

# PEDESTRIAN SAFETY in Maryland

# OVERVIEW

The Last 2 Years

What Does the Data Tell Us?

What are We Doing?

Where to Start?

Moving Forward - Partnership



THE LAST 2 YEARS



A NEW MDOT - SHA

INNOVATION  
MODERNIZATION  
COMMUNICATION  
CUSTOMER EXPERIENCE



# PEDESTRIAN SAFETY

## Updated Approaches

▶ **NOT A ONE SIZE FITS ALL APPROACH**

▶ **BOLD, NEW STRATEGIES**

▶ **PRIORITIZING PEDESTRIAN SAFETY - CONTEXT DRIVEN**

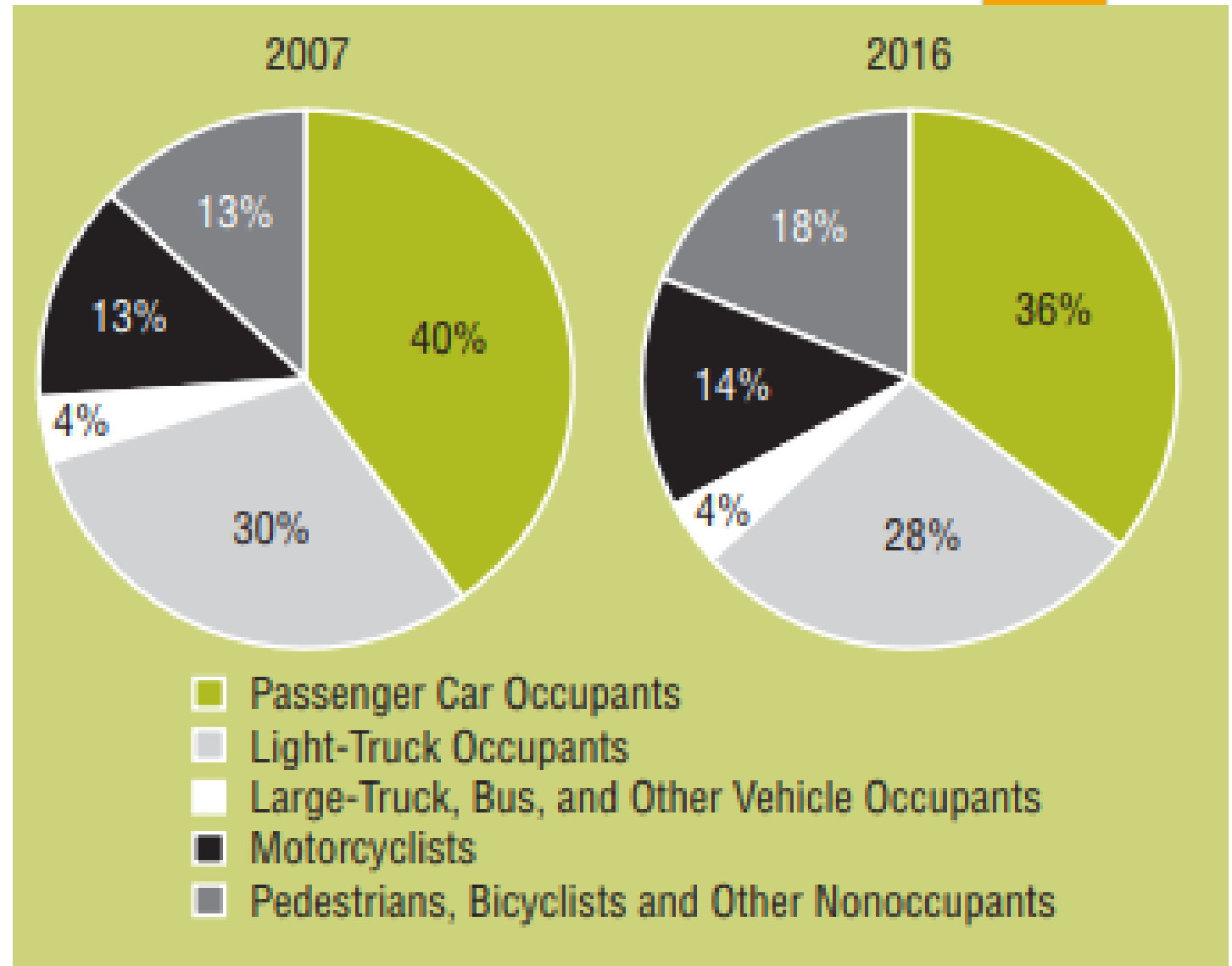
- HAWK Pedestrian Signal
- Reducing Lane Widths
- Reducing Speed Limits
- Revamped Pedestrian Roadway Safety Audit Program (PRSA)
- RRFB – Rectangular Rapid Flashing Beacons
- Developing Urban Standards



WHAT IS THE DATA  
TELLING US?

# PEDESTRIAN CRASH NATIONAL TRENDS

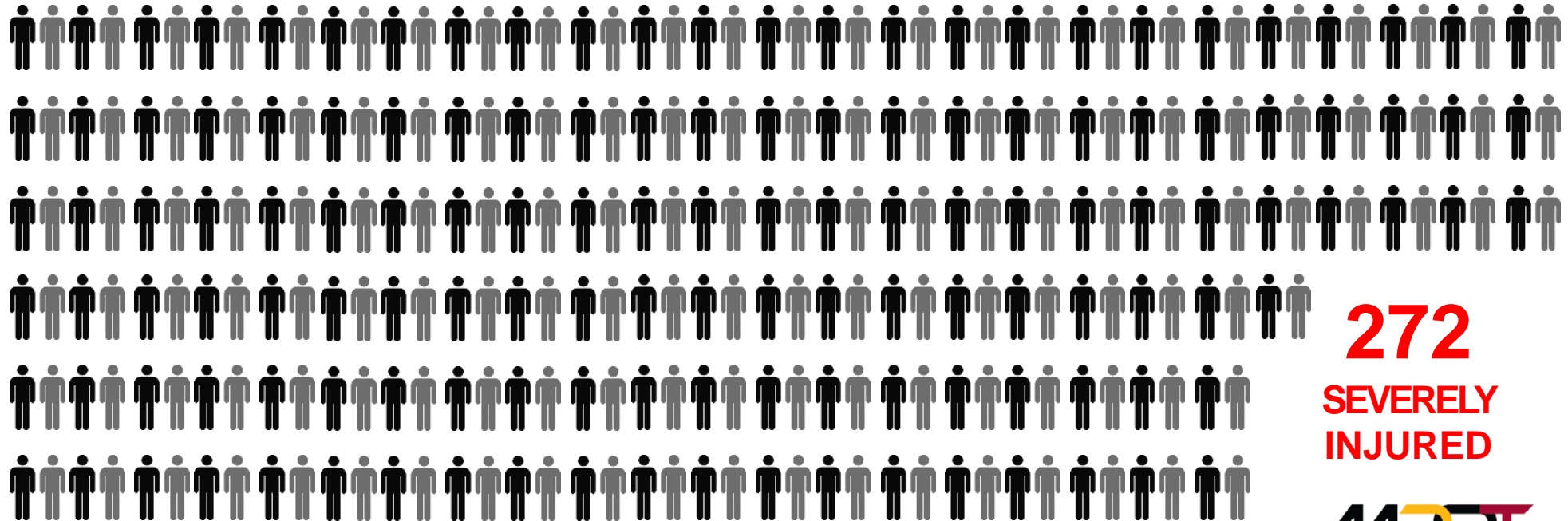
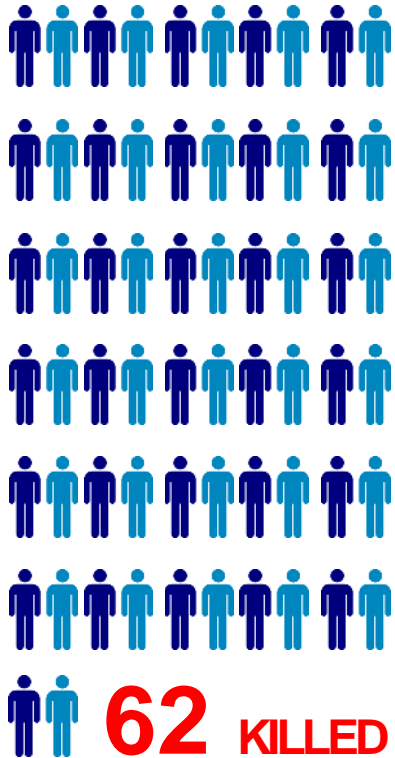
- Nationally pedestrian fatalities increased by 492 (a 9.0-percent increase) between 2015 and 2016, and are at their highest number since 1990.
- Nationwide 15 pedestrians are killed and 185 are injured in crashes every day\*.



Source: FARS 2007 Final File, 2016 ARF



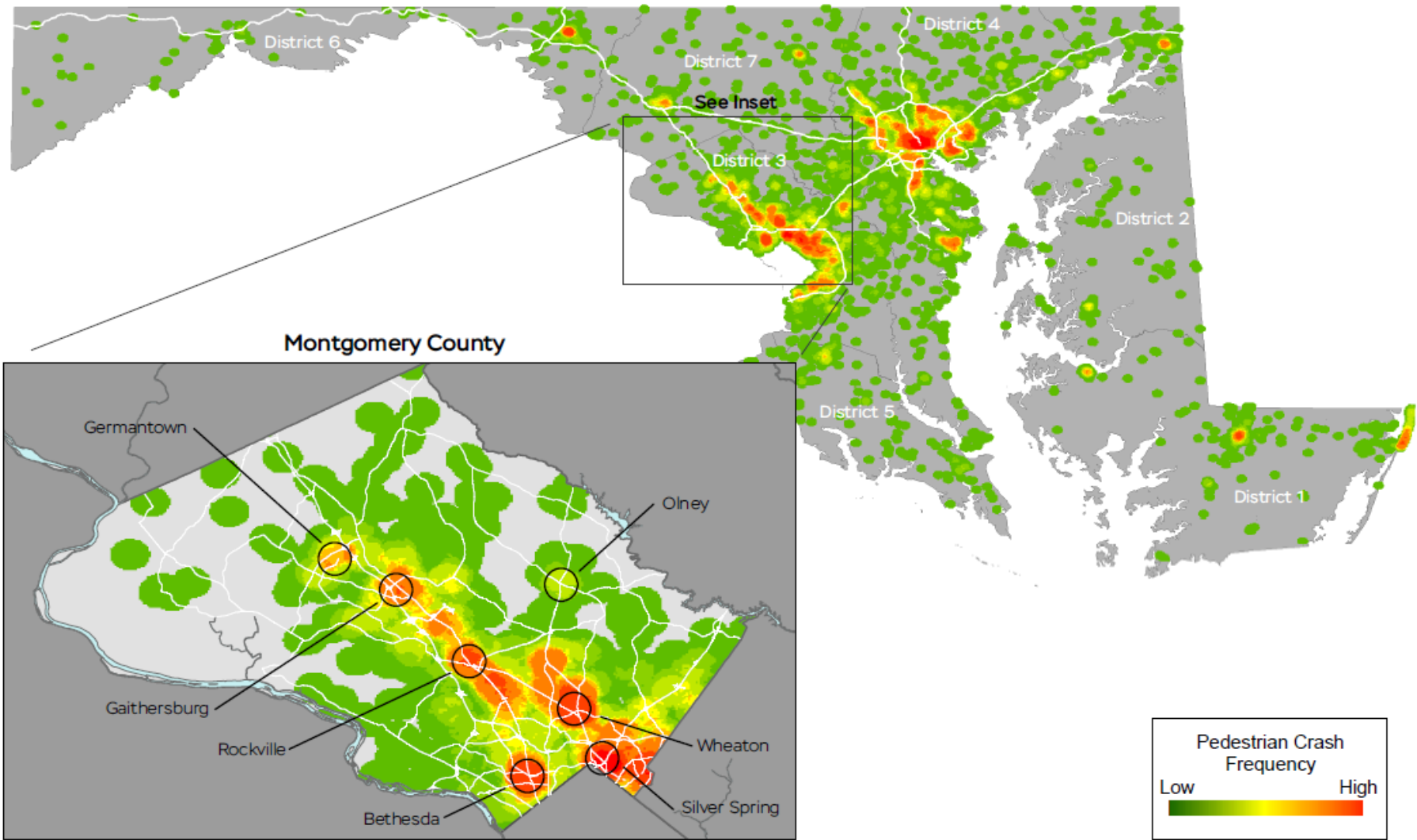
# 2018 PEDESTRIAN CRASHES - Statewide





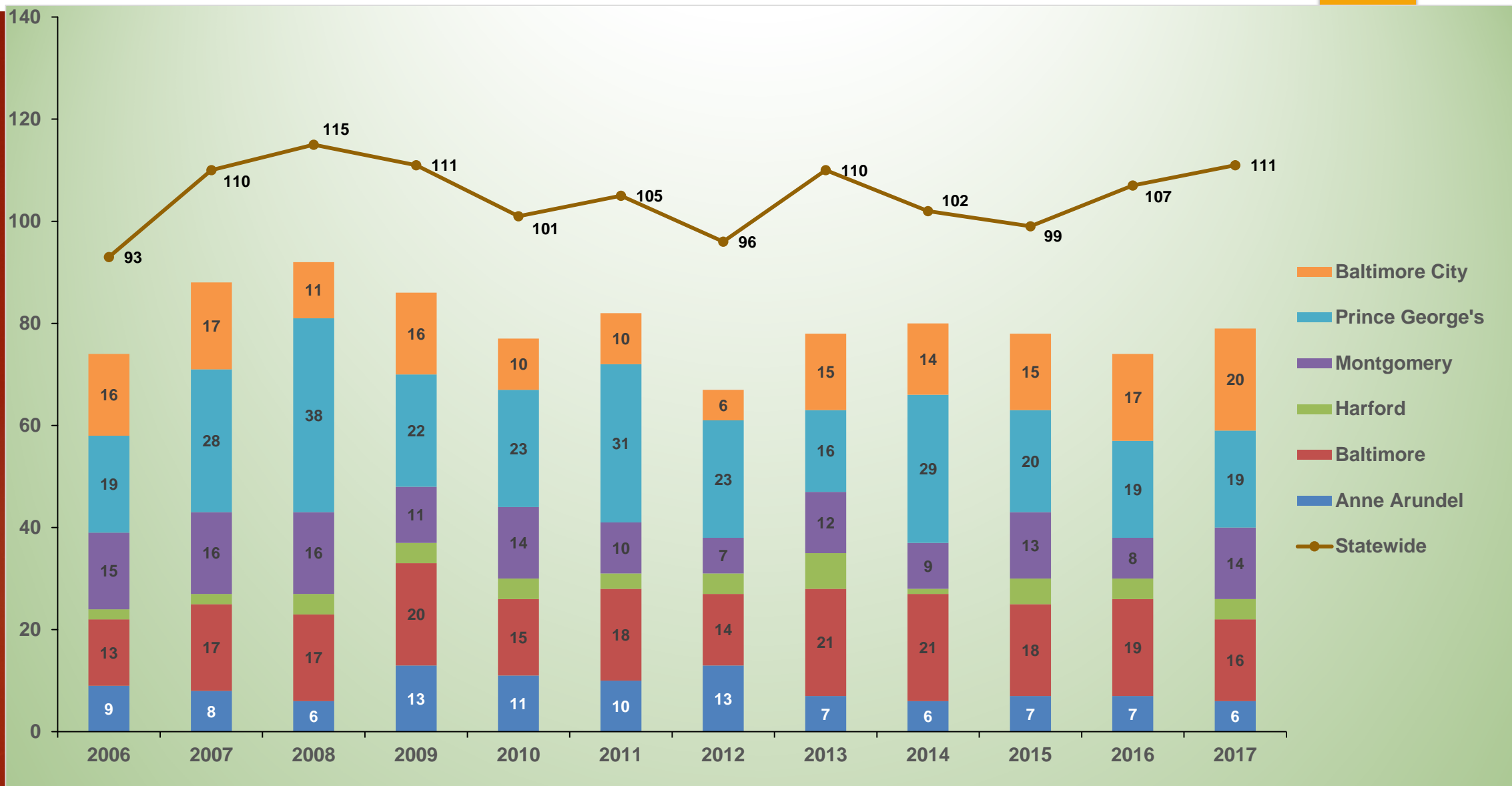
# Statewide Pedestrian Crashes

Data for 2013 - 2017



Updated: 11/7/18

Pedestrian Crashes  
Statewide &  
Montgomery County

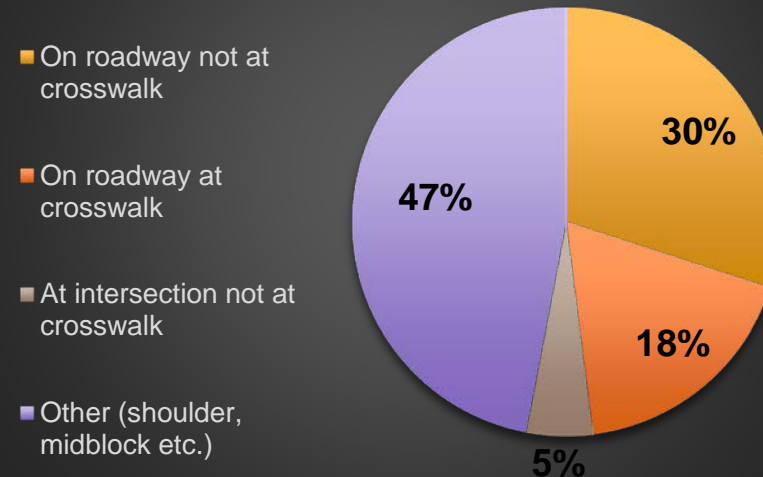


**Maryland Fatal Pedestrian Crashes 2006-2017**

# CRASH DATA TRENDS & PEDESTRIAN RISK FACTORS

- ▶ **30** percent of all crashes happen at intersections.
- ▶ **35** percent of all crashes happen between the hours of 3 pm and 7 pm.
- ▶ **Speed** is a major factor in crash survivability for pedestrians.
  - ▶ At speeds higher than 40 mph there is 77 percent likelihood of fatality or severe injury.

Where are Pedestrian Crashes Happening?



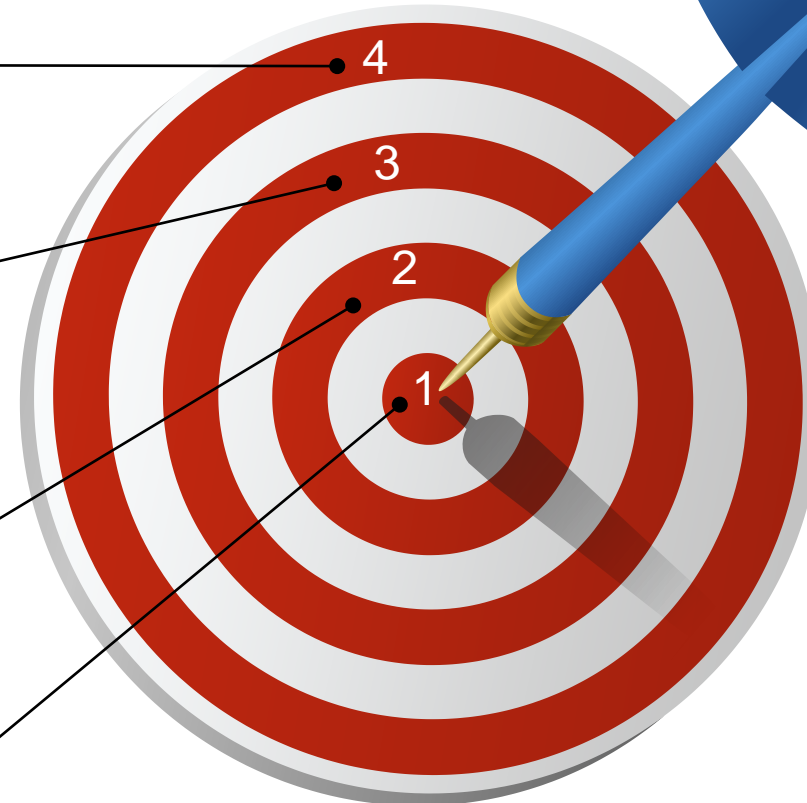


WHAT ARE WE  
DOING?



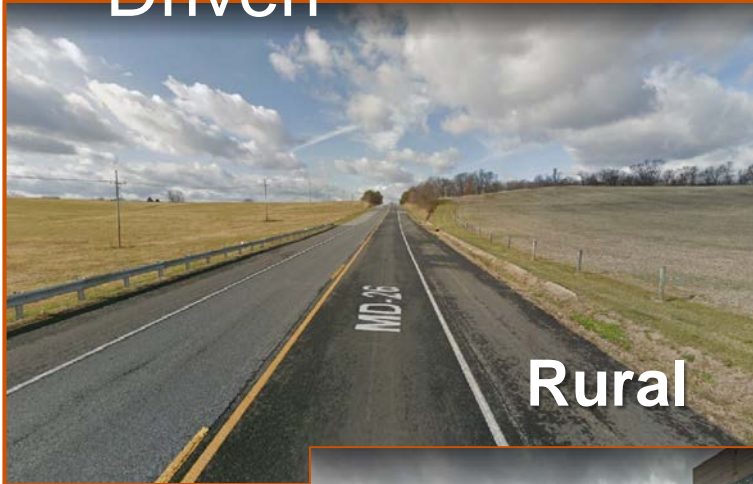
# DATA DRIVEN APPROACH

- DATA - ROOT CAUSE**  
where, how, when and why crashes are occurring.
- CONTEXT - DEMOGRAPHIC & LAND USE DATA**  
who and where are our roadway users.
- INFRASTRUCTURE**  
the state of our roadway, bus stops, lighting.
- TARGET**  
Targeted and comprehensive pedestrian safety solutions



# NEW URBAN STANDARD DESIGN

Beyond Functional Classifications – Land Use & User Driven







# PCAT – Pedestrian Crash Analysis Tool

## PRSA Dashboard – MD 97 in Aspen Hill

# TAKING EVERY OPPORTUNITY

## Implementation Strategies

- ▶ **Short Term**  
Lane Use, Width, Traffic Control, Striping,  
Lower Speed Limits in CBDs
- ▶ **Mid Term**  
Minor Geometric Fixes
- ▶ **Long Term**  
Major Projects, Realignment







# WHERE TO START?

# IMPROVEMENTS TO MD 97 - Wheaton



## Short Term Projects

Remark & Upgrade All Crosswalks in Central Business District (CBD)  
Ped Recall at All Signals in CBD  
Curb Markers

## Mid Term Projects

Median Fence between Reedie Drive and Price Avenue  
Lead Pedestrian Interval at Reedie Drive

## Long Term Options

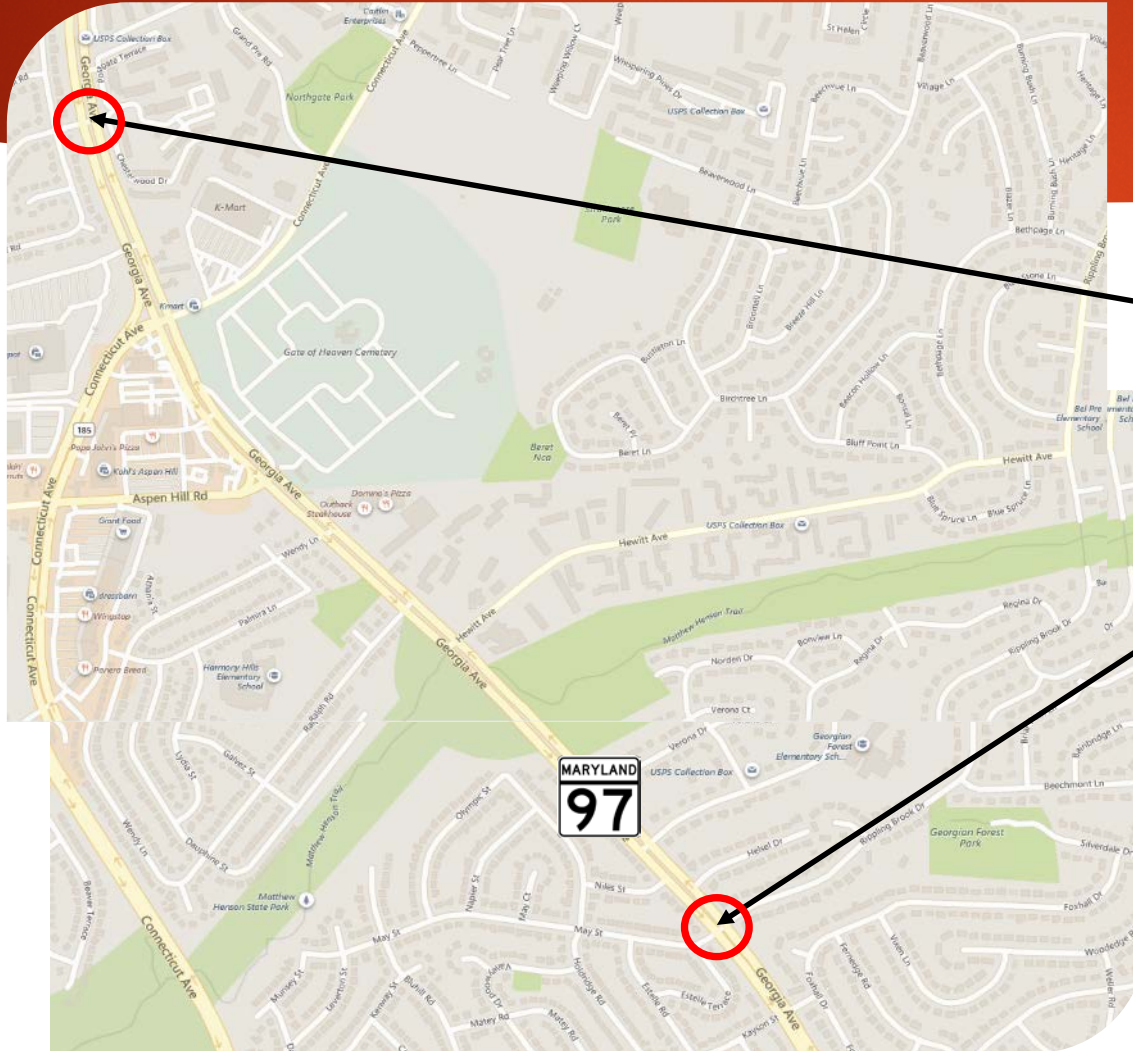
Ped Signal Study at Price Avenue  
Increase Intersection Lighting  
Pedestrian Access Improvement Study near the intersection of MD 586 and Prichard Road  
Evaluate Bus Stop Locations with MCDOT

**Redesign for Pedestrian Focus**





# IMPROVEMENTS TO MD 97 – Aspen Hill



## Short Term Projects

Remark & Upgrade All Crosswalks and Stop-Bars

Review and Adjust Ped Timing

New Signal at MD 97 and Heathfield w/ APS/CPS and crosswalks – **Installed by December 2018.**

## Mid Term Projects

New Signal at MD 97 at May Street/ Rippling Brook w/ APS/CPS and crosswalks – **Installed by Summer 2019.**

## Long Term Options

Lane Width Reduction

New Intersection Lighting As Needed

**Redesign for Pedestrian Focus**





# MOVING FORWARD - PARTNERSHIP



# PARTNERSHIP

## Education & Enforcement

- ▶ EDUCATION CAMPAIGN
- ▶ ENFORCEMENT
- ▶ DESIGNING FOR PEDESTRIANS



**MDOT**  
MARYLAND DEPARTMENT  
OF TRANSPORTATION

STATE HIGHWAY  
ADMINISTRATION

# CORRIDOR APPROACH

- ▶ Revamped pedestrian safety audit - identify corridors (approximately 1 mile).
- ▶ Selected corridor considers:
  - Land use characteristics and pedestrian generators
  - Severity of crashes, fatalities, crash patterns, frequency of severe crashes, ratio of severe crashes to overall crashes, district priority list
- ▶ Re-evaluated all PRSA corridors.
- ▶ Streamlined PRSA process.
- ▶ Focused process on implementation.







# Thank you.

**Greg Slater, MDOT SHA Administrator**

gslater@sha.state.md.us