

Moving Maryland

Toward Zero Deaths



Maryland's Strategic Highway Safety Plan

Toward Zero Deaths

Goal: To ensure a safe, secure, and resilient transportation system for all users

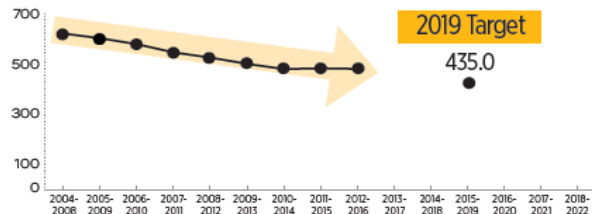
Objective: Reduce the number of lives lost and injuries sustained on Maryland roads

Strategy: Build partnerships to strengthen state and local efforts to improve safety

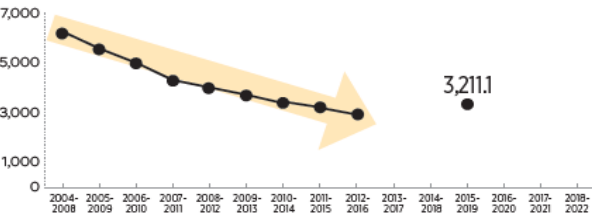


MARYLAND
STRATEGIC
HIGHWAY
SAFETY PLAN
2016-2020

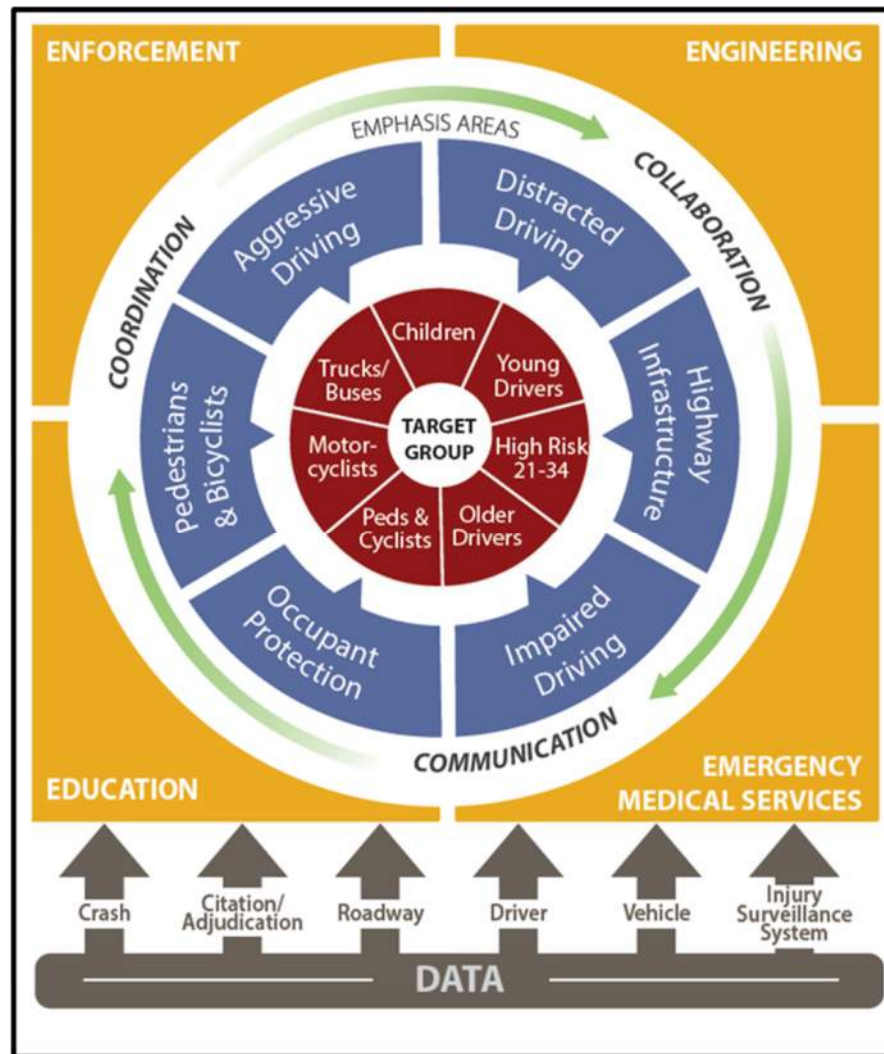
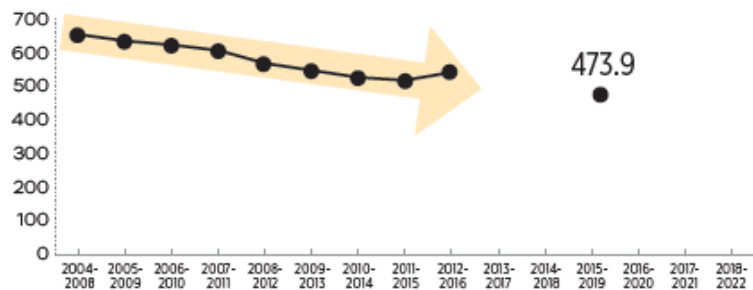
Total Fatalities



Total Serious Injuries



Non-motorized Fatalities & Serious Injuries



Maryland Motor Vehicle Occupant Fatality Contributing Factors

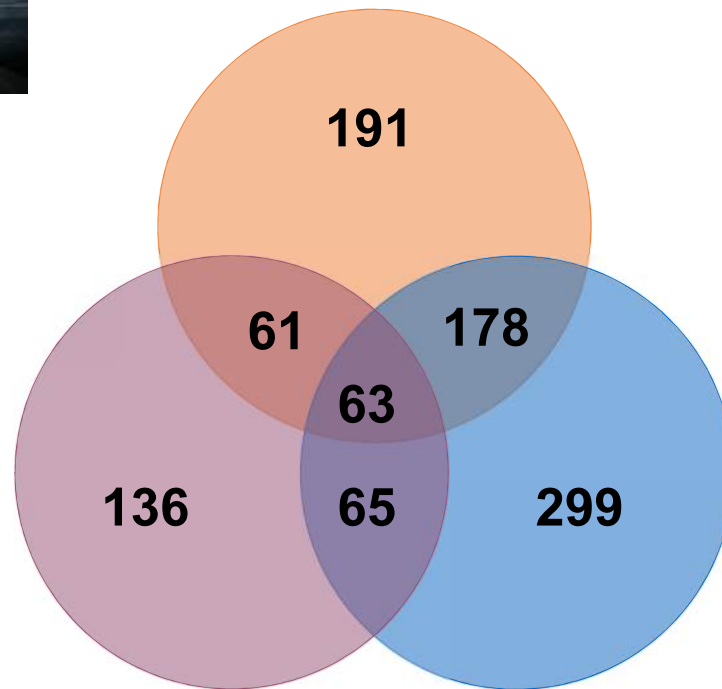


Unbelted = 493
(32% of all fatalities)

1,563 motor vehicle occupant deaths for the period 2013-2017.

Sixty-four percent (n=993) involved speeding, impairment, or lack of belt use.

Maryland's 2018 Observed Seat Belt Rate is 90.3%



Speed = 325
(21% of all)



Impaired = 605
39% of all)

Behavioral Emphasis Area Spending

Overall grant funds obligated

- Statewide - \$12.6 million
- National Capital Region - \$1.7 million

Funds used to support media, enforcement, education, and other programs



Engineering Emphasis Areas

Highway Infrastructure

An average of **276** fatalities and **2,169** serious injuries occurred in crashes involving infrastructure-related issues.

- Intersection
- Run-Off-Road
- Work Zones

Pedestrian and Bicyclist

- An average of **105** fatalities and **362** serious injuries occurred in crashes involving pedestrians.
- An average of **7** fatalities and **68** serious injuries occurred in crashes involving bicyclists.
- Pedestrian fatalities account for 25% of total fatalities.

Highway Infrastructure Crash Mitigation



Spot Improvements

Identify intersections where the Crash Severity Index is high and implement safety improvements
Identify corridors where the Crash Severity Index is high and address roadway elements that contribute to crashes



Systemwide Improvements

Develop and implement system-wide improvements to reduce the number and severity of infrastructure-related crashes
Identify, develop, and implement system-wide improvements that address the safety of vulnerable user groups



Commercial Vehicle Improvements

Identify and implement recommended safety initiatives for commercial motor carriers

Spot Improvements



An annual list of Candidate Safety Improvement Locations is prepared by the Office of Traffic and Safety identifying intersections and sections of roadway based on crash numbers, rates, and severity



Road Safety Audits are conducted by independent teams along roadways where safety concerns or patterns of crashes have been identified



Fatal crash locations are reviewed by District Traffic office soon after the crash to determine if all traffic control devices are up to current standards



District Traffic office responds to customer concerns about traffic safety and conduct studies as requested



Typical HSIP Projects

Data Driven
Approach to
Target
Specific Crash
Trends

Geometric Modifications – ADA,
Curb Radii, Turn Lanes, Roundabouts
Traffic Signal Modifications
Lighting
Rumble Strips
Raised Pavement Markers
Pedestrian Improvements
Traffic Barrier



Systemwide Improvements



- High Friction Surface Treatment
- Low Cost Improvements at Ramp Termini to target Wrong Way Driving Crashes
- Guardrail Upgrades
- Pedestrian Roadway Safety Audit (PRSA) program
- Pedestrian Best Practices Guidelines
 - Pedestrian Hybrid Beacon or HAWK
 - Rectangular Rapid Flashing Beacon (RRFB)

Yellow Extension Lines



Wrong Way Driving Crashes



Wrong way crashes are approximately 0.4% of crashes Statewide (compared to 2.8% nationally)

High percentage of crashes involve alcohol use

Most crashes happened at night and involved younger drivers

Low cost, innovative improvements identified – signing, pavement marking, signal modifications



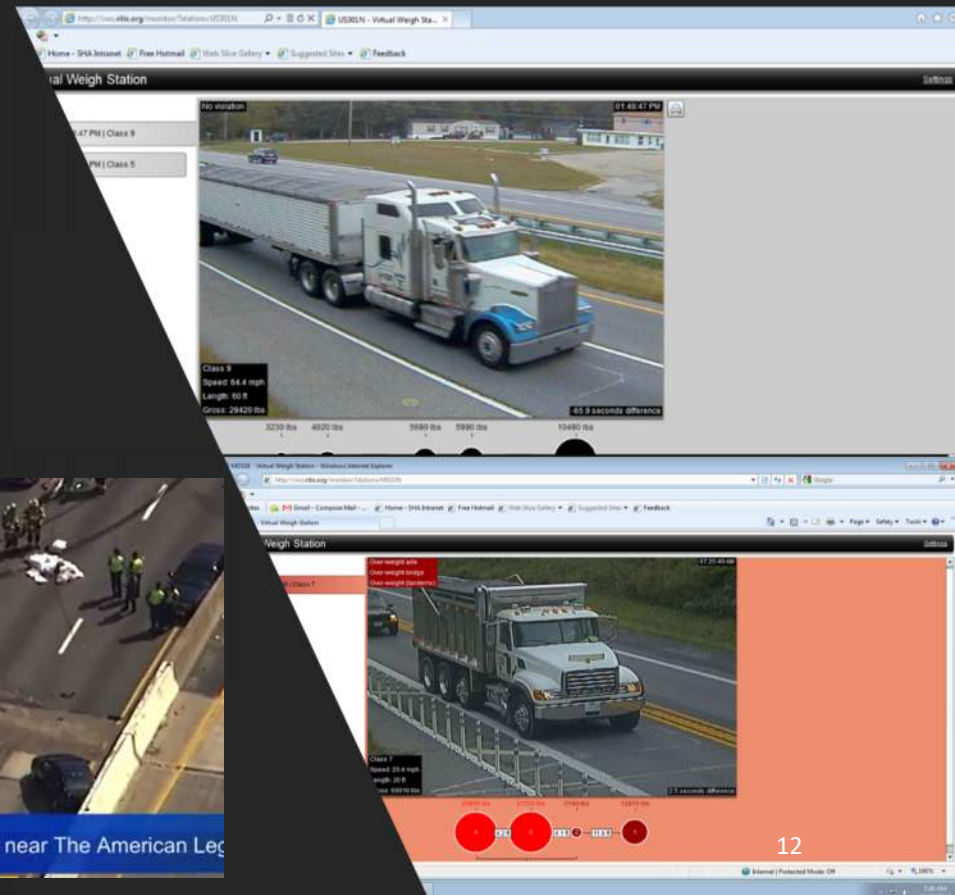
Commercial Vehicle Safety Improvements

Over 100,000 Inspections conducted yearly
Maryland Virtual Weigh Station (VWS) Program

- 20 VWS deployed statewide

Maryland State Police Inspection of Trucks

- Out of Service rate at 40 % for certain categories



Pedestrian and Bicyclist Safety

Pedestrian Roadway Safety Audits

- 17 PRSA's conducted
- 7 in Montgomery County and 10 in Prince George's County
- More than 750 recommendations generated
- Recommendations used to initiate short term, mid term, and long term projects

Sidewalk Programs

Safe Routes to School Programs

Urban Mobility Program



Context Driven Mitigation



In urban areas:

- Lower speed limits
- Continental crosswalks
- No Turn on Red
- Leading Pedestrian Intervals

Lower speed limit implemented along:

- MD 97 (Wheaton, MD)
- MD 410 (Bethesda, MD)
- MD 188 (Bethesda, MD)

Several more corridors planned....

Maryland Highway Safety Infrastructure Spending

Fiscal Year	Statewide*	National Capital Region*
2018	53.5	20.7
2019	49	9.4
2020	64	14.5

*All dollar figures in millions

For Further Information

[Maryland Strategic Highway Safety Plan](#)

[Maryland Highway Safety Improvement Program](#)

[Maryland Highway Safety Plan](#)

[MDOT SHA Transportation Performance Management Dashboard](#)

[Maryland Highway Safety Office](#)



Contacts

Cedric Ward, P.E., PTOE

Office of Traffic & Safety

MDOT State Highway Administration

cward@mdot.maryland.gov

