

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

**TWO-YEAR ACTION PLAN • PBTSAC Draft Review • July 24, 2017** 

### REPORT SECTIONS



Acknowledgements

Letter from the County Executive

What is Vision Zero?

Why is Vision Zero Important?

Data Analysis

Action Plan Development

Two-Year Action Plan Shared Mission,
Shared
Accountability

### 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

# WHAT IS VISION ZERO?







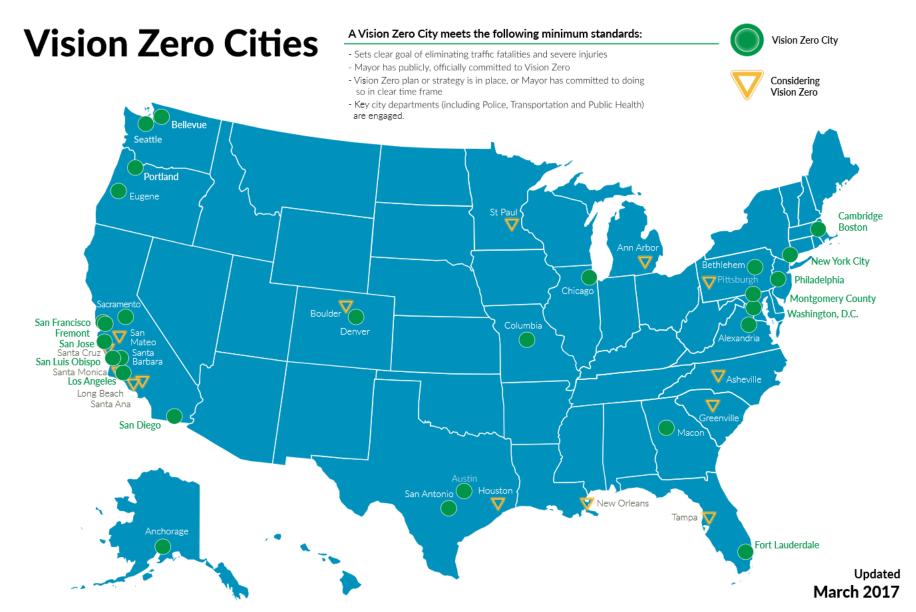


#### **Photo Credits:**

Johna Willner/imagebank.Sweden.se "20West," Erica Stineman (Target Zero) "Vision Zero Turning" City of New York Taxi & Limousine Commission

# WHAT IS VISION ZERO?



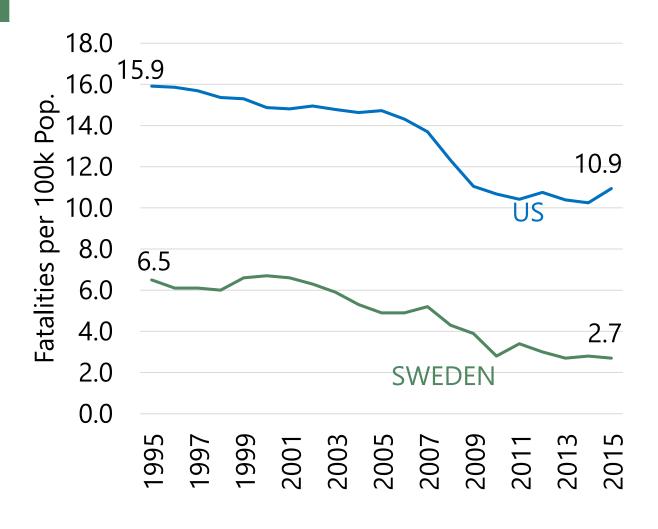


### WHY IS VISION ZERO IMPORTANT? WHY ADOPT IT NOW?



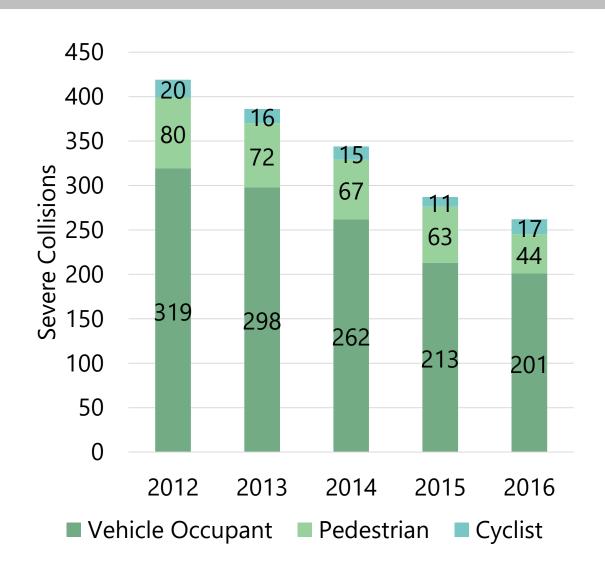
Country	Fatalities per 100k Pop.
Russia	18.9
US	10.6
Poland	10.3
Greece	9.1
Canada	6.0
Australia	5.4
Japan	4.7
Germany	4.3
UK	2.9
Sweden	2.8

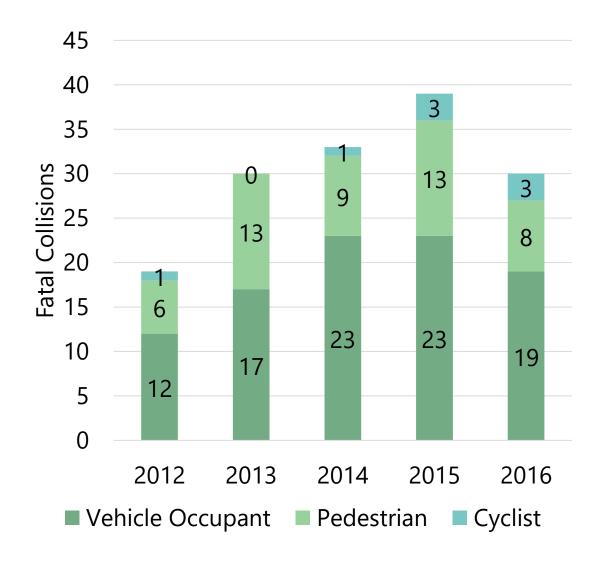
### TRAFFIC DEATHS IN US AND SWEDEN



# DATA ANALYSIS – 5 YEAR TREND

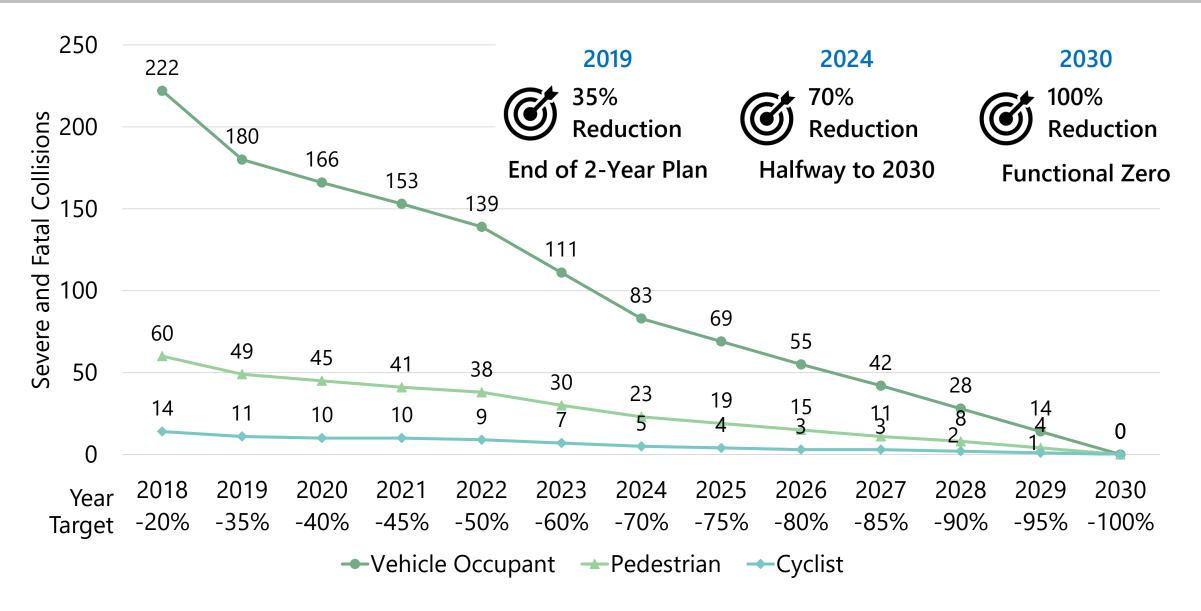






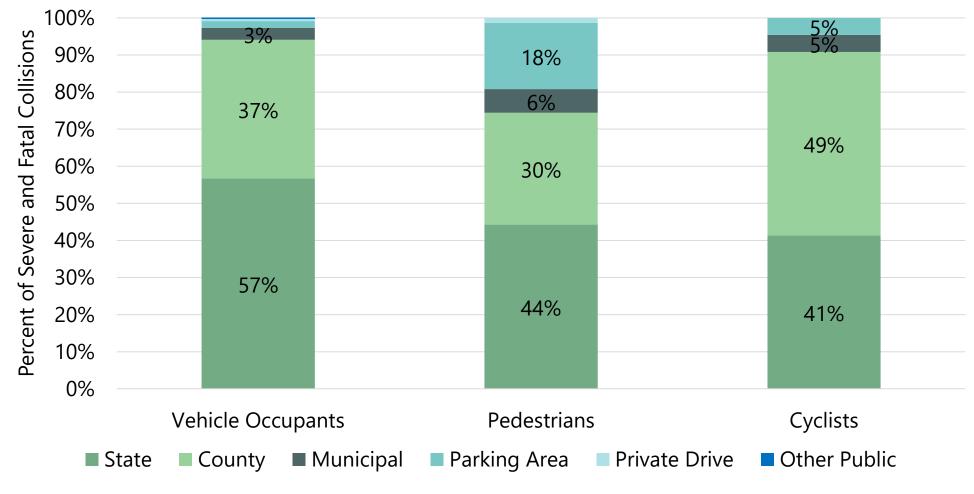
### DATA ANALYSIS – REDUCTION TARGETS





### DATA ANALYSIS – COLLISIONS BY ROADWAY OWNER

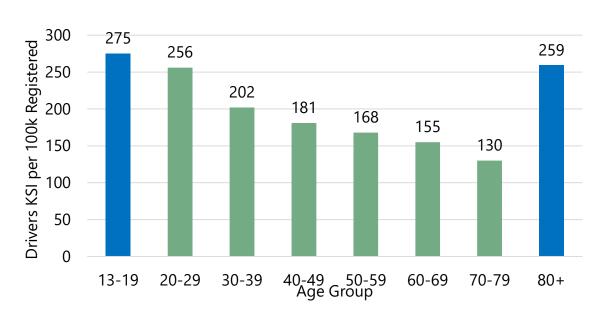


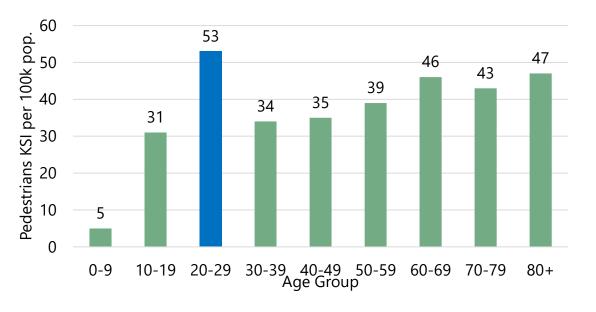


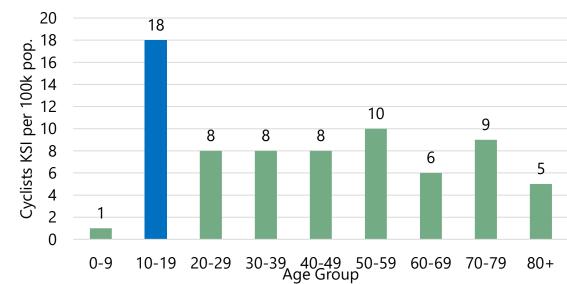
	State	County	Municipal	Total
Lane Miles	1,167	4,877	773	6,817
Percent of Total	17%	72%	11%	100%

# DATA ANALYSIS – AGE OF PERSON KILLED OR SEVERELY INJURED





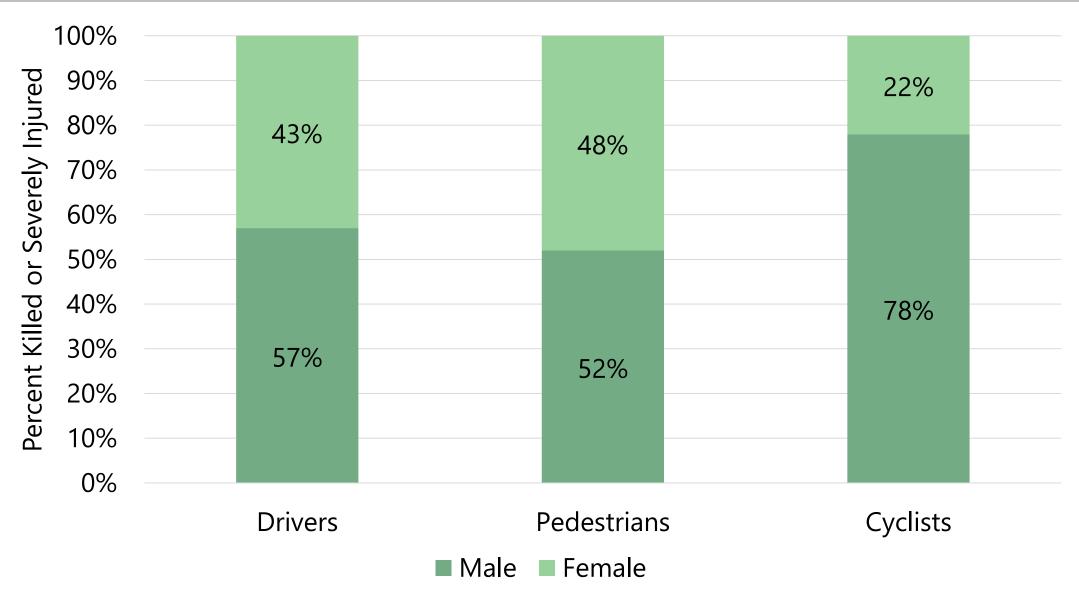






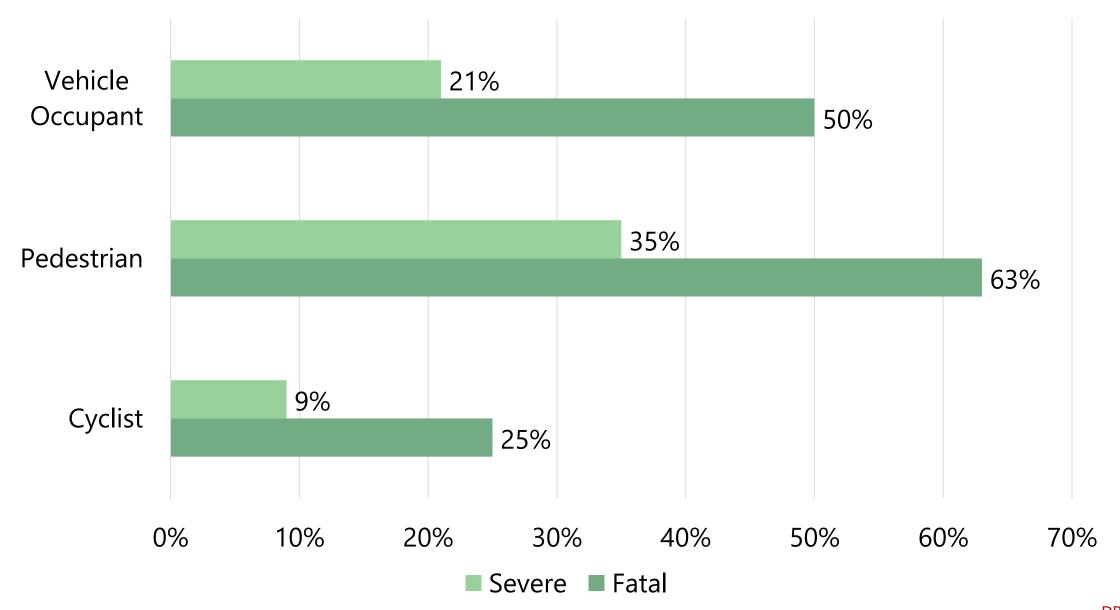
# DATA ANALYSIS – SEX OF PERSON KILLED OR SEVERELY INJURED





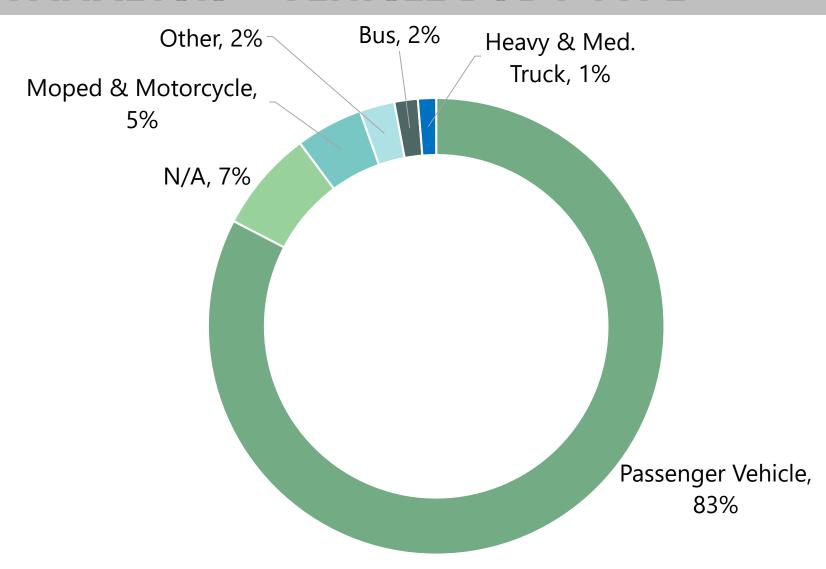
# DATA ANALYSIS – NIGHTTIME COLLISIONS





# DATA ANALYSIS – VEHICLE BODY TYPE





# DATA ANALYSIS – VEHICLES – COLLISION TYPE

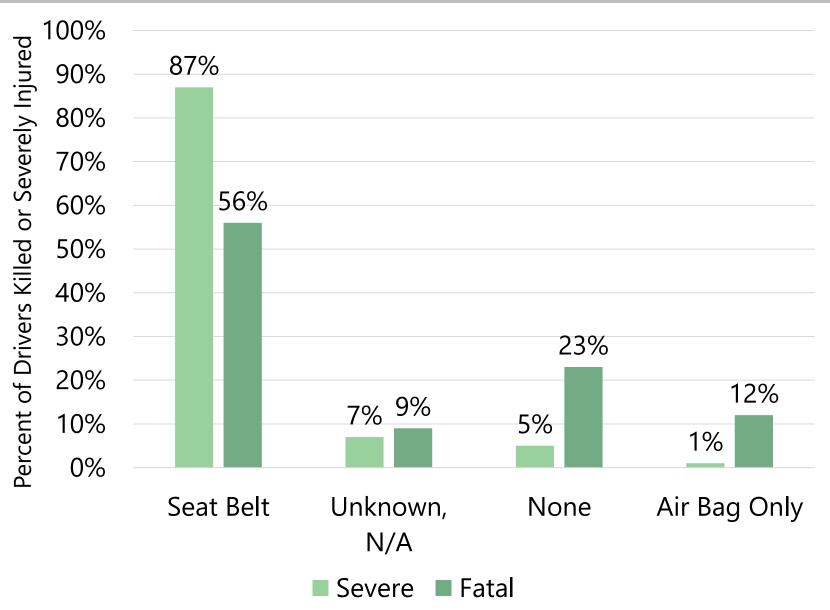


Collision Type	% of Single or Vehicle- to-Vehicle Collisions	
	Severe	Fatal
Same Direction Rear End	27%	3%
Left Turn	19%	11%
Straight Movement Angle	19%	15%
Single Vehicle	18%	50%
Head On	7%	12%
Sideswipe	4%	3%
Other	3%	5%
Right Turn	2%	1%
Unknown N/A	1%	0%



### DATA ANALYSIS – VEHICLE – SAFETY EQUIPMENT USED

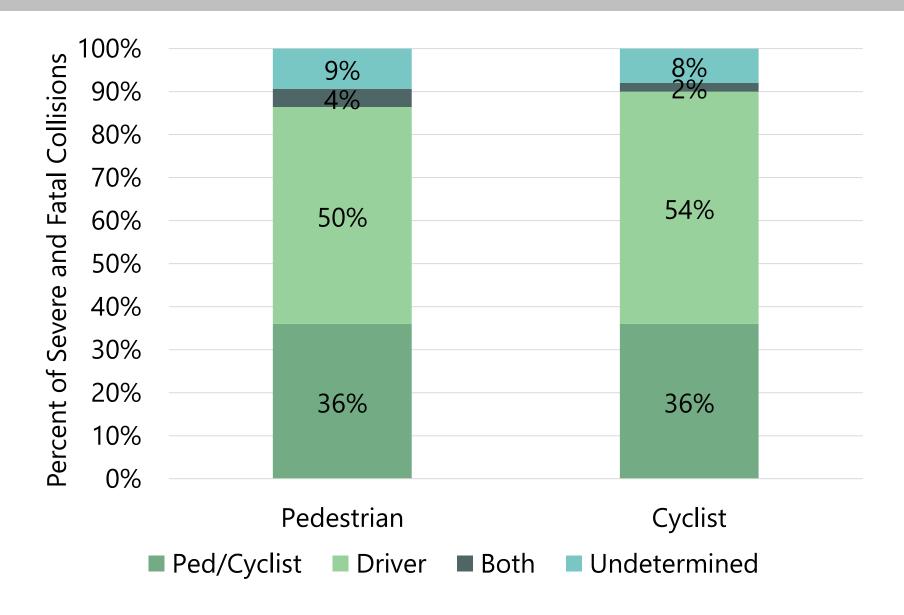






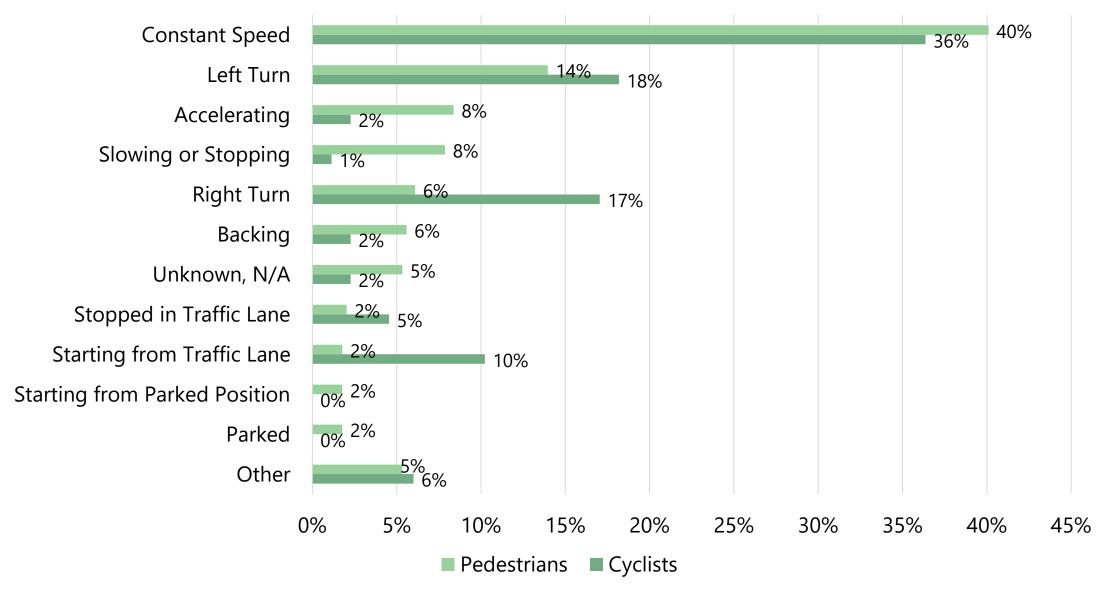
### DATA ANALYSIS – PEDS & BIKES – PARTY AT FAULT





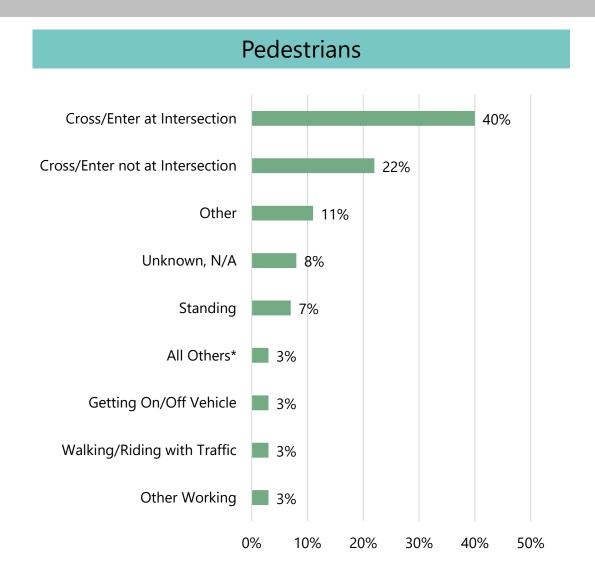
### DATA ANALYSIS – PEDS & BIKES – VEHICLE MOVEMENT

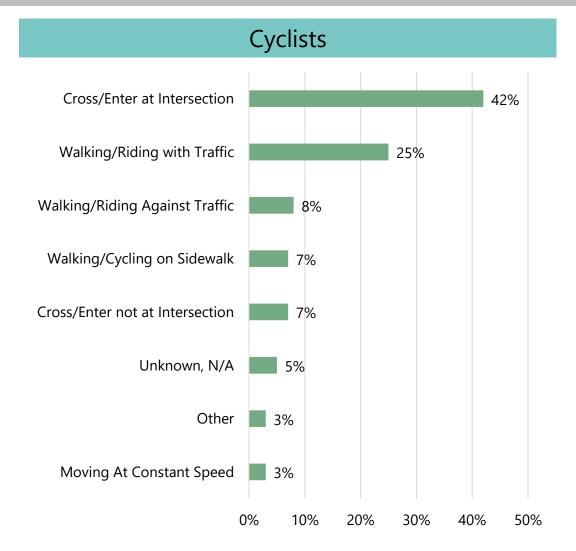




### DATA ANALYSIS – PEDS & BIKES – MOVEMENT







### DATA ANALYSIS – OTHER TRENDS – SELECT CHARACTERISTICS



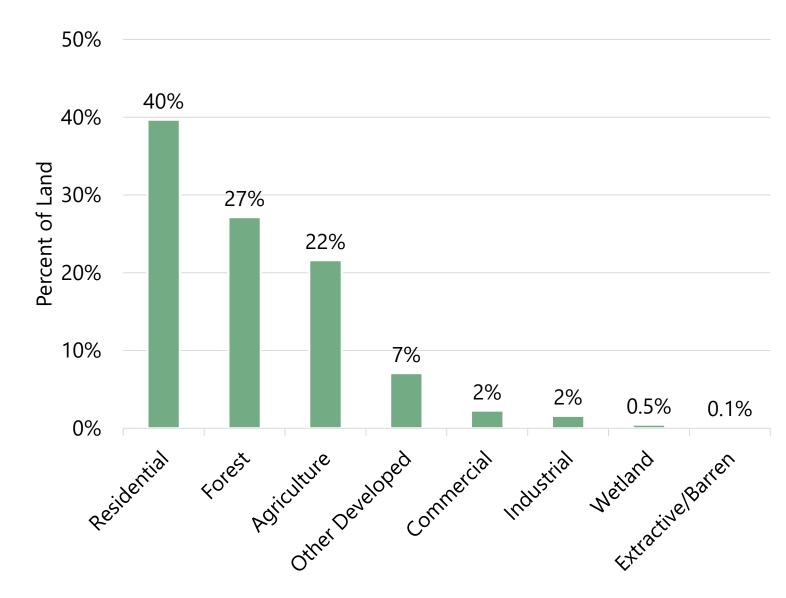
Characteristic	<b>Montgomery County</b>	United States	
Median Household Income	\$99,435	\$53,889	
Median Age	38.9	37.8	
Limited English Speaking Households	7.0%	4.5%	
Residents in Poverty	6.7%	15.5%	
Foreign Born Residents	33.0%	13.0%	
Population 25 Years and Older with	31.3%	11.2%	
Graduate or Professional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

# DATA ANALYSIS – OTHER TRENDS – LAND USE







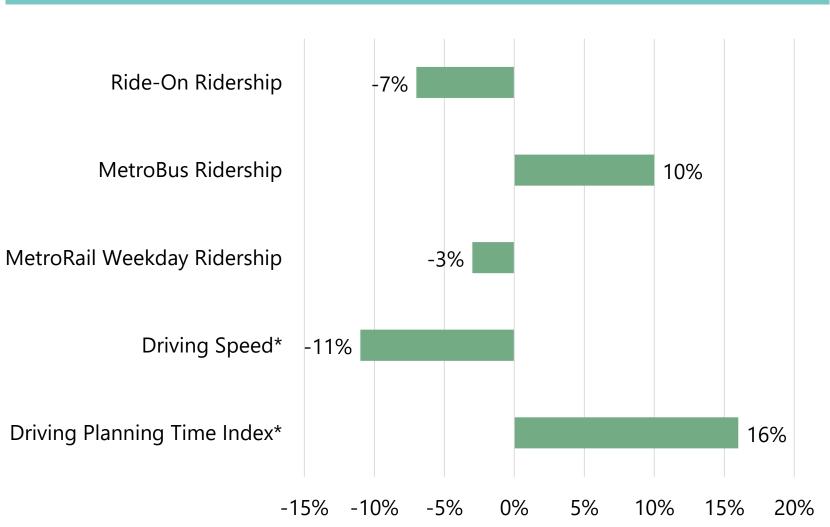


#### **Photo Credits:**

### DATA ANALYSIS – OTHER TRENDS – CHANGES IN TRAVEL



### Changes from FY10 to FY15





## ACTION PLAN DEVELOPMENT



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

## 2-YEAR AND 10-YEAR ACTION PLANS



### 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

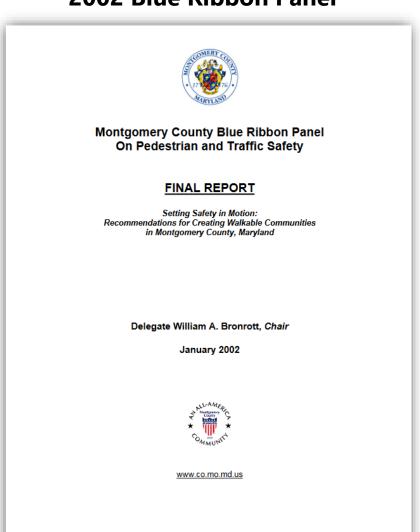




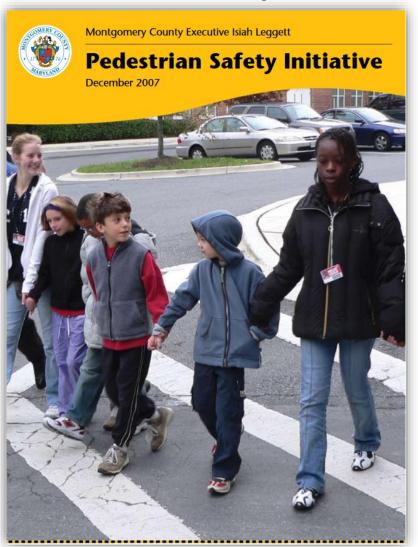
# PREVIOUS ROADWAY SAFETY EFFORTS



#### **2002 Blue Ribbon Panel**

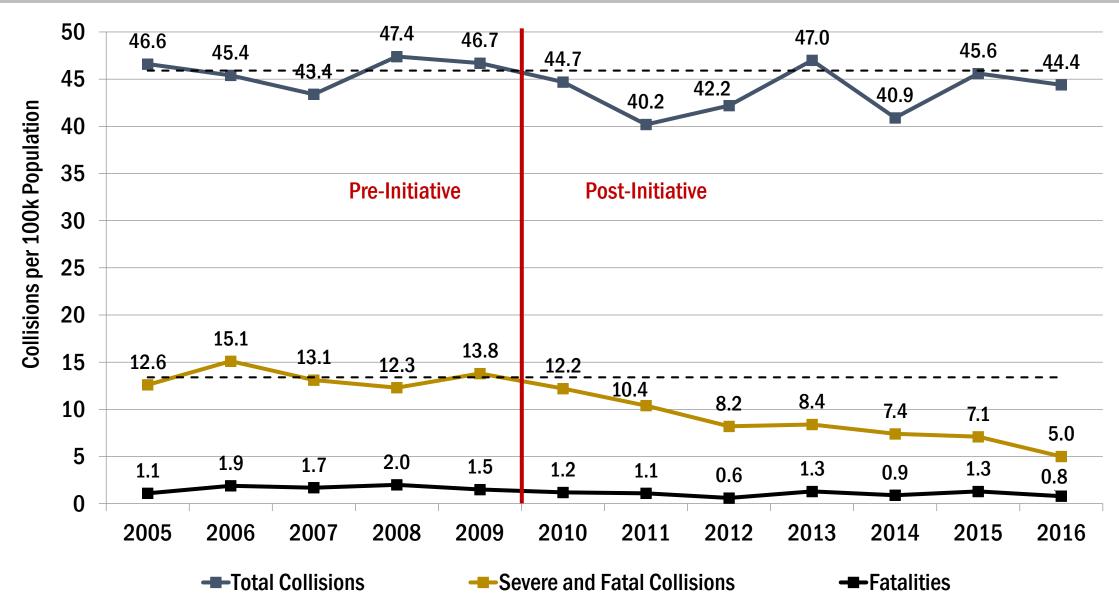


#### **2007 Pedestrian Safety Initiative**



### RESULTS FROM PEDESTRIAN SAFETY INITIATIVE





# STAKEHOLDER AND COMMUNITY ENGAGEMENT



- 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

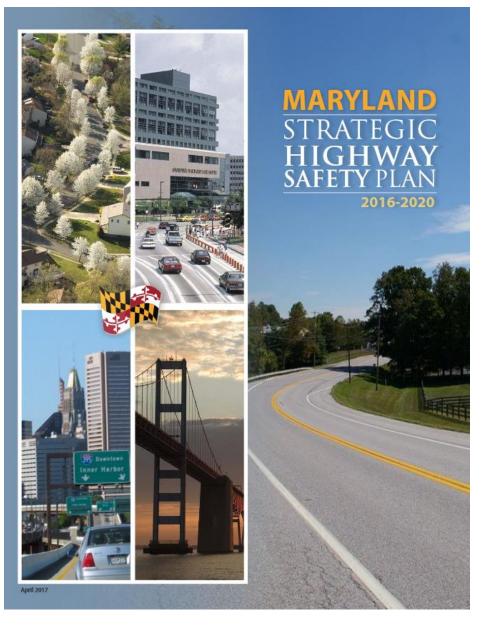






# RELATIONSHIP TO MARYLAND SHSP





#### **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

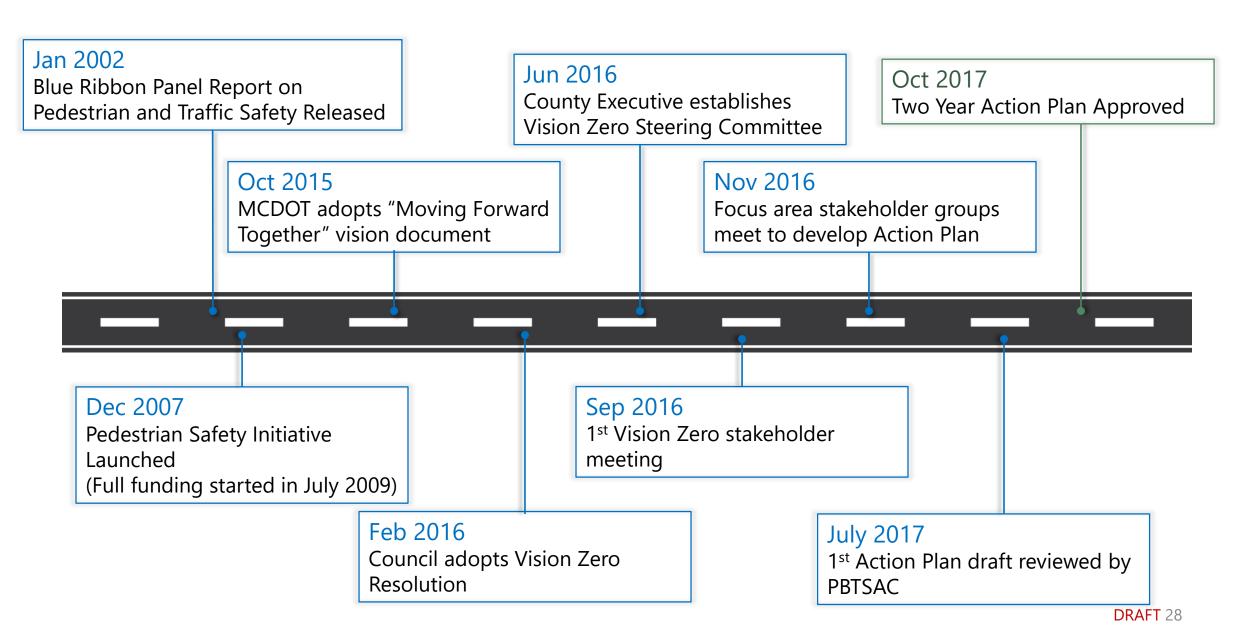
#### **Differences:**

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

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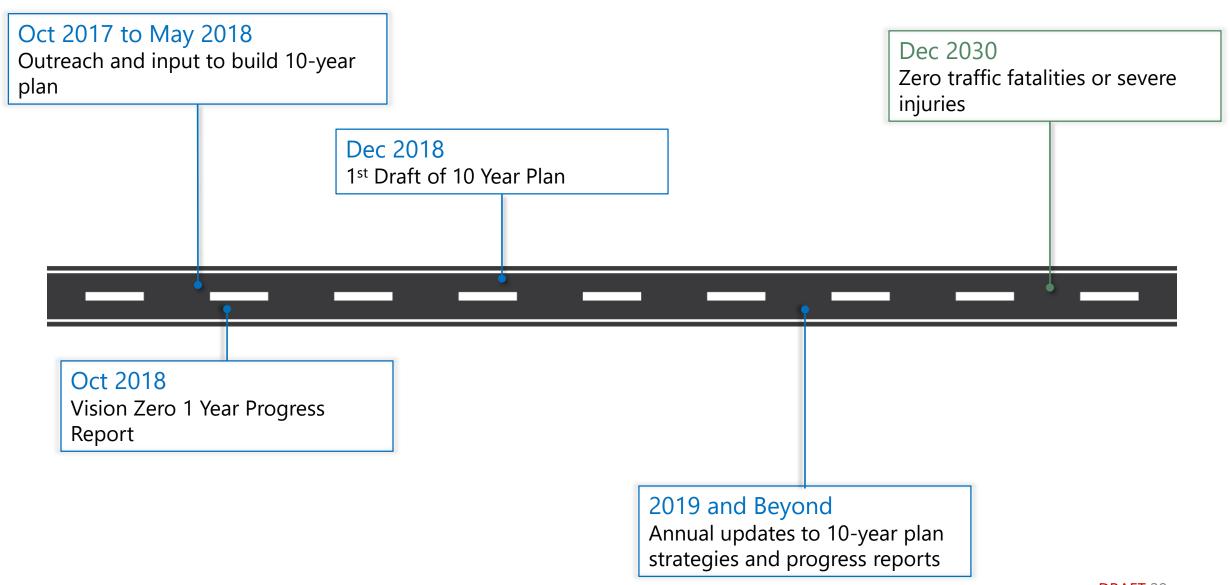
# ROAD TO VISION ZERO – TWO-YEAR ACTION PLAN





# ROAD TO VISION ZERO – TWO TO TEN YEAR PLAN





### TWO-YEAR ACTION PLAN – SAFE SYSTEMS APPROACH



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

# TWO-YEAR ACTION PLAN – ACTION ITEMS





#### **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: Complete Sidewalk Inventory

ENG-9: Accelerate Sidewalk Building

ENG-10: Expand Low-Stress Bicycle Network

# TWO-YEAR ACTION PLAN – ENFORCEMENT



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: Audit 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





### FINALIZING THE TWO-YEAR ACTION PLAN



# August 7<sup>th</sup> –

Comment period for PBTSAC Draft Closes

**September** (Date to be Set) – Full Public Review

September 28<sup>th</sup> –

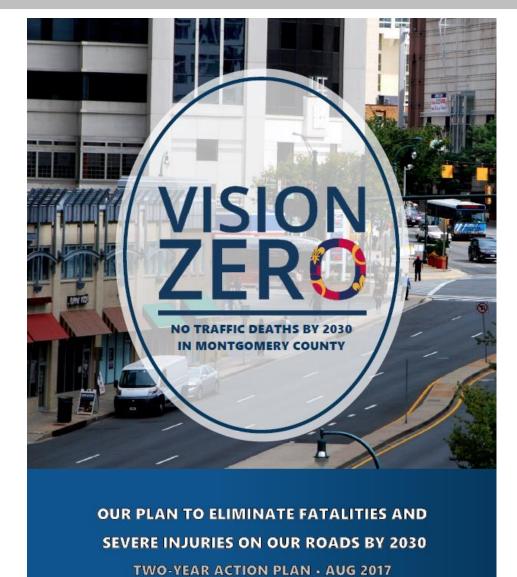
Final Review during PBTSAC Meeting

October 15th -

Two-Year Plan Signed-off by County Executive

### LINKS TO DRAFT AND FEEDBACK FORM





Copy of Draft:

https://goo.gl/98TWue

Feedback Form:

https://www.surveymonkey.com/r/MCVZfeedback

# QUESTIONS?



