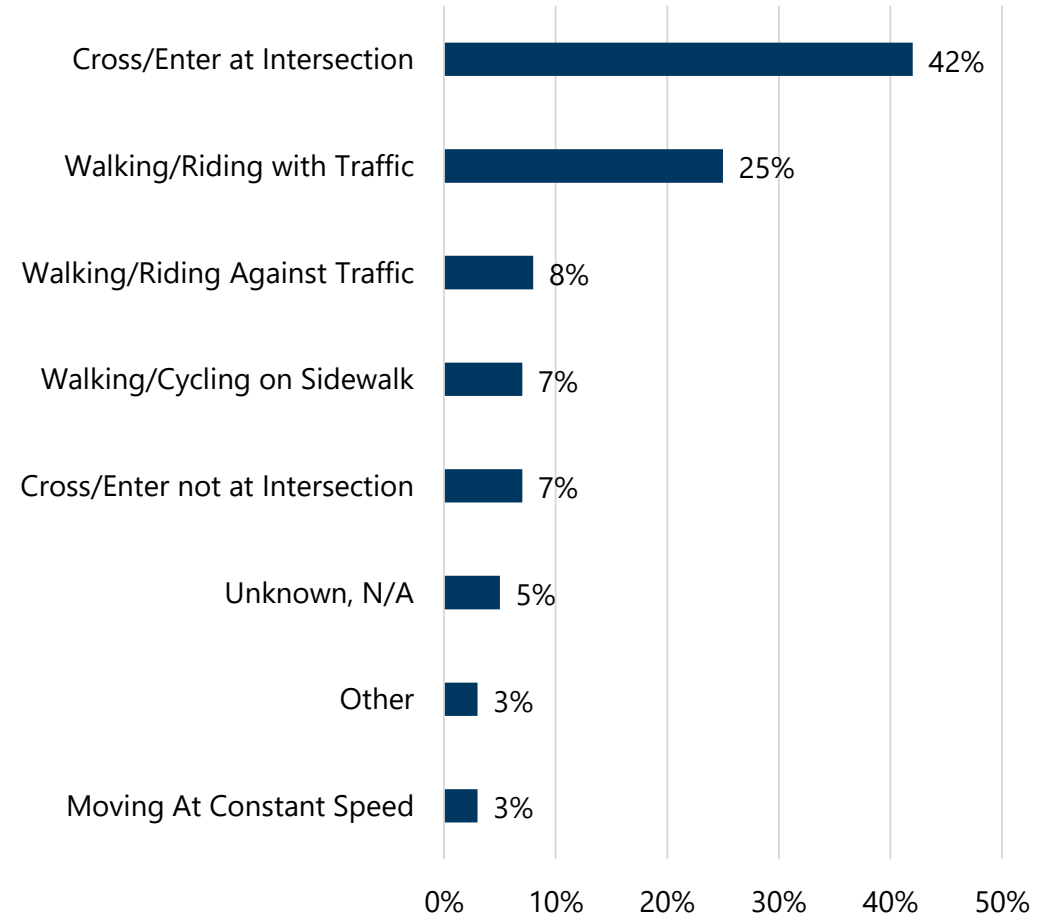
DATA ANALYSIS – PEDS & BIKES – VEHICLE MOVEMENT



Pedestrians



Cyclists



Characteristic	Montgomery County	United States
Median Household Income	\$99,435	\$53,889
Median Age	38.9	37.8
Limited English Speaking Households	7.0%	4.5%
Residents in Poverty	6.7%	15.5%
Foreign Born Residents	33.0%	13.0%
Population 25 Years and Older with Graduate or Professional Degree	31.3%	11.2%

DATA ANALYSIS – OTHER TRENDS – LAND USE

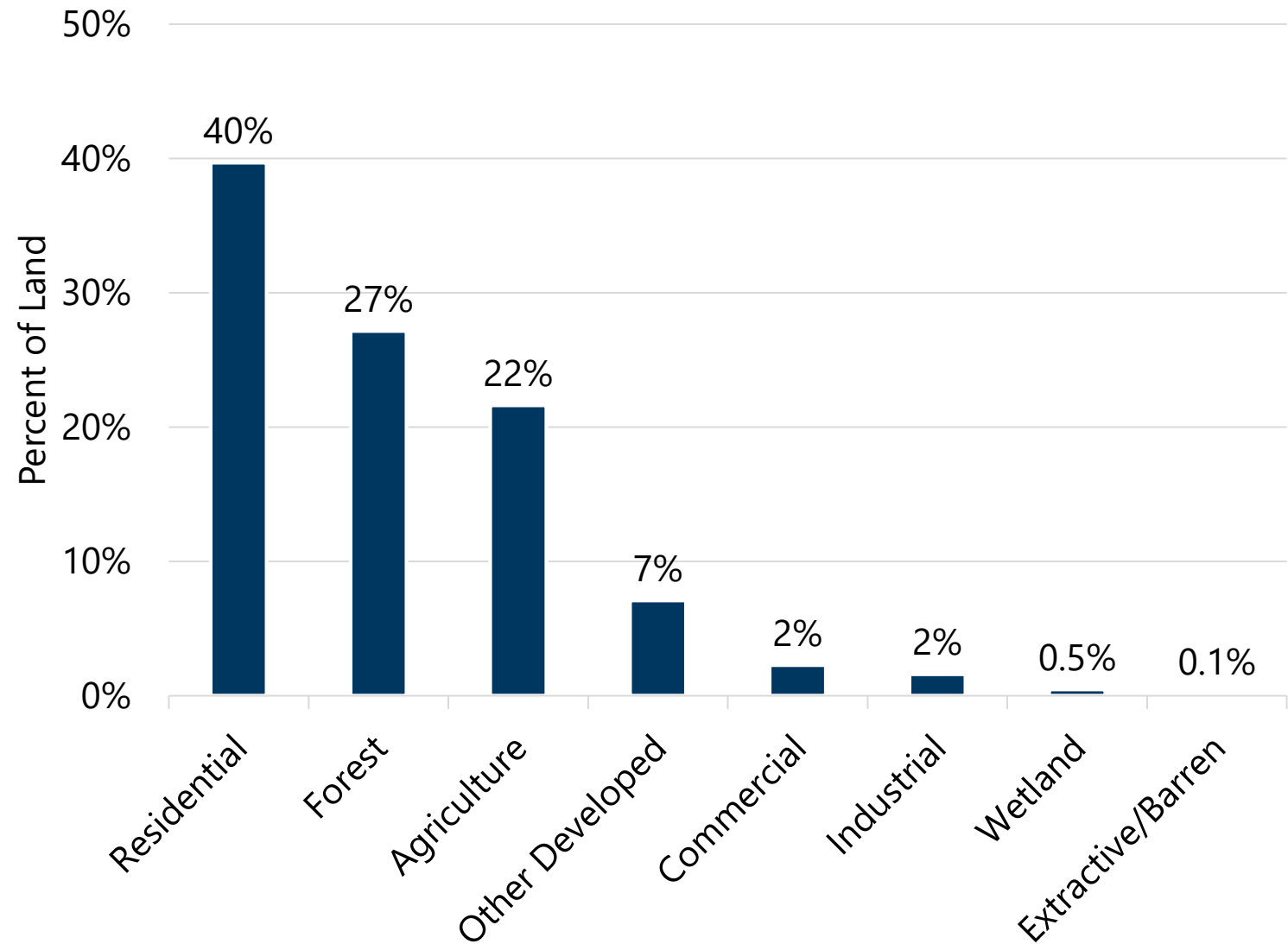
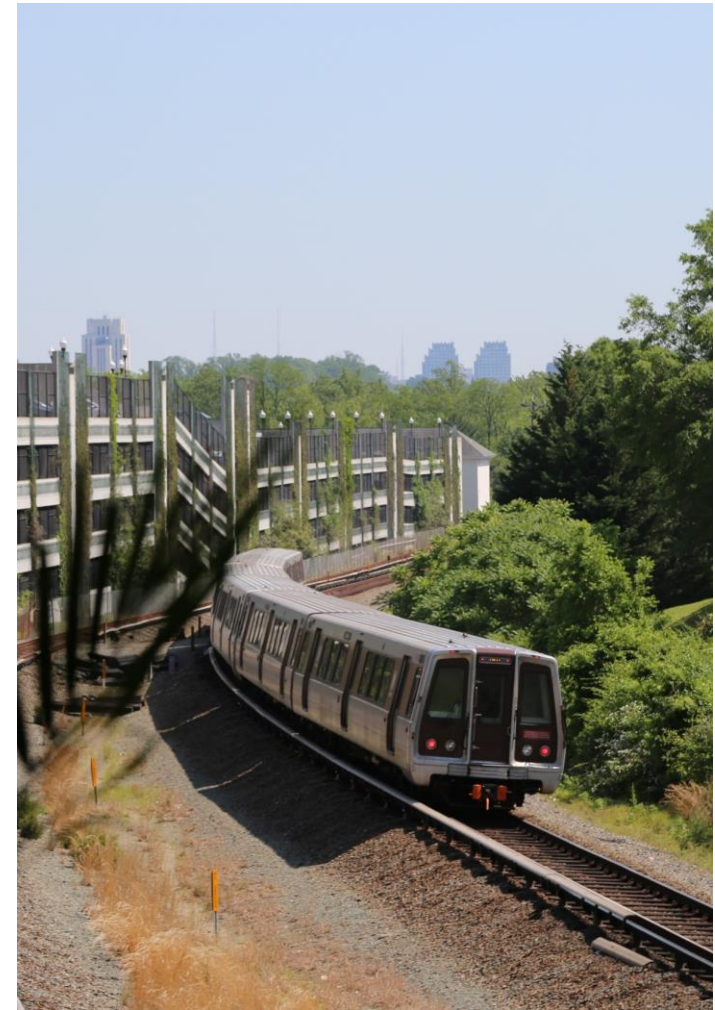
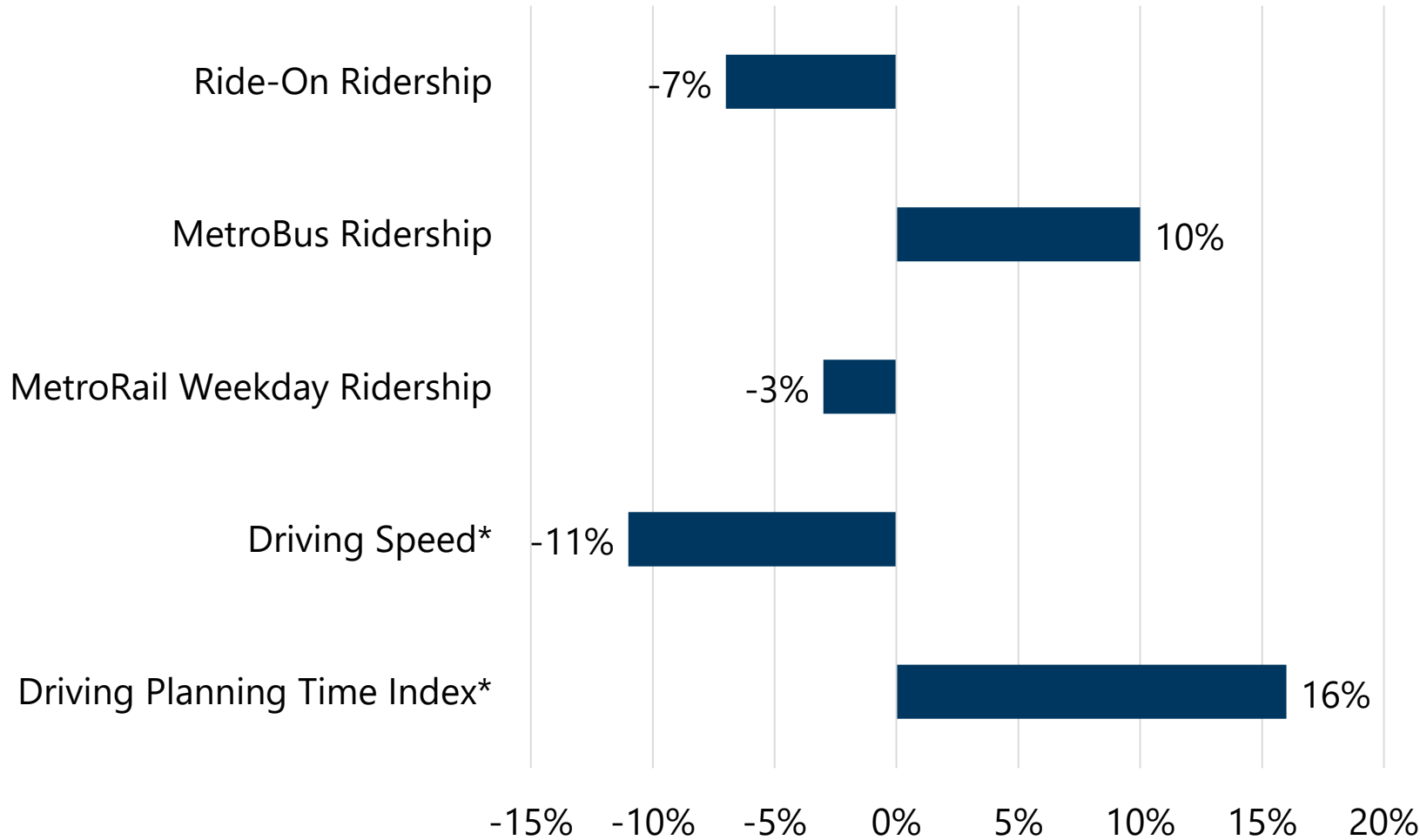


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Changes from FY10 to FY15



*Data are for calendar years 2011 to 2015