



Prince
George's
county

MARYLAND



experience
expand
explore

Strategic Roadway Safety Plan 2017 - 2020



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Rushern L. Baker, III
County Executive

PRINCE GEORGE'S COUNTY GOVERNMENT

OFFICE OF THE COUNTY EXECUTIVE

A Message from the County Executive:

Prince George's County is a vibrant and thriving county. Over the last several years Prince George's County has become the leading catalyst in the State of Maryland for economic development, job creation, and innovation. These are wonderful accomplishments that we have worked very hard together to achieve. As your County Executive, I am well aware that the primary mission of government is to ensure the health and safety of its citizens. Few things play a bigger role in achieving that mission than the roadways that we travel on a day to day basis conducting our daily lives. Over the last several years, Prince George's County has made major strides in improving safety in and around our roadway network. However, significant challenges remain, and building on that progress will require a concerted and coordinated effort.

This Strategic Roadway Safety Plan (SRSP) is our roadmap to decreasing and ultimately eliminating traffic deaths and injuries on our roadways. It is data driven, specific, and achievable, bringing County agencies together with state and regional partners to collectively address the Four E's of Safety: Engineering, Education, Enforcement, and Emergency services. Its prescriptions and methodologies provide concrete steps to be taken to achieve that objective, and criteria through which to measure our progress. The SRSP is an important document whose implementation will benefit us now and for years to come.

I wish to thank all who have been involved in developing the SRSP, especially the Department of Public Works & Transportation, the Police Department and the Prince George's County Pedestrian and Bicycle Safety Work Group who have worked so hard to move this project forward. As the plan moves from development to implementation, these agencies and others will be reaching out to citizens across the County to work with them to drive our road related serious injuries and fatalities down to zero. I ask our citizens to be responsive to that outreach. As public servants and residents of Prince George's who love our County and our people, I can think of few goals more worthy of pursuing.

Sincerely,

A handwritten signature in black ink, appearing to read "Rushern L. Baker, III".

Rushern L. Baker, III
County Executive

14741 Governor Oden Bowie Drive, Upper Marlboro, Maryland 20772
(301) 952-4131
www.princegeorgescountymd.gov

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OUR COMMITMENT TO SAFETY

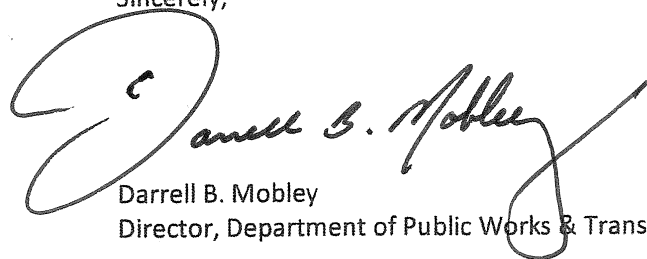
Improving roadway safety is a top priority for Prince George's County since secure travel is directly linked to the quality of life of residents, commuters, and visitors. We recognize that for Prince George's County to be a leader in the State of Maryland and the Washington Metropolitan Region, our roadways must be safe for drivers and passengers and our most vulnerable users, pedestrians and bicyclists.

Prince George's County in collaboration with the Maryland Department of Transportation's Maryland Highway Safety Office (MHSO) and the State Highway Administration (SHA) has adopted the Toward Zero Deaths (TZD) approach to improve the safety of our roadways. Since 2008, an average of 99 deaths and 503 serious injuries occurred each year on a county, state, or municipal roadway in Prince George's County. The goal of TZD is to cut vehicle related fatalities and serious injuries in half by 2030, while the ultimate goal is to reach zero. To achieve this overarching goal, the TZD approach utilizes five-year plans, each with their own annual goals concerning the reduction of vehicle related fatalities and serious injuries.

The 2017-2020 Strategic Roadway Safety Plan (SRSP) is the first wide-ranging blueprint for Prince George's County. Implementing the comprehensive solutions outlined in the SRSP requires a collaborative process, involving agencies at the local, state, and regional level and built upon the *Four E's of Safety*: Engineering, Education, Enforcement, and Emergency services.

We would like to thank the Prince George's County Pedestrian and Bicycle Safety Work Group for the development of the SRSP and their commitment to collaborating across sectors to promote safety and reduce fatalities and serious injuries in Prince George's County.

Sincerely,



Darrell B. Mobley
Director, Department of Public Works & Transportation

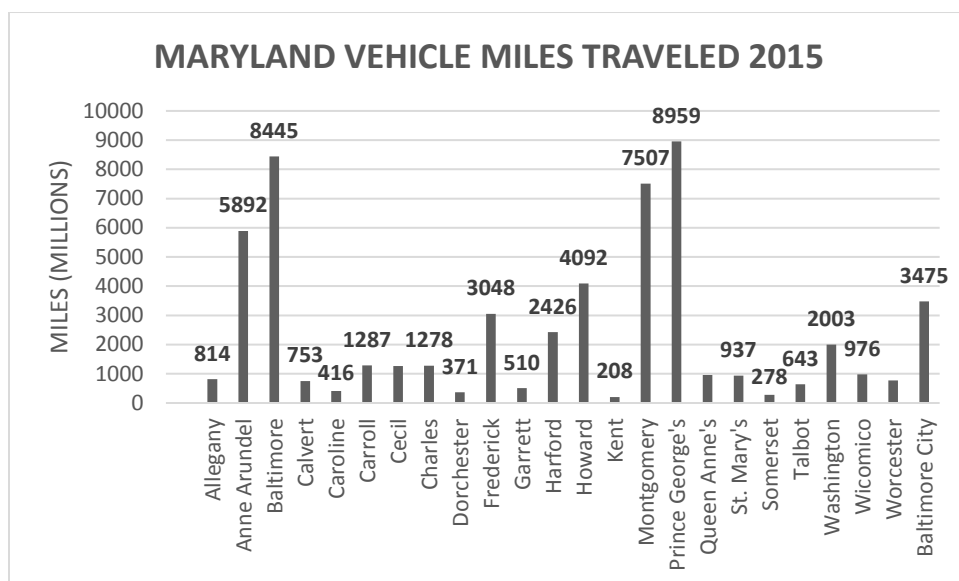
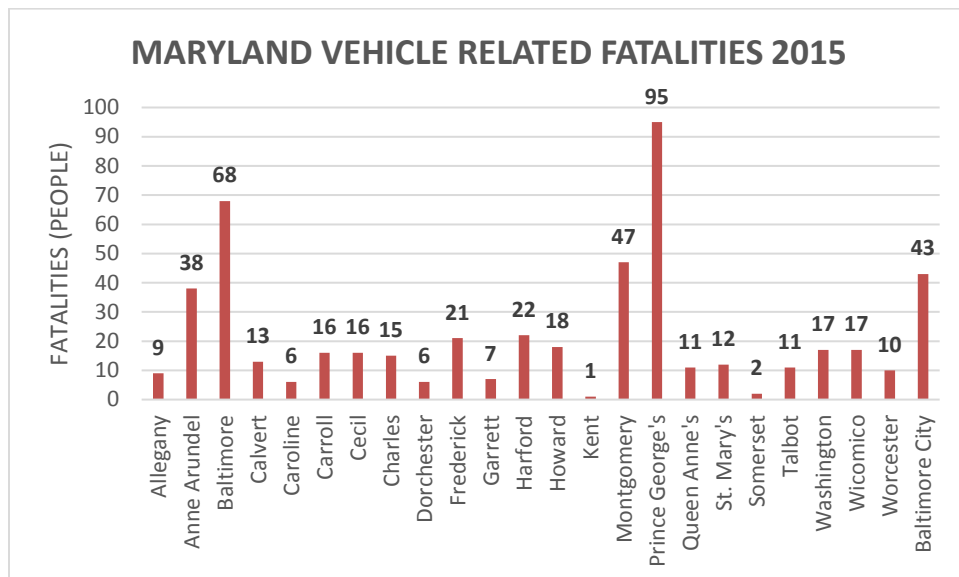


Henry P. Stawinski, III
Chief of Police

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TOWARD ZERO DEATHS

In 2015, Prince George's County experienced more vehicle related fatalities than any other county in Maryland. However, Prince George's County's roadways experience more vehicle miles traveled (VMT) than other counties in the state due to geographic size, metropolitan location, and population. These factors contribute to higher volumes of roadway users which can contribute to higher incidences of vehicle crashes that may result in injury and fatality.



To better understand and evaluate the crash history within Prince George's County, rates are calculated to analyze vehicle related fatalities in relation to vehicle miles traveled (VMT) and population. The table below provides the number of vehicle related fatalities and fatality rates by VMT and population for each county. When VMT and population are analyzed, more than half of the counties in Maryland have fatality rates greater than the state rate (see counties in red).

2015 MARYLAND VEHICLE RELATED FATALITY RATES¹

County	Fatalities	VMT (millions)	Rate	Population	Rate
Allegany	9	814	1.11	74,650	1.21
Anne Arundel	38	5,892	0.64	559,600	0.68
Baltimore	68	8,445	0.81	832,050	0.82
Calvert	13	753	1.73	91,650	1.42
Caroline	6	416	1.44	33,900	1.77
Carroll	16	1,287	1.24	168,550	0.95
Cecil	16	1,269	1.26	103,600	1.54
Charles	15	1,278	1.17	157,100	0.95
Dorchester	6	371	1.62	33,250	1.80
Frederick	21	3,048	0.69	245,600	0.86
Garrett	7	510	1.37	30,100	2.33
Harford	22	2,426	0.91	252,000	0.87
Howard	18	4,092	0.44	309,050	0.58
Kent	1	208	0.48	20,600	0.49
Montgomery	47	7,507	0.63	1,036,000	0.45
Prince George's	95	8,959	1.06	900,350	1.06
Queen Anne's	11	960	1.15	50,150	2.19
St. Mary's	12	937	1.28	113,900	1.05
Somerset	2	278	0.72	26,900	0.74
Talbot	11	643	1.71	39,100	2.81
Washington	17	2,003	0.85	151,200	1.12
Wicomico	17	976	1.74	102,950	1.65
Worcester	10	767	1.30	52,900	1.89
Baltimore City	43	3,475	1.24	625,000	0.69
State	521	57,314	0.91	6,010,150	0.87

¹ Maryland Motor Vehicle Administration, Maryland Highway Safety Office (June 2016)

In light of these staggering statistics, in November 2012, County Executive Rushern L. Baker, III made pedestrian safety a top priority and charged CountyStat, (a countywide program which tracks data, identifies solutions, and monitors progress towards addressing county issues) to investigate the issue and present recommendations and actions. In response, the Prince George's Department of Public Works and Transportation (DPW&T) led the formation of the Prince George's County Pedestrian and Bicycle Safety Work Group comprised of key agencies including DPW&T, Prince George's County Police Department, Prince George's County Fire and Emergency Medical Services, Prince George's County Public Schools, Prince George's County Health Department, Maryland State Highway Administration (SHA), Maryland Highway Safety Office (MHSO), and The Maryland-National Capital Park and Planning Commission (M-NCPPC). Further, the Prince George's County Council issued Council Resolution 37 (2013) to reinforce the County's commitment in making traffic safety a top priority. This legislation granted official authority to the work group to develop appropriate policies and programs to address bicycle and pedestrian safety in the County.

DR-3

COUNTY COUNCIL OF PRINCE GEORGE'S COUNTY, MARYLAND
2013 Legislative Session

Resolution No. CR-37-2013
 Proposed by Council Member Toles
 Introduced by Council Members Toles, Franklin, Harrison, Lehman and Otton
 Co-Sponsors _____
 Date of Introduction May 14, 2013

RESOLUTION

1 A RESOLUTION concerning
 2 Prince George's County Pedestrian and Bicycle Safety Work Group
 3 For the purpose of establishing the Prince George's County Pedestrian and Bicycle Safety Work
 4 Group to review and evaluate ways and to recommend appropriate policies and/or legislation to
 5 address pedestrian and bicycle safety in the County.
 6 WHEREAS, the Prince George's County, according information from the Maryland
 7 Highway Safety Office, has had the Washington metropolitan region in pedestrian and bicyclist
 8 fatalities, averaging twenty-seven (27) incidents per year from 2006 to 2011, primarily occurring
 9 on State maintained highways; and
 10 WHEREAS, the Prince George's County participates in the Metropolitan Washington
 11 Council of Government's Regional "Street Smart" Pedestrian and Bicycle Safety Education
 12 Campaign, a bi-annual regional awareness program to reduce pedestrian and bicycle related
 13 fatalities and injuries through focus on the three "E's" - education, engineering and enforcement;
 14 and
 15 WHEREAS, the Prince George's County for the first time hosted the 2012 Spring "Street
 16 Smart" campaign in District Heights, Maryland; and
 17 WHEREAS, the Prince George's County Council in 2012 enacted CR-83-2012, a bill
 18 establishing a Complete and Green Street policy for Prince George's County, which adopted a
 19 principle that streets in the County safely and adequately accommodate motorized and non-
 20 motorized users, including pedestrians and bicycles; and
 21 WHEREAS, the County Council desires to further enhance the opportunities for addressing
 22 issues related to improving pedestrian and bicycle safety education, reducing pedestrian and

CR-37-2013 (DR-3)

and injuries, the implementation of the County's Complete Street policy, and
 private recommendations for implementation related thereto; and
 the Department of Public Work and Transportation has initiated an
 Group of governmental representatives to address pedestrian safety issues in
 the County Council supports the continuation of the mission of the Interagency
 Section 596 of the Charter provides that the County Council or County
 appoint, for designated periods, one or more temporary advisory boards of
 county who shall assist in the consideration of County policies and programs;
 BEFORE, BE IT RESOLVED by the County Council of Prince George's
 that the Interagency Work Group be renamed the Prince George's County
 Bicycle Safety Work Group and that its membership be expanded to review and
 city's response and to recommend appropriate policies and/or legislation to
 of pedestrian and bicycle safety in the County;
 FURTHER RESOLVED that the Pedestrian and Bicycle Safety Work Group shall be
 than (11) members as follows:
 members of the County Council or their designees, as appointed by the Chair;
 any Executive or the County Executive's representative;
 rector of the County Department of Public Works and Transportation (DPWT)
 r designee;
 Prince George's County Police Chief (PGPD) or their designee;
 Prince George's County Fire/EMS Chief (PGFD) or their designee;
 air of the Prince George's Planning Board or their designee;
 ief Executive Officer of the Prince George's County Board of Education or
 designee;
 ecretary of the Maryland Department of Transportation (MDOT) or their
 designee;
 representative of the Metropolitan Washington Council of Government's
 Transportation Planning Board (TPB) representing Prince George's County;
 10. A representative of a public utility company providing services within Prince George's
 County; and

CR-37-2013 (DR-3)

two citizens of Prince George's County.
 FURTHER RESOLVED that the Co-Chairs of the Work Group shall be the
 of Public Works and Transportation and the Prince George's County Police Chief or
 een.
 FURTHER RESOLVED that the Pedestrian and Bicycle Safety Work Group, in its
 identify and prioritize pedestrian and bicycle safety issues related to: (1) older and
 mmunities within the Developed Tier of the County, including but not limited to
 improvements, street lighting, complete streets and other pedestrian and bicycle safety
 urban centers and corridor nodes under Article 27A of the County Code; and (3)
 outed Development areas of the County.
 FURTHER RESOLVED that the Pedestrian and Bicycle Safety Work Group shall
 interim findings to the County Executive and County Council on or before December
 shall regularly report, at least bi-annually, to the County Executive and the County
 its work.
 FURTHER RESOLVED that copies of this Resolution be sent by the Clerk of the
 the County Executive, the Prince George's County Police Chief, the Director of
 and Transportation (DPWT), the Prince George's County Fire/EMS Chief, the
 the Prince George's Planning Board, the Chief Executive Officer of the Prince George's
 and of Education, the Secretary of the Maryland Department of Transportation and the
 Metropolitan Washington Council of Government's Transportation Planning Board

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PRINCE GEORGE'S COUNTY STRATEGIC ROADWAY SAFETY PLAN 2017-2020

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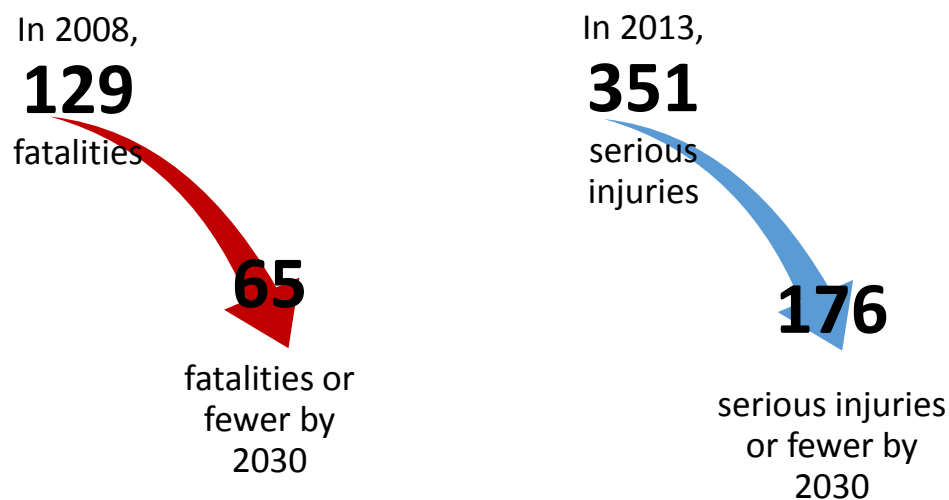
The Pedestrian and Bicycle Safety Work Group is a multidisciplinary committee which utilizes the *4 E's of Safety* to reduce serious injuries and fatalities. The *4 E's* include engineering, enforcement, education, and emergency services. The Pedestrian and Bicycle Safety Work Group joined the Maryland Department of Transportation's (MDOT), MHSO and SHA in adopting the *Toward Zero Deaths (TZD)* approach.



The initial goal of the TZD is to reduce vehicle related fatalities and serious injuries by at least 50 percent from a baseline year by 2030, with an eventual goal of zero traffic related deaths and serious injuries.

The year 2008 represents the first year that the state initiated TZD, and is the baseline year for measuring fatalities. The year 2013 is the baseline year for measuring serious injuries. 2013 was selected because there was a significant reduction of these incidents between 2008 and 2013. The goal is to halve the serious injuries even after that change.

In 2008, Prince George's County experienced 129 vehicle related fatalities and in 2013, 351 serious injuries. Therefore, utilizing the TZD approach, our goal is to reduce vehicle related fatalities to 65 or fewer and serious injuries to 176 or fewer by 2030.



The TZD is a data-driven approach that directs programming and countermeasures to targeted geographic areas and particular roadway user behaviors to reduce fatalities and serious injuries. Data regarding vehicle related crashes is vital to the TZD because it provides the foundation for the TZD goals and strategies.

Since 2015, all vehicle related crash data in the state of Maryland is reported utilizing the Automated Crash Reporting System (ACRS) and processed through the Maryland State Police Central Records Division (MSP-CRD). The new ACRS system replaced the older paper crash reporting system, the Enhanced Maryland Automated Accident Reporting System (eMAARS), and provides for more uniform, accurate, and timely data.



Through the TZD approach, **overall reduction targets** for vehicle related fatalities and serious injuries, and **reduction targets within special emphasis areas (EAs)** are established including:



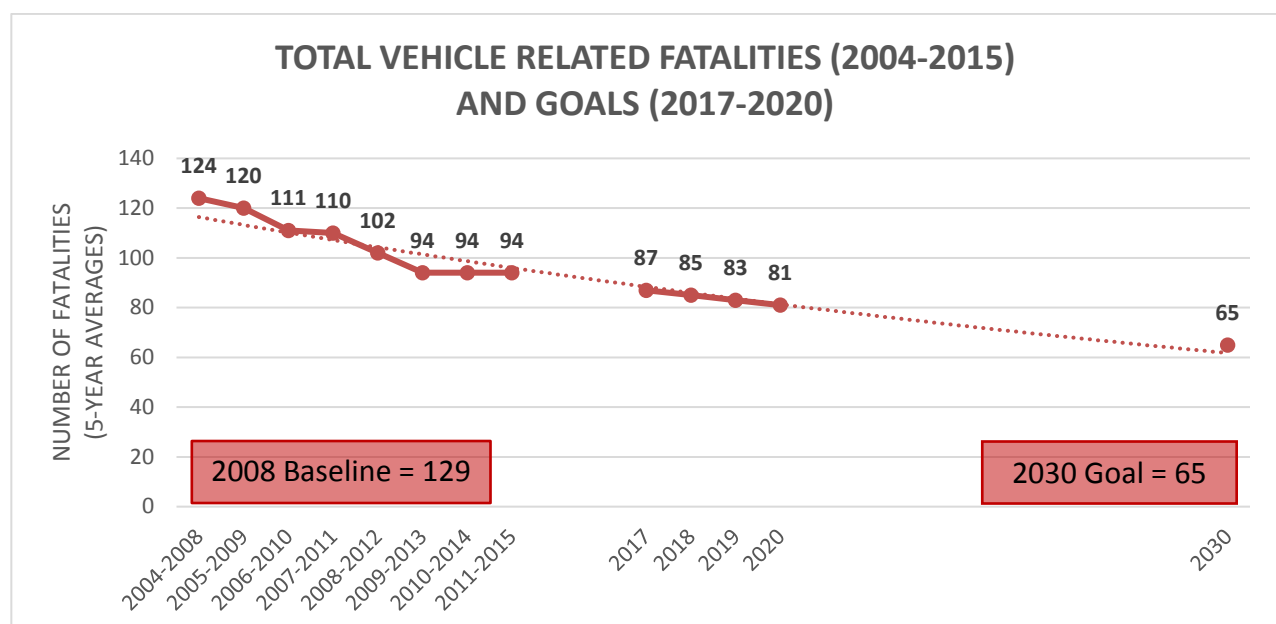
Contained within each of the six emphasis areas are specialized reduction goals and targeted strategies developed to address particular behaviors and populations. The *Prince George's County Strategic Roadway Safety Plan* represents the collaboration, input, and commitment of many agencies to reduce vehicle related fatalities and injuries in Prince George's County.

VEHICLE CRASH HISTORY & GOALS

FATALITIES

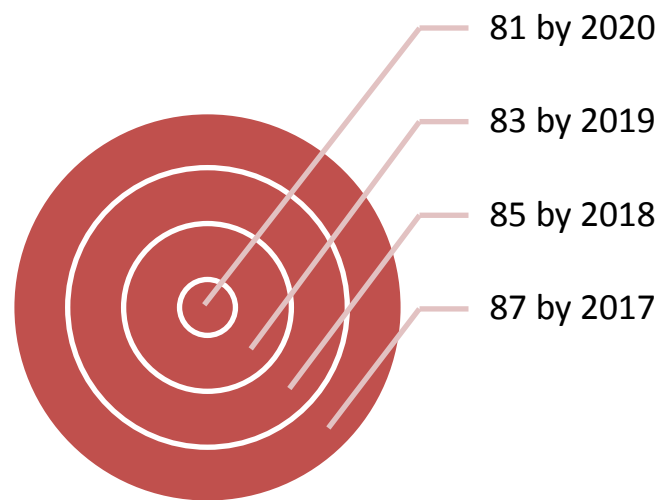
From 2004-2008, Prince George's County averaged 124 vehicle related fatalities annually. Since then, the number of vehicle related fatalities has decreased, presumably as a result of a combination of countermeasures including increased enforcement, safety, education, and infrastructure improvements.

Looking forward, Prince George's County intends to further reduce the number of vehicle related fatalities using Toward Zero Deaths (TZD) methodology, which seeks to cut vehicle related fatalities in half by 2030. TZD utilizes 2008 as a baseline year for vehicle related fatalities and calculates annual goals utilizing an exponential trend line anchored to the 2030 goal. Using 2008 as the baseline year, there were 129 vehicle related fatalities in Prince George's County, therefore our goal is to reduce the 2008 number by half by 2030 to 65 or fewer deaths.



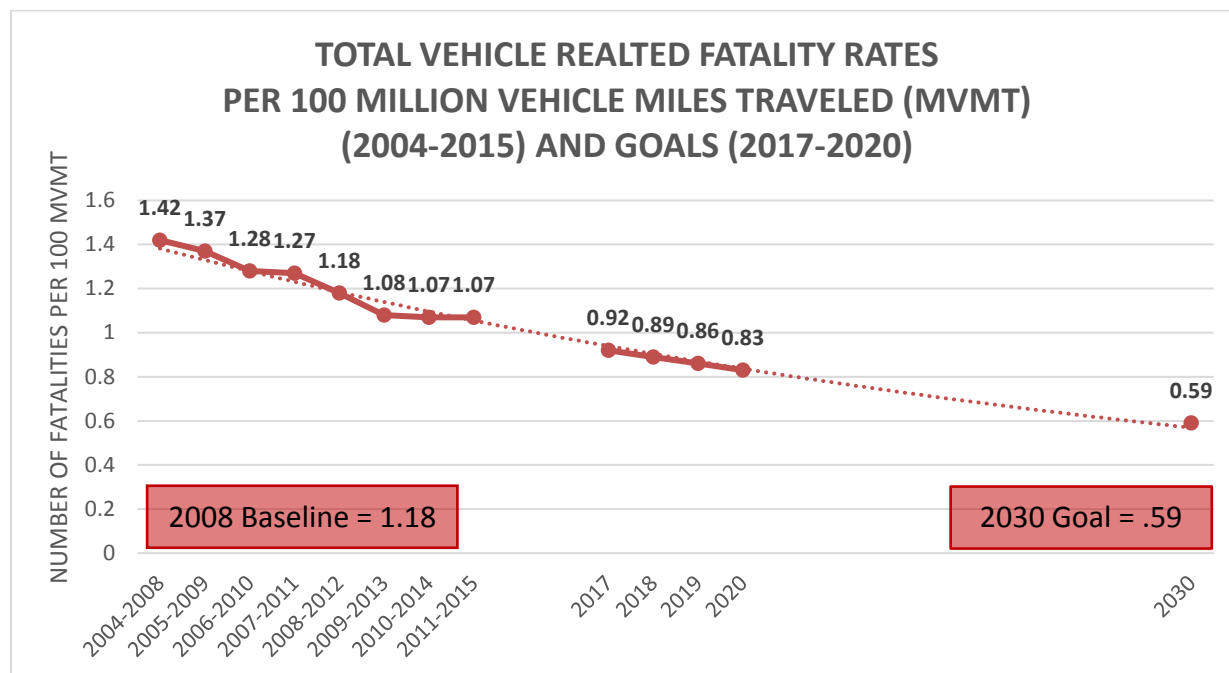
Note: Official 2016 data was not available at the time of the publishing of this report.

FATALITY GOAL: Reduce the annual number of vehicle related fatalities on all roads in Prince George's County to 81 or fewer by December 31, 2020.



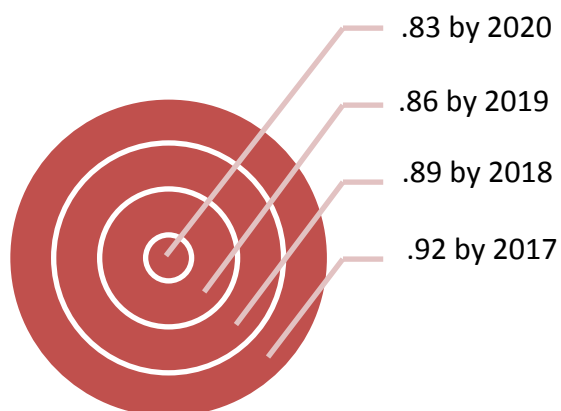
FATALITY RATES

The fatality rates below provide a way to examine vehicle related deaths relative to the amount of driving on roadways in Prince George's County. As discussed previously, Prince George's County has the highest vehicle miles traveled in the state.



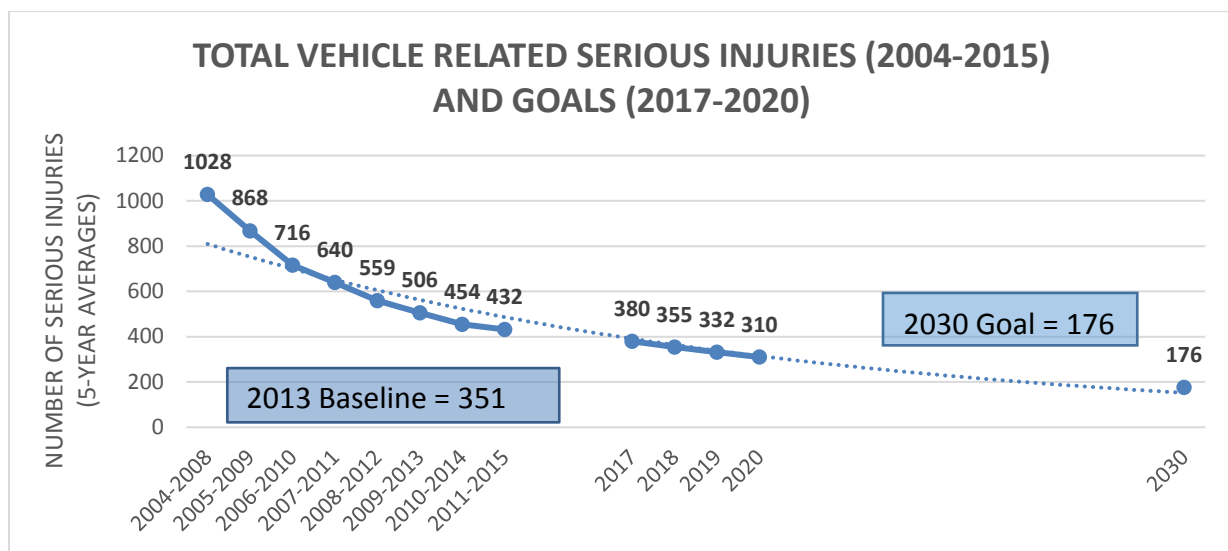
Note: Official 2016 data was not available at the time of the publishing of this report.

FATALITY RATE GOAL: Reduce the annual number of vehicle related fatalities per 100 million vehicle miles traveled (MVMT) on all roads in Prince George's County to .83 or less by December 31, 2020.



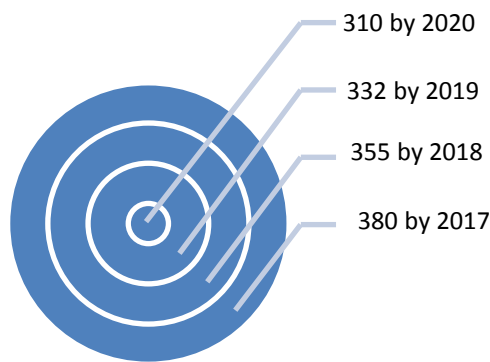
SERIOUS INJURIES

On average, 432 serious injuries resulting from vehicle related crashes occurred annually between 2011-2015 in Prince George's County. In the benchmark year of 2013, there were 351 vehicle related serious injuries in Prince George's County. Through TZD, the goal is to reduce the 2013 number by half by 2030. Unfortunately, in recent years the number of serious injuries has increased past the baseline year. However, it should be noted that the year 2013 recorded the single lowest number of serious injuries in recent history by a significant margin. Using an exponential trend line fitted to the goal of 176, annual goals are calculated in the graph below.



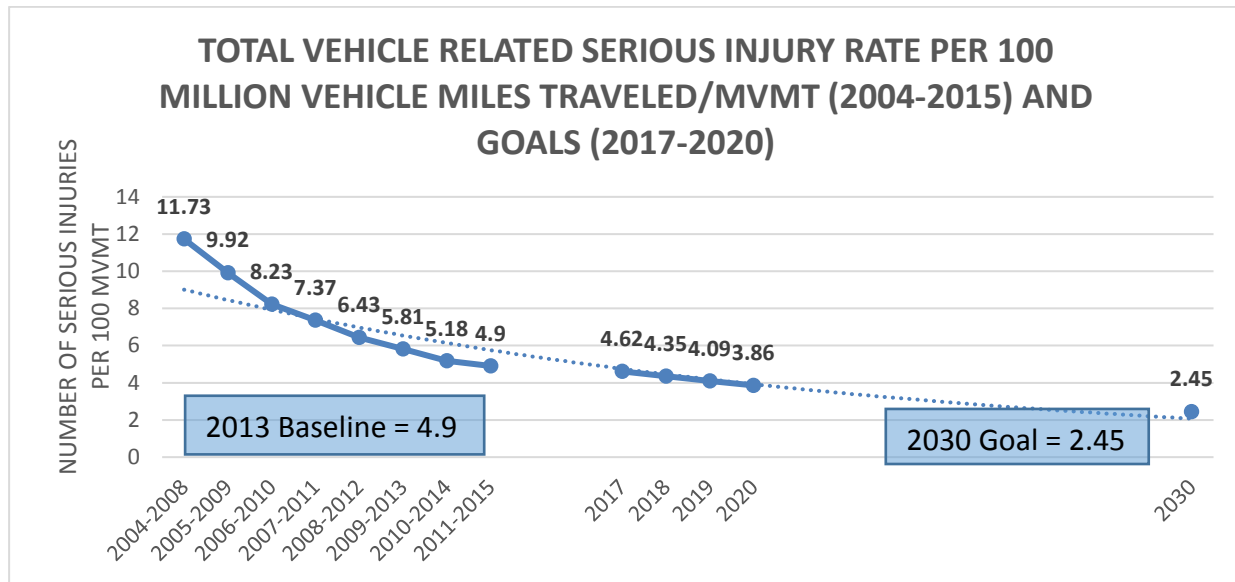
Note: Official 2016 data was not available at the time of the publishing of this report.

SERIOUS INJURY GOAL: Reduce the annual number of vehicle related serious injuries on all roads in Prince George's County to 310 or fewer by December 31, 2020.



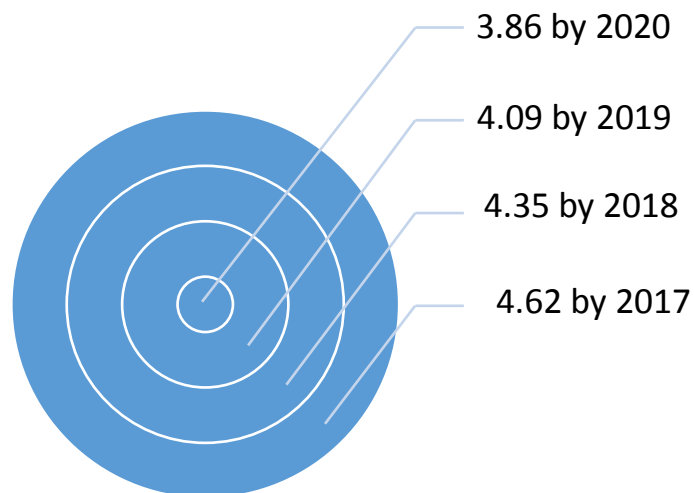
SERIOUS INJURY RATES

The serious injury rates below are calculated using the number of vehicle miles traveled on roadways in Prince George's County relative to the number of vehicle related serious injuries.



Note: Official 2016 data was not available at the time of the publishing of this report.

SERIOUS INJURY RATE GOAL: Reduce the annual number of vehicle related serious injuries per 100 million vehicle miles traveled (VMT) on all roads in Prince George's County to 3.86 or less by December 31, 2020.



EMPHASIS AREAS

To reach overall fatality and serious injury reduction targets, six special emphasis areas with annual reduction targets have been identified. Following the guidance of the MHSO, target reductions for the six emphasis areas were calculated using historical five year rolling averages with an exponential trend fixed to a 2030 endpoint. Consistent with the overall fatality and serious injury reduction methodology, the emphasis areas also utilized 2008 as the baseline year for fatalities and 2013 as the baseline year for serious injuries. The six emphasis areas are the following:



Aggressive
Driving



Distracted
Driving



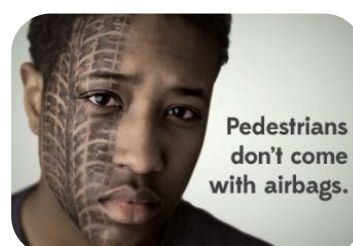
Impaired
Driving



Occupant
Protection



Highway
Infrastructure



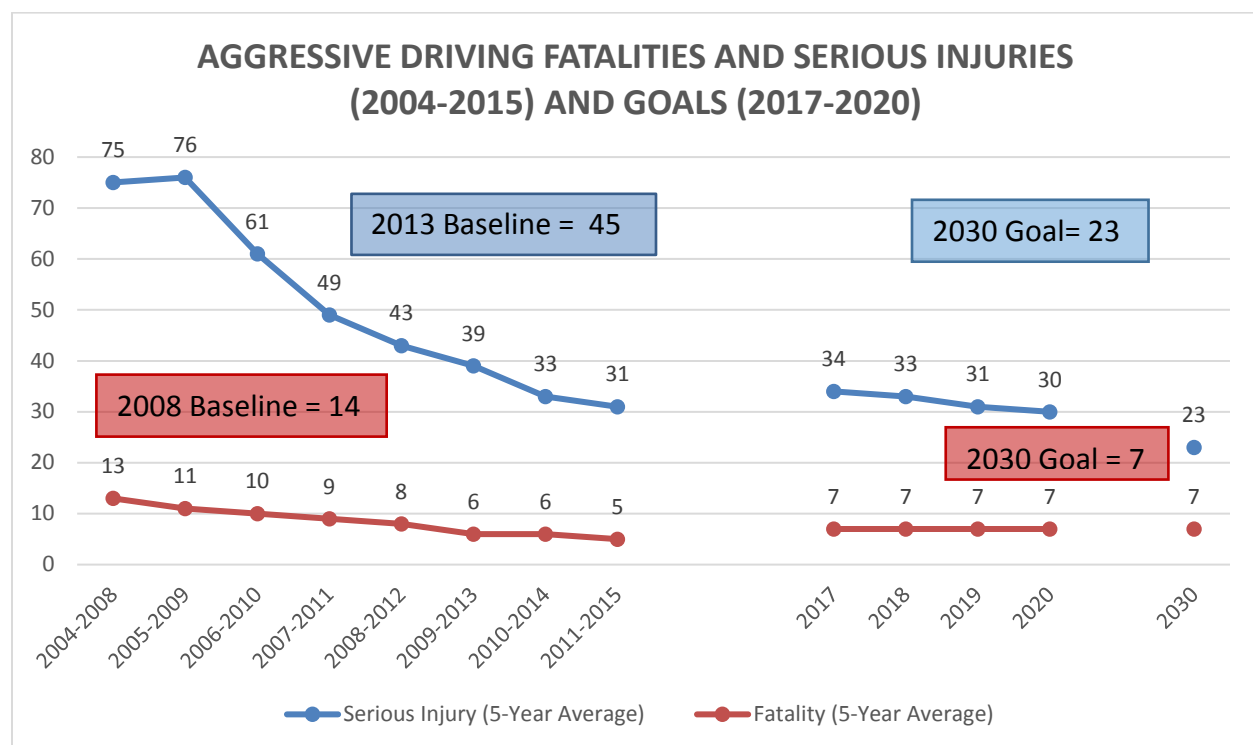
Pedestrians and
Bicyclists

AGGRESSIVE DRIVING

Prince George's ranks in the top five counties statewide for vehicle crashes resulting from aggressive driving and suffered the most fatal crashes associated with aggressive driving amongst other counties in Maryland. Aggressive driving is defined when a driver exhibits one of the following behaviors:

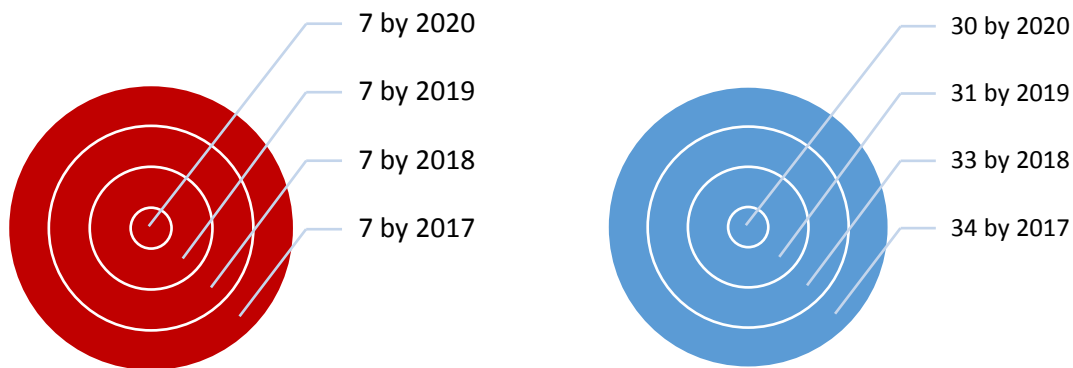
- Tailgating
- Running red lights and stop signs
- Improper passing
- Speeding
- Weaving
- Failing to yield the right of way
- Driving on a roadway emergency lane

Despite Prince George's County's statewide ranking, fatalities and serious injuries caused by aggressive driving have declined locally. Serious injuries had a marked decline in 2011 and 2012, as did fatalities in 2009 to 2015, thereby reducing the 5-year historical averages below the future goals. However, despite several encouraging years, the County remains committed to a long term reduction strategy provided through the TZD.



Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce fatalities and serious injuries to as few as possible, while never exceeding seven fatalities. We want to reduce serious injuries to 30 or fewer by 2020, and halve them from the baseline year to 23 or less by 2030



AGGRESSIVE DRIVING STRATEGIES

- A. Use **data-driven** approaches to identify driver behaviors and target audiences to focus on aggressive and speed-related enforcement, education, engineering, and emergency services.
- B. Promote and support **legislation and adjudication** to reduce aggressive driving.
- C. Identify and implement effective **engineering and technological solutions** to reduce aggressive driving.
- D. Conduct **public awareness, training, and media programs** aimed at reducing aggressive driving.
- E. Develop and implement aggressive driving **enforcement practices**.

2017 Smooth Operator Program

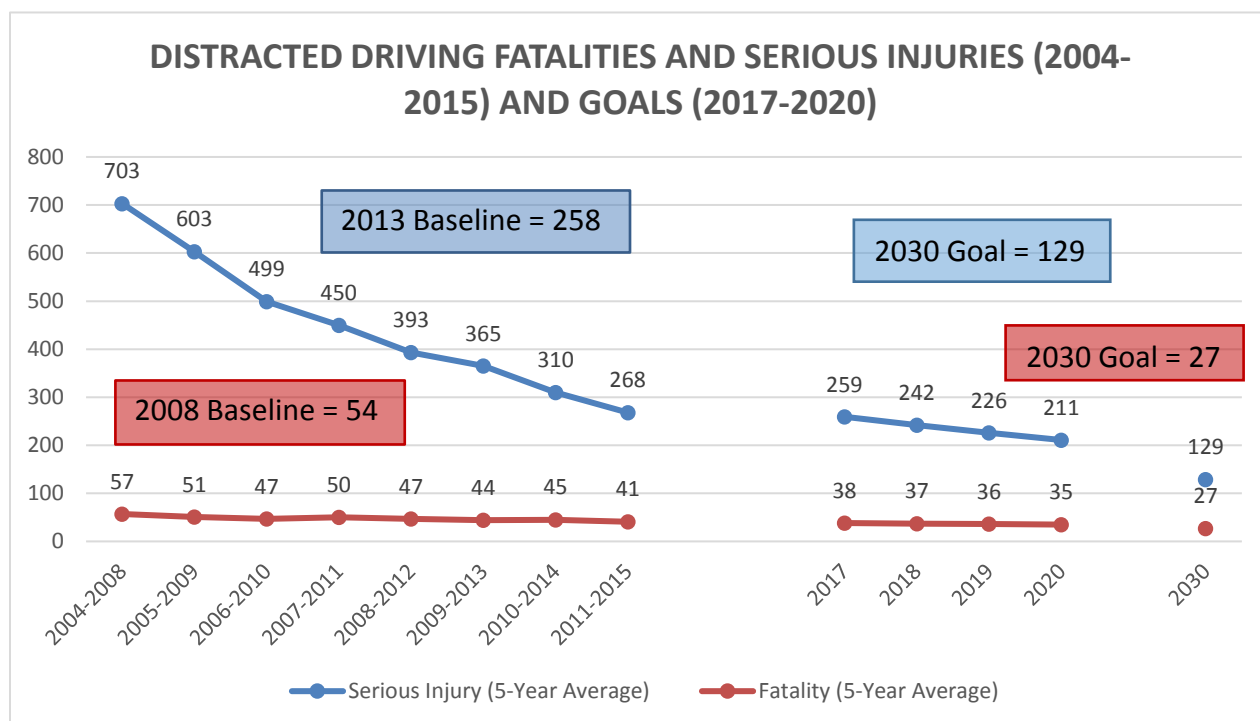
- January 20-29
- March 3-12
- May 12-21
- July 21-30



DISTRACTED DRIVING

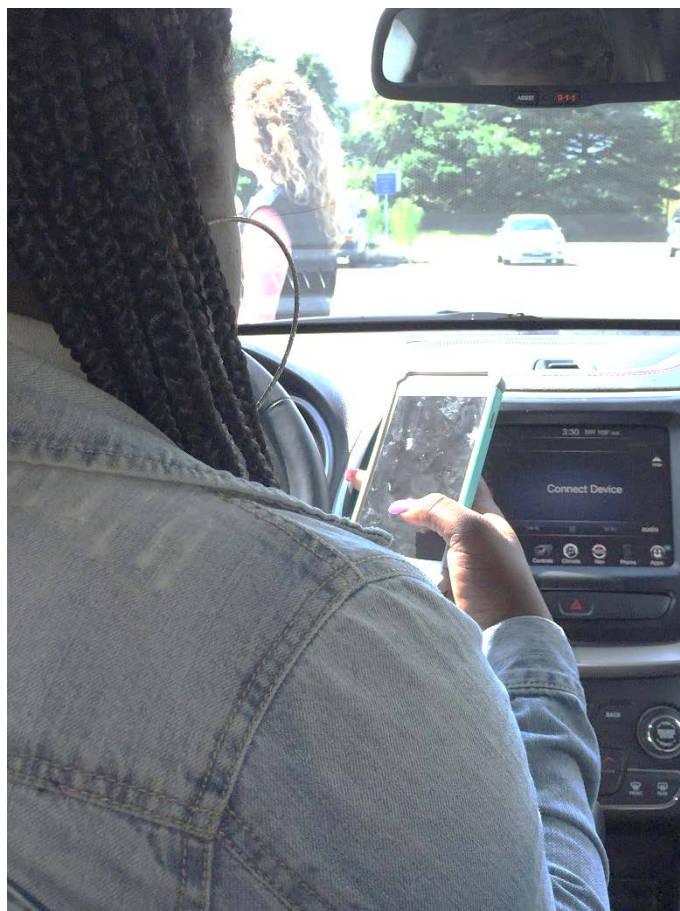
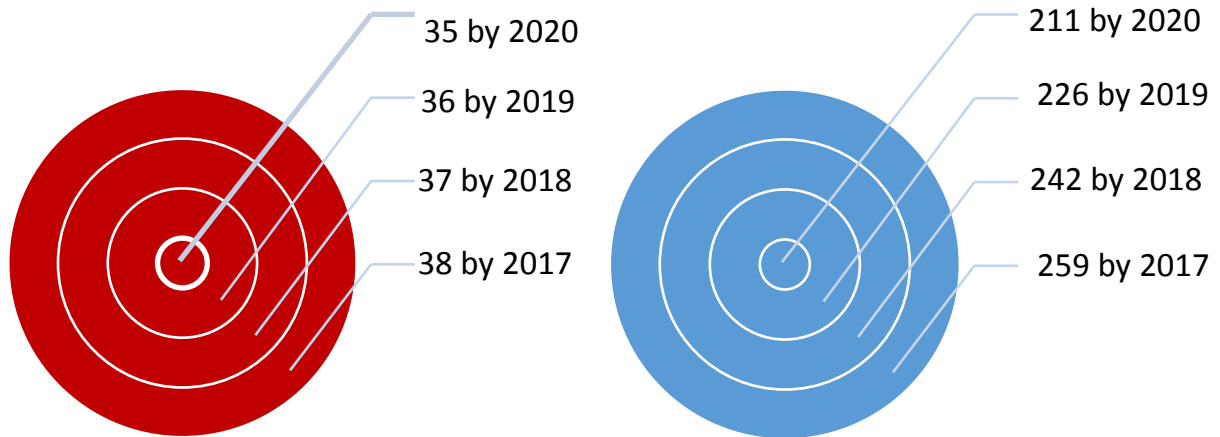
Distracted driving crashes occur when a driver fails to focus on driving and shifts attention to other things such as texting, talking on a cellphone, changing the radio, attending to a child, eating or drinking, or applying make-up.

Distracted driving accounts for more fatalities and almost five times the number of serious injuries than the other emphasis areas. Prince George's County has the highest number of vehicle crashes caused by distracted driving in the state of Maryland. However the number of vehicle crashes caused by distracted driving has drastically decreased, presumably as new technology has emerged such as hands free devices and as laws have been enacted restricting texting while driving. Between 2011 and 2015, an average of 41 people were killed and 268 seriously injured in crashes involving a distracted driver in Prince George's County.



Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce fatalities to 35 or fewer annually and serious injuries to 211 or fewer annually by 2020.



DISTRACTED DRIVING STRATEGIES

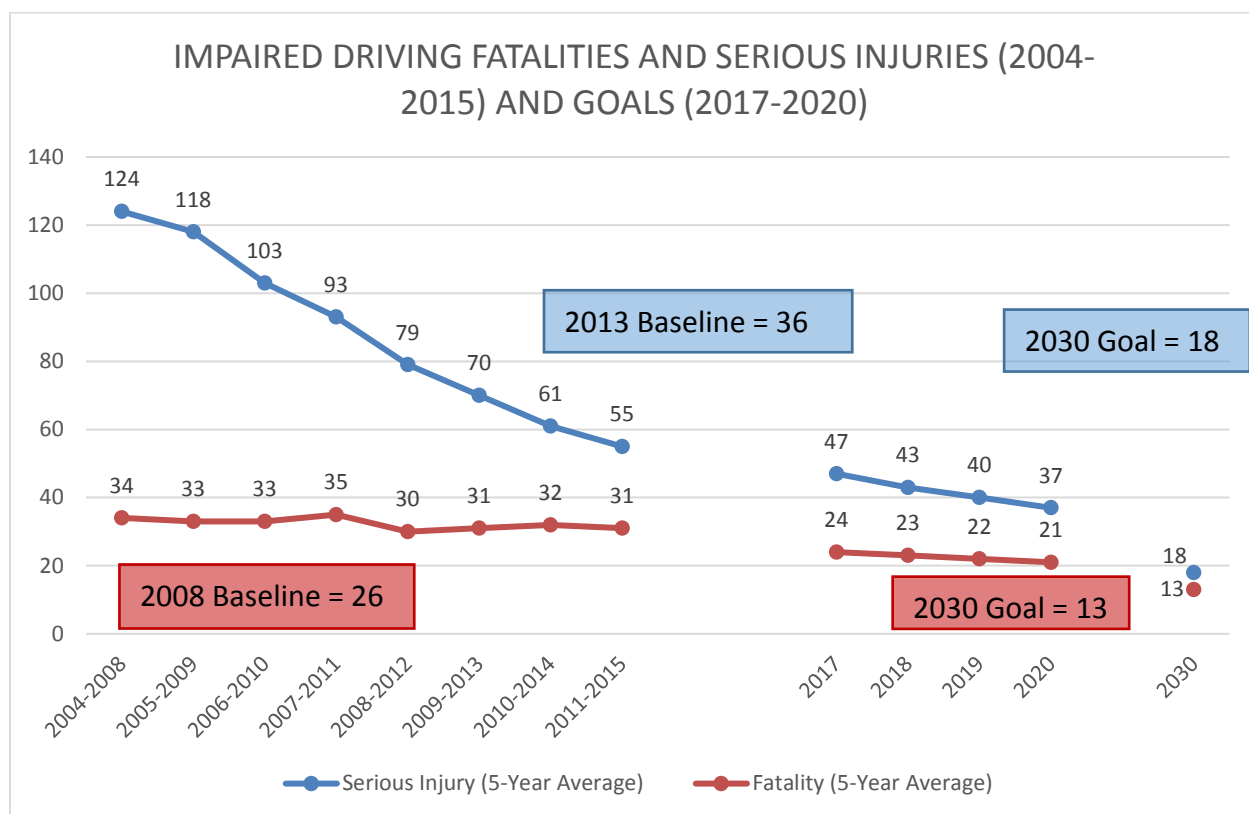
- A. Evaluate and improve **data** quality for problem identification and program evaluation purposes.
- B. Evaluate and recommend **legislation and/or regulations** that address distractive behavior while driving.
- C. Integrate and foster the use of **technologies and engineering applications** to address distracted driving infrastructure.
- D. Conduct **outreach initiatives** including, but not limited to, **education, training, and media** programs to reduce distracted driving.
- E. Enhance and improve **enforcement** of distracted driving laws.



IMPAIRED DRIVING

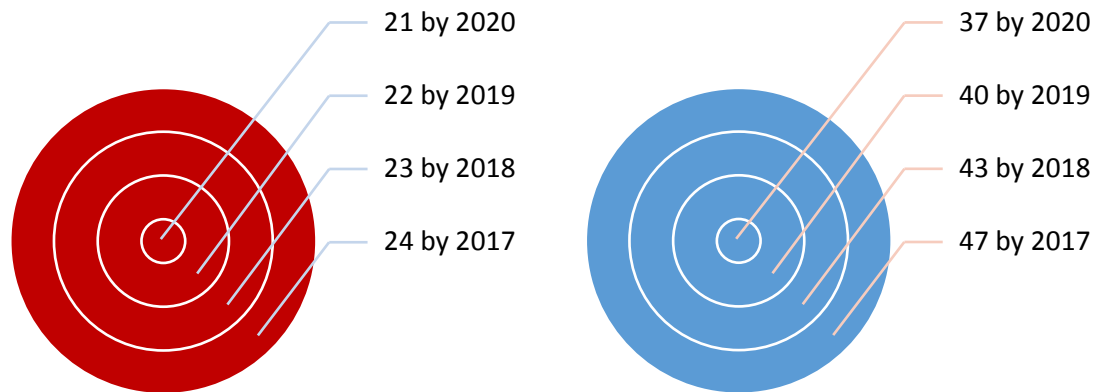
The National Highway Traffic Safety Administration (NHTSA) defines impairment as any driver with a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher. However in Maryland, impaired driving includes both alcohol and/or drug impairment determined by the investigating officer based on the driver's condition, blood alcohol concentration (BAC), and/or substance use detection.

Between 2011 and 2015 an average of 31 people were killed and 55 seriously injured occurred annually in crashes involving an impaired driver in Prince George's County. Amongst counties in Maryland, Prince George's County has the highest number of impaired vehicle crashes resulting in death and serious injury.



Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce fatalities to 21 or fewer annually and serious injuries to 37 or fewer annually by 2020.



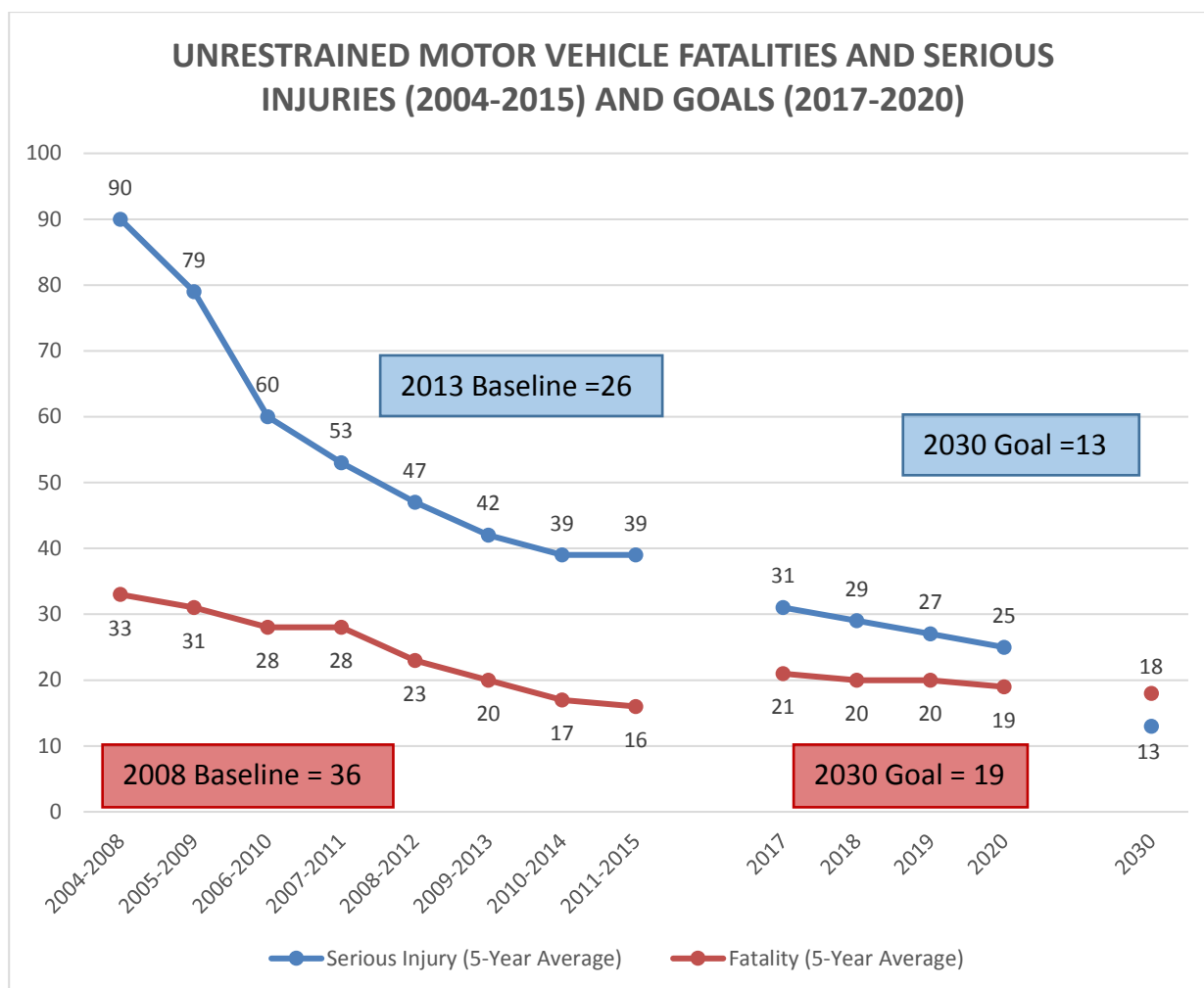
IMPAIRED DRIVING STRATEGIES

- A. Improve the availability, quality, collection, and use of **data** to support impaired driving enforcement, adjudication, programs, and initiatives.
- B. Investigate and promote **policies and legislation** aimed at reducing impaired driving.
- C. Enhance and improve the **prosecution and adjudication** of impaired driving cases.
- D. Investigate and foster the use of **technologies and best practices** to support impaired driving countermeasures.
- E. Conduct **outreach initiatives including, but not limited to, education, training, and media programs** to reduce impaired driving.
- F. Enhance and improve **enforcement** of impaired driving laws.



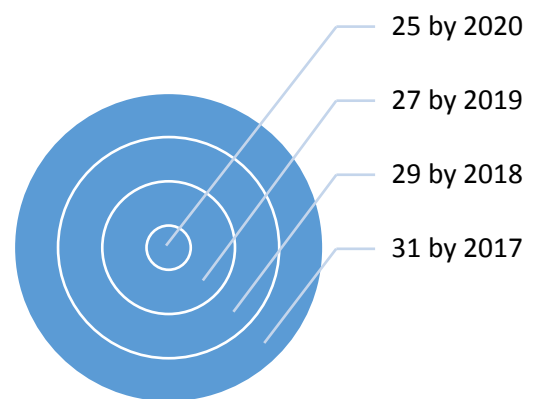
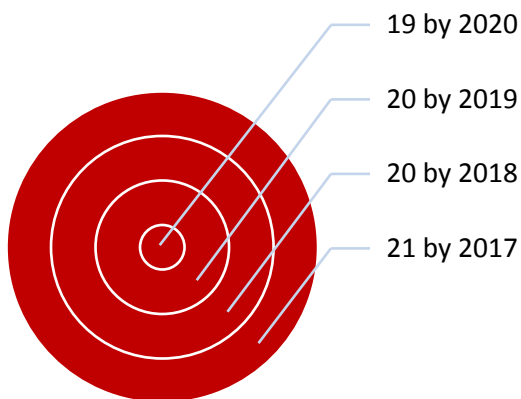
OCCUPANT PROTECTION

Between 2011 and 2015, an average of 16 unrestrained motorists were killed and 39 seriously injured occurred annually in vehicle crashes in Prince George's County. The TZD goal is to cut the 2008 number of unrestrained fatalities and the 2013 number of serious injuries in half by 2030. Since 2008, unrestrained fatalities have dropped significantly, resulting in the 2011-2015 five-year average being below the TZD goal. The County remains committed to the TZD methodology.



Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce fatalities to 19 or fewer annually and serious injuries to 25 or fewer annually by 2020.



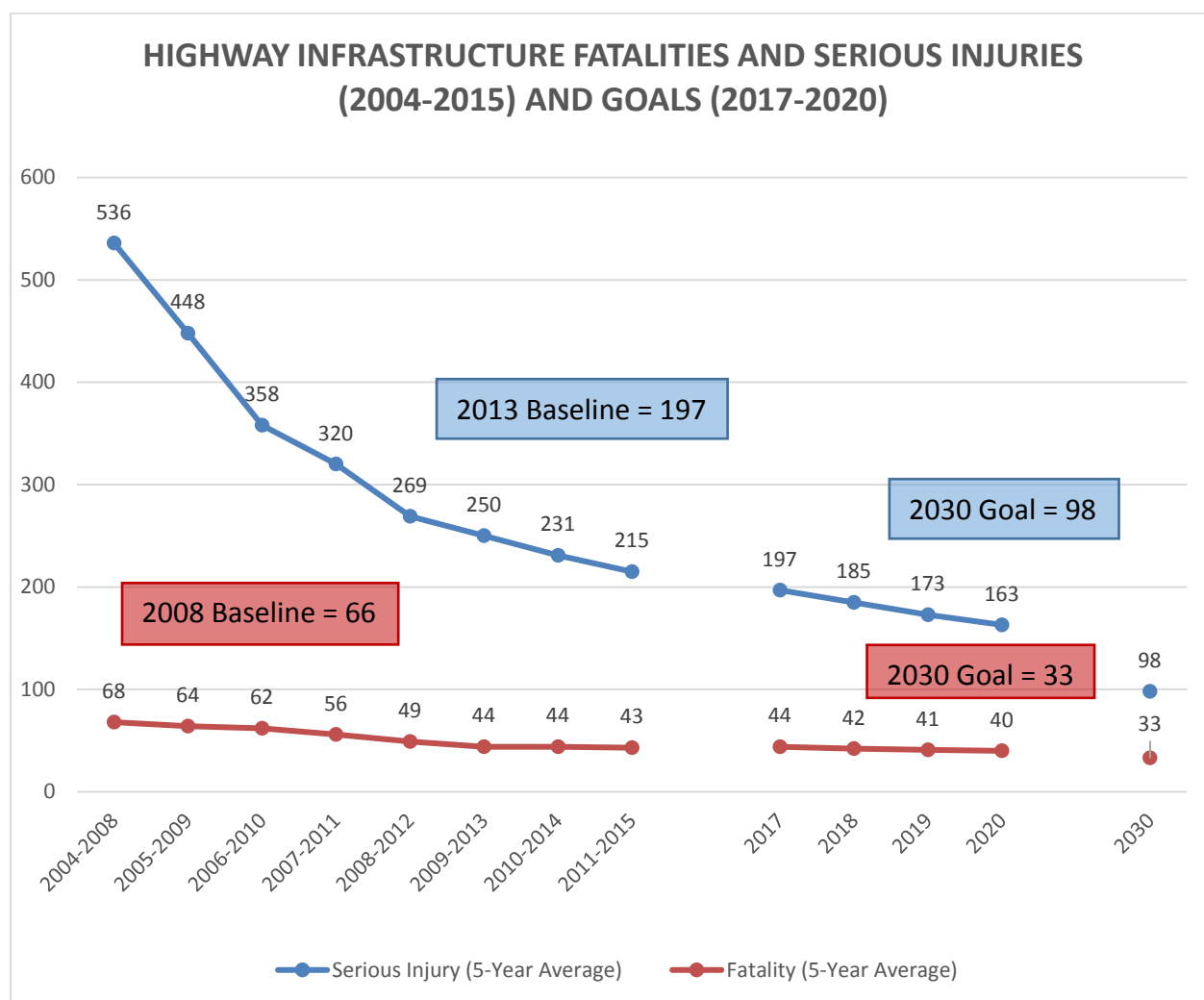
OCCUPANT PROTECTION STRATEGIES

- A. Improve the timeliness, accuracy, completeness, uniformity, accessibility, and integration of **occupant protection-related data**.
- B. Evaluate and recommend **legislation and/or regulations** to advance occupant protection for all ages.
- C. Implement adult and child occupant protection **public awareness and education, training, and media campaigns**.
- D. Enhance and improve **enforcement** of adult and child occupant protection laws.



HIGHWAY INFRASTRUCTURE

Between 2011 and 2015, an average of 43 fatalities and 215 serious injuries involving infrastructure related vehicle crashes occurred annually in Prince George's County. The short term goal is to reduce fatalities to 40 or fewer annually and serious injuries to 163 or fewer annually by 2020. Applying TZD, the long term goal is to reduce fatalities to 33 or fewer (from 66 in 2008) and serious injuries to 98 or fewer (from 197 in 2013) by 2030.



Note: Official 2016 data was not available at the time of the publishing of this report.

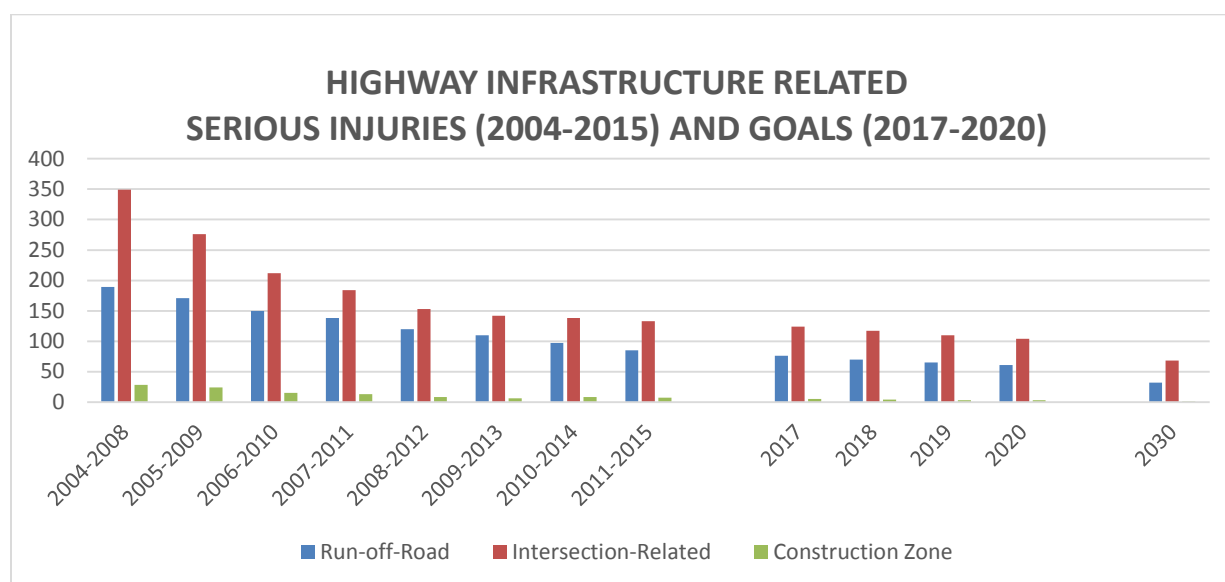
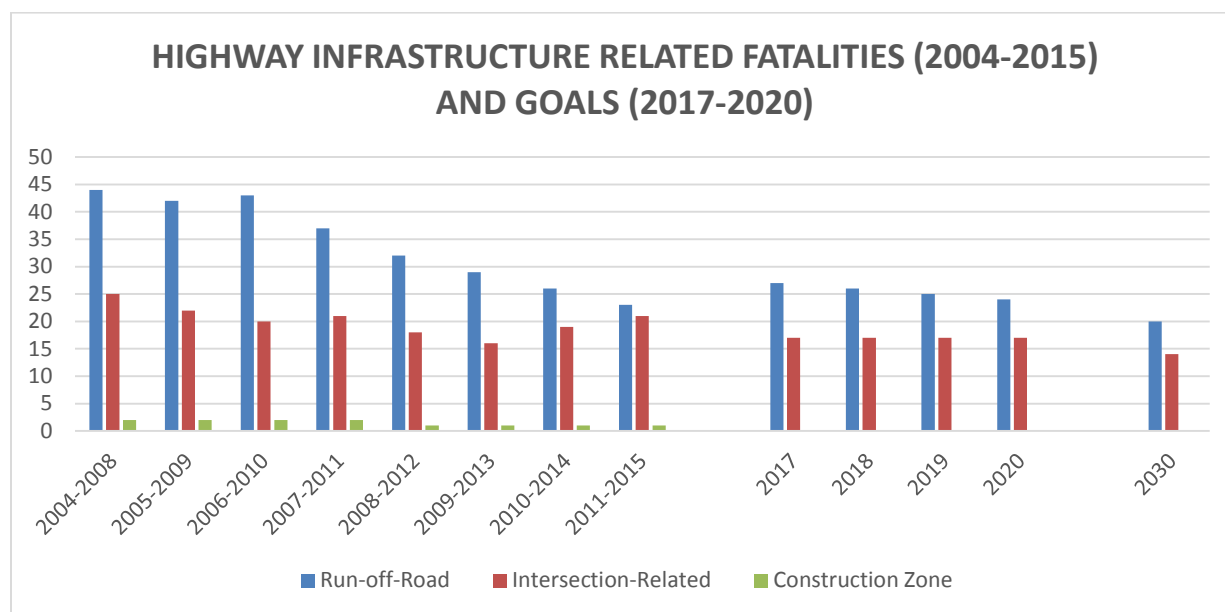


There are three main types of vehicle crashes involving infrastructure:

- Run-off-the-road
- Intersection
- Work zone

Run-off-the-road crashes account for the majority of fatal infrastructure crashes in Prince George's County and are defined as a crash where a vehicle strikes a fixed object such as trees, guardrail, light poles, curb, culvert, or embankment. Intersection-related crashes account for the majority of crashes resulting in serious injury. Both run-off-the-road crashes and intersection related crashes indicate that the roadway should be evaluated to determine if improvements could be made to reduce crashes.

The third type of highway infrastructure crashes are work zone crashes which generally occur in construction, maintenance, and utility work zones. These types of crashes are infrequent in Prince George’s County and could indicate that adequate safety and traffic controls are in place to alert drivers and avoid these crashes.



ANNUAL REDUCTION GOALS: The interim goal is to reduce fatalities to 40 or fewer annually and serious injuries to 163 or fewer annually by 2020.



HIGHWAY INFRASTRUCTURE STRATEGIES

- A. **Identify intersections where the Crash Severity Index** is high and implement safety improvements.
- B. Identify and target safety improvements along **corridors where the Crash Severity Index** is high and address roadway elements that contribute to crashes.
- C. Develop and implement system-wide improvements to reduce **the number and severity of infrastructure-related crashes** (e.g., intersection-related, run-off-the-road, work zone related, etc.).
- D. Identify, develop, and implement system-wide improvements that address the safety of **vulnerable user groups** (e.g., bicyclists, pedestrians, motorcyclists, older and young drivers, etc.).
- E. Identify and implement recommended safety initiatives for **commercial motor carriers**.

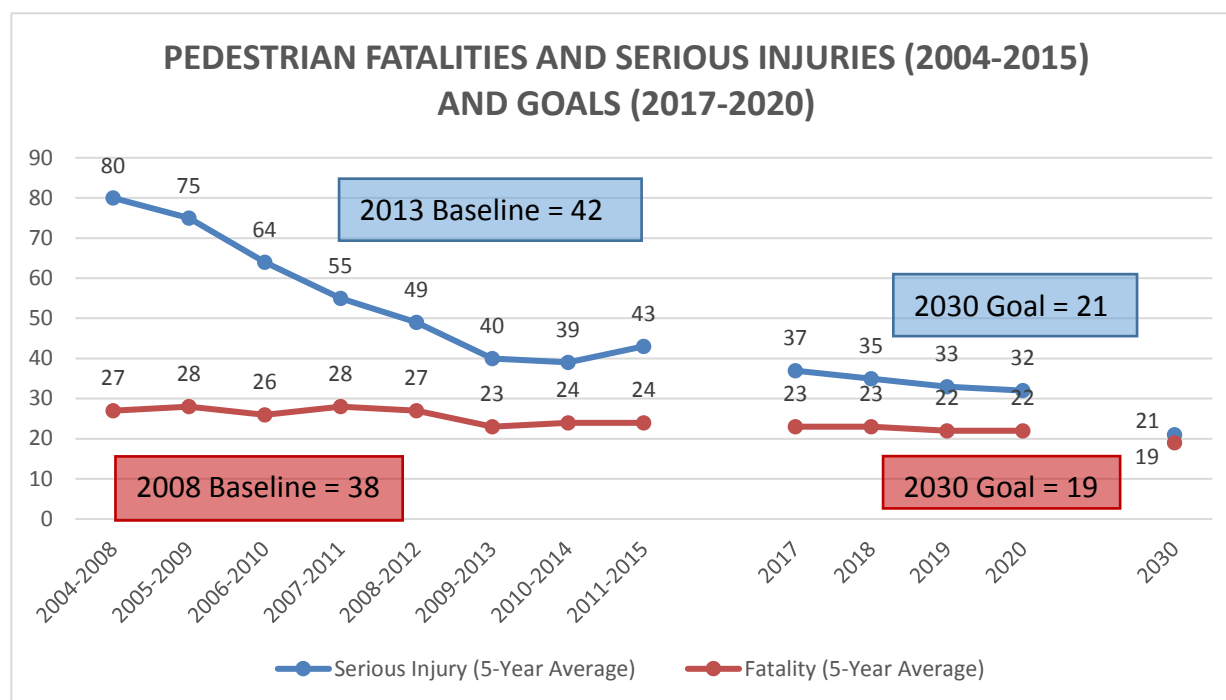


PEDESTRIANS AND BICYCLISTS

PEDESTRIANS

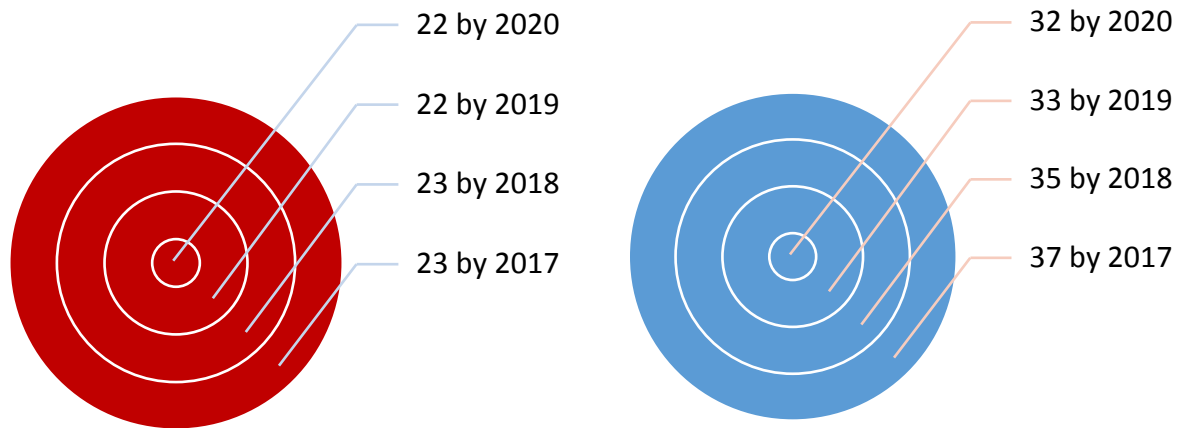
Prince George's County has historically experienced the highest number of pedestrian fatalities of any county in the state. Closer examination of the pedestrian crash data reveal that pedestrian fatalities occur more frequently on state roadways that are generally wide, multi-lane roadways, with speed limits above 35 mph. Significant crossing distances, speed, and inadequate street lighting are often contributing factors in pedestrian crashes. Research shows that pedestrians are killed nearly 85% of the time when struck by a car traveling 40 mph compared to only 5% of the time when struck by a car traveling 20 mph.

Between 2011 and 2015, an average of 24 pedestrians were killed and 43 seriously injured annually in vehicle related crashes in Prince George's County. Using TZD, the goal is to reduce pedestrian fatalities to 19 or fewer and serious injuries to 21 or fewer by 2030. Near term goals are graphed below representing a consistent annual reduction in subsequent years.



Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce pedestrian fatalities to 22 or fewer annually and serious injuries to 32 or fewer annually by 2020.



BICYCLISTS

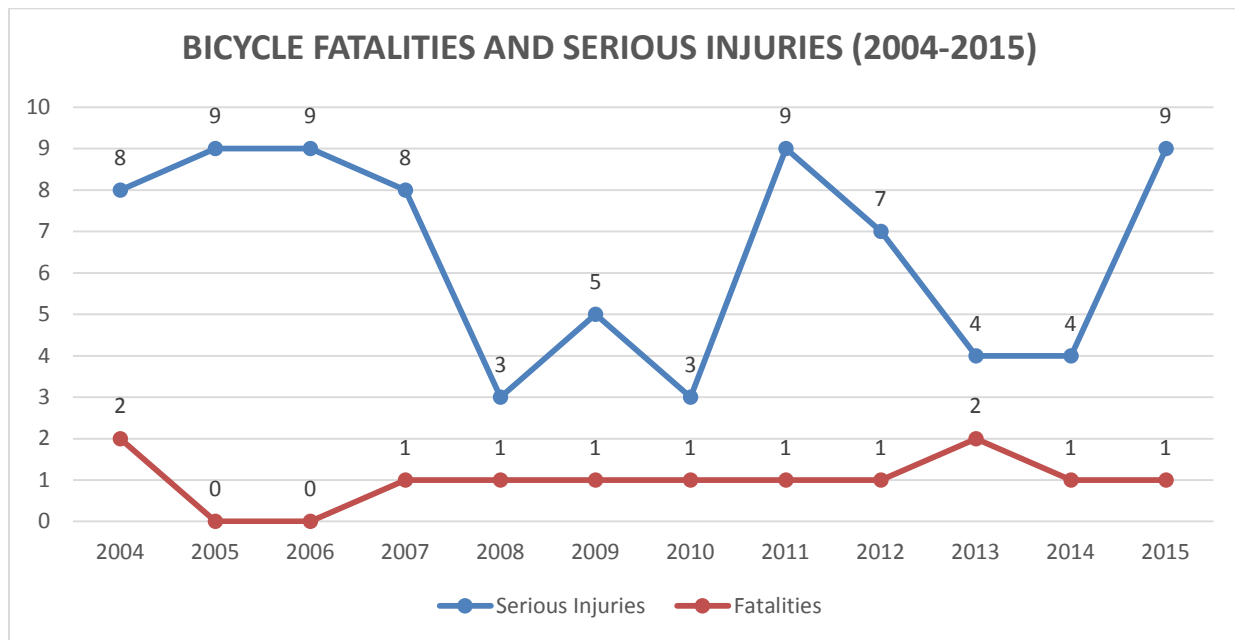
Demand for bicycling in Prince George's County is growing as more communities are building dedicated bicycle facilities such as on road bicycle lanes, cycle tracks, and off-road trails. Bicycling becomes appealing to a broader segment of the population when safety, comfort, and convenience are addressed through engineering.



Currently, Prince George's County has a strong off-road trail network that connects to neighboring jurisdictions including Montgomery County, Anne Arundel County, the District of Columbia, and Virginia. The trail network is widely used because it provides a dedicated space for bicyclists, separated from vehicles, which is more comfortable to most people.



Outside of the trail system, the bicycle infrastructure network is less developed, which makes cycling more challenging because bicycles and cars are sharing roadway space. Bicycle fatalities are rare in Prince George's County with an average of one or fewer annually. However, bicycle crashes resulting in a varying degree of injury are more common.



PEDESTRIAN AND BICYCLE STRATEGIES

- A. Identify and target pedestrian and bicycle safety issues, populations, and locations of activity and concern through the **collection, analysis, and evaluation of data and information**.
- B. Promote safe behaviors of all road users appropriate for the environment through **education and enforcement initiatives**.
- C. Create and improve roadway environments for safe walking and bicycling through implementation of **engineering treatments, land use planning, and system-wide countermeasures**.
- D. Create and improve pedestrian and bicycle safety culture in Maryland including the promotion and implementation of **legislation and training of professionals and stakeholders about best safety practices**.
- E. **Develop, apply, and promote technological approaches**, including those in vehicles and emergency response equipment, in order to better prevent and reduce the severity of collisions involving pedestrians and bicyclists.
- F. **Identify and promote safe driving and pedestrian behavior** for all motorist and public safety professionals at the scene of emergency events.



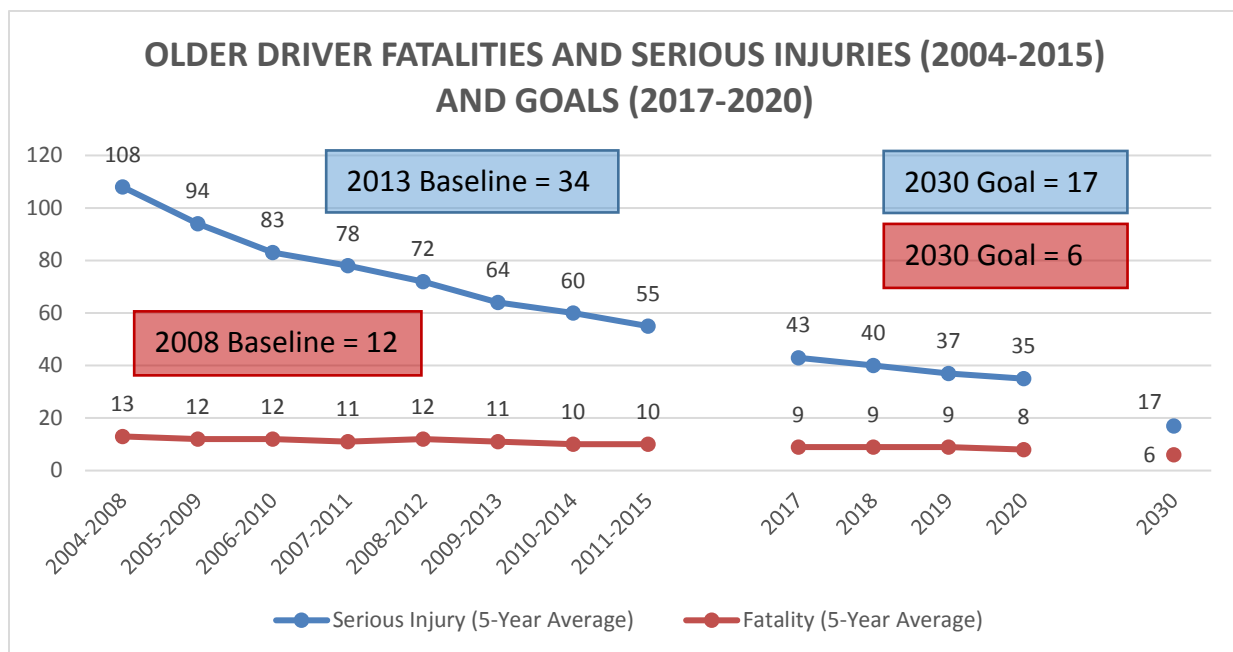
SPECIAL POPULATIONS AND VEHICLES

In addition to the emphasis areas, there are special populations and vehicles that are susceptible to vehicular crashes due to driver age, driver experience, or vehicle type including:

- Older Drivers
- Younger Drivers
- Motorcycles
- Commercial Vehicles
- School Buses
- Rail-Highway Grade Crossings

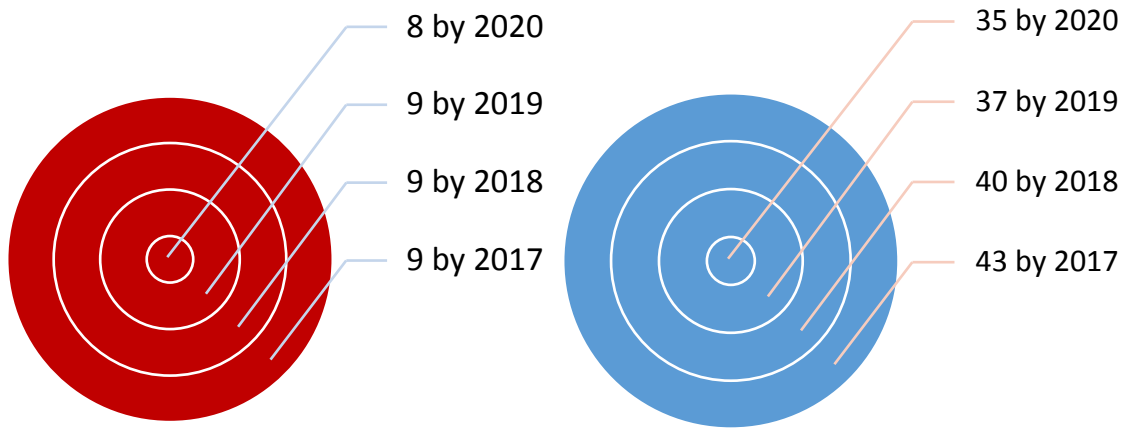
OLDER DRIVERS

Older drivers are defined as drivers age 65 and older. Generally, crashes involving older drivers result in serious injury more often than fatalities. Between 2011 and 2015, an average of 10 fatalities and 55 serious injuries occurred annually from older driver related vehicle crashes.



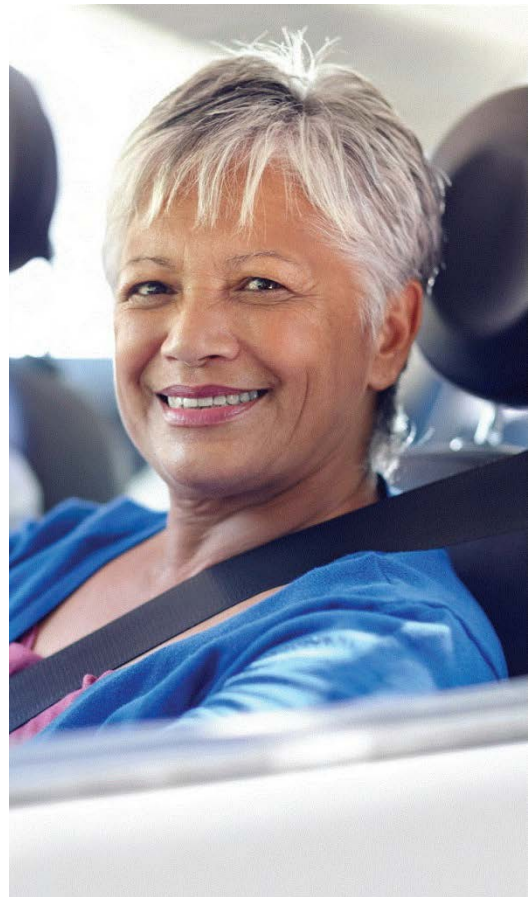
Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce older driver related fatalities to 8 or fewer annually and serious injuries to 35 or fewer annually by 2020.



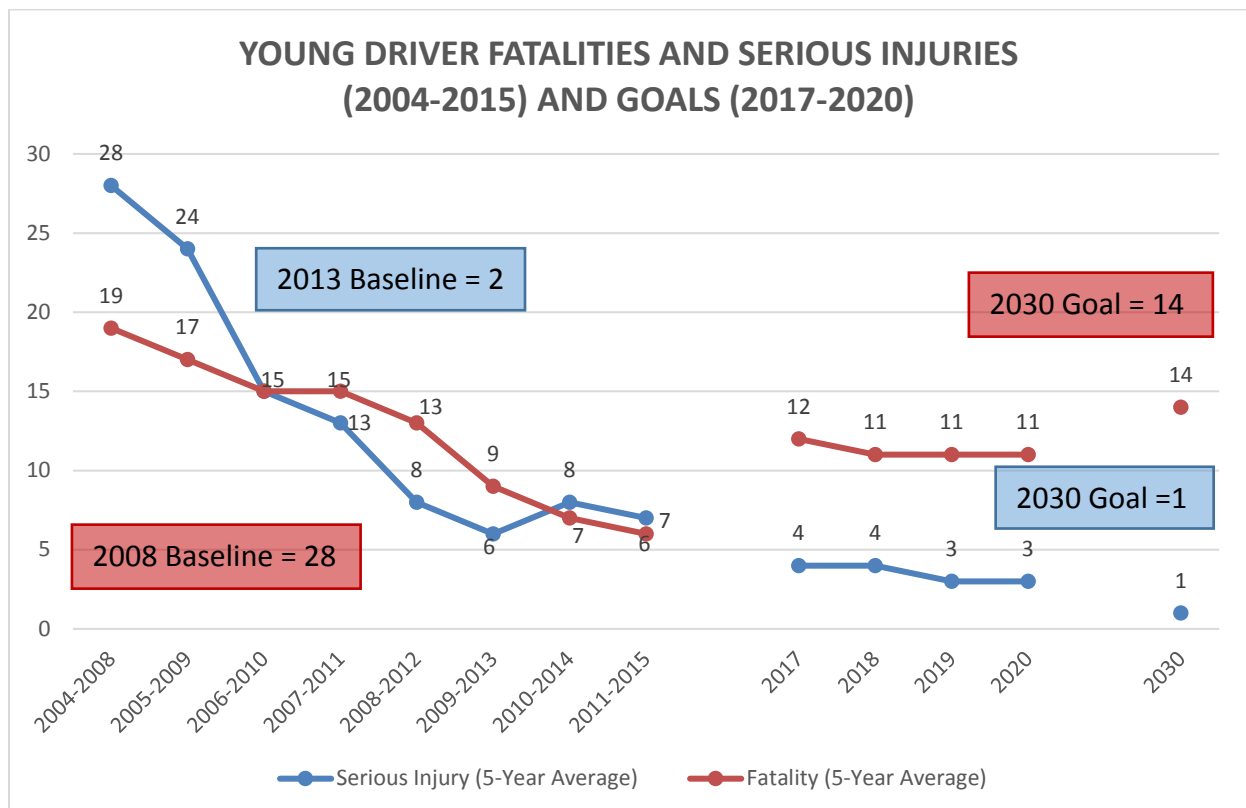
OLDER DRIVER STRATEGIES

- A. Promote the Maryland Motor Vehicle Administration's older driver safety tips and information through County agencies including Department of Family Services and the Health Department.
- B. Utilize countermeasures to improve older driver safety found in the National Highway Traffic Safety Administration's (NHTSA) *Countermeasures That Work*. Countermeasures include: Communications and outreach; licensing, and traffic law enforcement strategies.



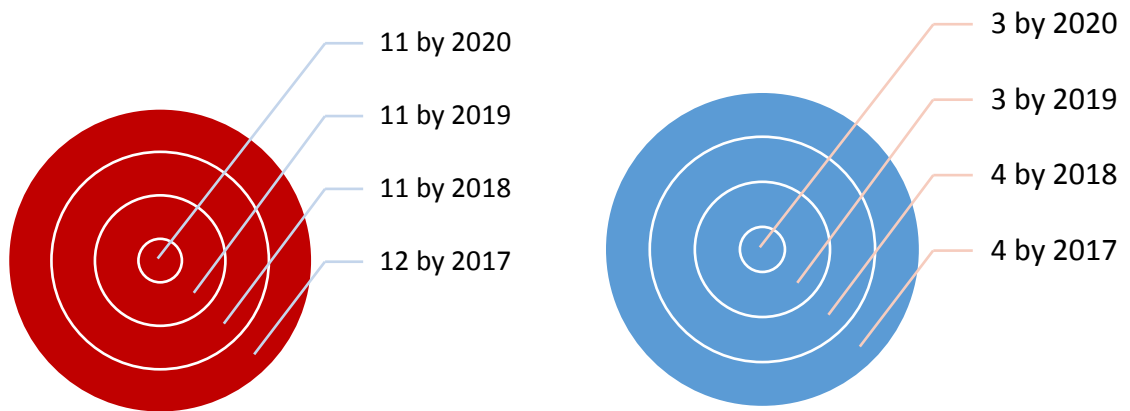
YOUNG DRIVERS

Young drivers are defined as drivers between 16 and 20 years old. These drivers are newly licensed and have limited driving experience. Similar to older drivers, crashes involving young drivers seldom result in fatalities but more often result in serious injury. On average, seven serious injuries resulting from vehicle related crashes occurred annually between 2011-2015 in Prince George's County. In the benchmark year of 2013, there were two vehicle related serious injuries in Prince George's County. Through TZD, the goal is to reduce the 2013 number in half by 2030. Unfortunately, in recent years the number of serious injuries has increased past the baseline year. However, it should be noted that the year 2013 recorded the single lowest number of serious injuries in recent history by a significant margin. Using an exponential trend line fitted to the goal of one, annual goals are calculated in the graph below.



Note: Official 2016 data was not available at the time of the publishing of this report.

ANNUAL REDUCTION GOALS: The interim goal is to reduce young driver related fatalities to 11 or fewer annually and serious injuries to 3 or fewer annually by 2020.



YOUNG DRIVER STRATEGIES

- A. Utilize countermeasures to improve younger driver safety found in the National Highway Traffic Safety Administration's (NHTSA) *Countermeasures That Work*. Countermeasures include: graduated driver licensing; driver education; parental involvement; and traffic law enforcement strategies.



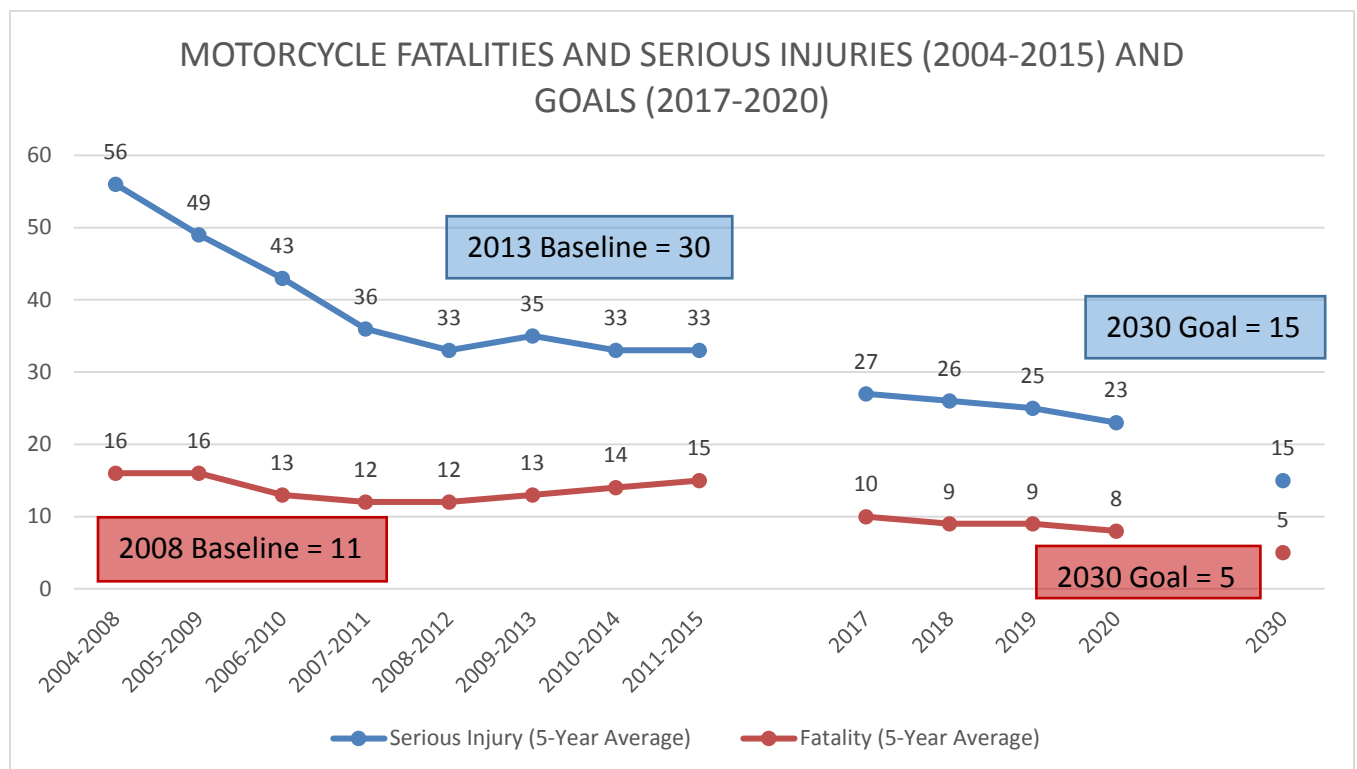
- B. Partner with schools, youth organizations, civic and religious organizations to:
- Target distracted driving programs to youth and young adults;
 - Teach youth and young adults the consequences of impaired driving; and
 - Promote the use of occupant protection to youth and young adults.



MOTORCYCLES

In Prince George's County, nearly one-fifth (18.5%) of motorcycle crashes were rear end crashes where another vehicle hit a motorcycle from behind. The second most prevalent type of motorcycle crash is crashing into a fixed object, most often the curb-wall and guardrail. Moreover, nearly one-fifth (18.2%) of motorcycle drivers involved in crashes between 2009 and 2013 did not use some type of safety protection equipment such as a helmet. Motorcycle crashes occur more often during March-October and during the weekends when presumably the weather and leisure time produces more motorcycle trips.

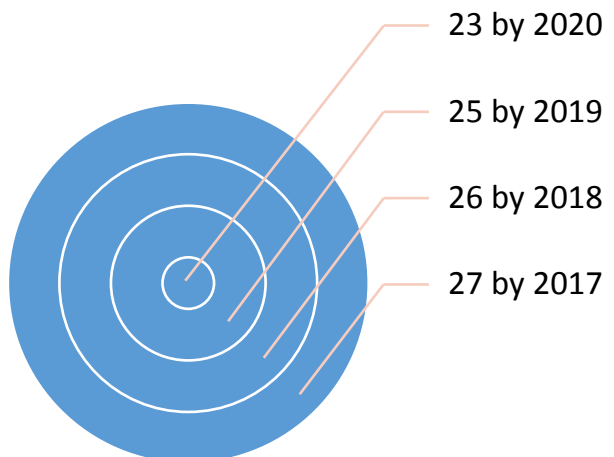
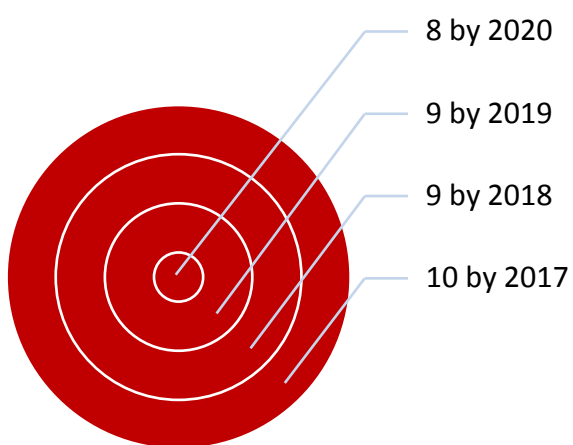
Between 2011 and 2015, an average of 15 people were killed and 33 seriously injured annually in motorcycle crashes in Prince George's County.



Note: Official 2016 data was not available at the time of the publishing of this report.



ANNUAL REDUCTION GOALS: The interim goal is to reduce motorcycle related fatalities to 8 or fewer annually and serious injuries to 23 or fewer annually by 2020.



MOTORCYCLE STRATEGIES

- A. Utilize countermeasures to improve motorcycle safety found in the National Highway Traffic Safety Administration's (NHTSA) *Countermeasures That Work*. Countermeasures include: increase motorcycle helmet usage; eliminate alcohol impairment; motorcycle training and licensing; reflective and protective clothing; and other driver awareness of motorcyclists.
- B. Support and promote the Maryland Motor Vehicle Administration's Motorcycle Safety Program which includes:
 - Education and training of motorcycle riders;
 - Awareness campaigns for motorists;
 - Enforcement of traffic laws for all road users.

COMMERCIAL VEHICLES

Between 2011 and 2015, there was an average of 829 heavy truck or cross county bus crashes annually in Prince George's County. The majority of these crashes resulted in property damage only (69%); approximately one-third resulted in personal injury (30%); and one percent (1%) resulted in a fatality.



	2011	2012	2013	2014	2015	5 YEAR AVERAGE
Fatal Crashes	7	12	6	6	12	9
Injury Crashes	274	242	253	274	209	250
Property Damage Only Crashes	598	544	566	544	597	570
Total Crashes	879	798	825	824	818	829
Total of All Fatalities	8	15	7	6	13	10
Total Number Injured	394	382	375	382	397	368

Note: Official 2016 data was not available at the time of the publishing of this report.

To help reduce crashes in half by 2030 and ultimately even lower, the following strategies have been identified:

COMMERCIAL VEHICLE STRATEGIES

- Promote commercial motor vehicle safety efforts of the Federal Motor Carrier Safety Administration (FMCSA);
- Highlight the needs of commercial motor vehicles in roadway design;
- Designate specific roadways for commercial motor vehicle traffic and restrict access on certain roadways.

SCHOOL BUSES

Between 2011 and 2015, an average of 265 school bus crashes were reported annually. Of these crashes, an average of 30 school bus crashes resulted in injury and none resulted in fatalities.

	2011	2012	2013	2014	2015	5 YEAR AVERAGE
Fatal Crashes	0	0	0	0	0	0
Injury Crashes	40	23	28	37	23	30
Property Damage Crashes	246	201	235	235	255	234
Total Crashes	286	224	263	272	278	265
Total All Fatalities	0	0	0	0	0	0
Total Number Injured	73	109	146	80	46	91

Note: Official 2016 data was not available at the time of the publishing of this report.

To help reduce crashes in half by 2030 and ultimately even lower, the following strategies have been identified:

SCHOOL BUS STRATEGIES

- A. Support legislation that penalizes drivers for infractions against school buses;
- B. Support safety technology for school buses;
- C. Promote the National Highway Traffic Safety Administration's (NHTSA) school bus safety programs.



RAIL-HIGHWAY GRADE CROSSINGS

Crashes at rail-highway grade crossings are rare in Prince George's County. Between 2011 and 2015, there was an average of five crashes annually involving a train in Prince George's County.

	2011	2012	2013	2014	2015	5 YEAR AVERAGE
Fatal Crashes	0	0	0	0	0	0
Injury Crashes	0	2	2	5	0	2
Property Damage Crashes	4	4	3	3	3	3
Total Crashes	4	6	5	8	3	5
Total All Fatalities	0	0	0	0	0	0
Total Number Injured	0	2	2	5	0	2

Note: Official 2016 data was not available at the time of the publishing of this report.

To help reduce crashes in half by 2030 and ultimately even lower, the following strategies have been identified:

RAIL-HIGHWAY GRADE CROSSING STRATEGIES:

- A. Ensure that adequate active warning devices are installed and operational at rail-highway grade crossing including: flashing signals, gates, and signs.



IMPLEMENTATION & EVALUATION

To reach our fatality and serious injury reduction goals as outlined in the *2017-2020 Prince George's County Strategic Roadway Safety Plan*, a multi-disciplinary, collaborative, sustained effort is required. To reduce vehicle related crashes on Prince George's County's roadways, it will require participation from all of the *Four E's: Engineering, Enforcement, Education, and Emergency Services*.

To ensure PGC SRSP implementation, the Prince George's County Roadway Safety Executive Committee (PGCHSEC) will be established. The PGCHSEC will be comprised of leaders from the County Executive's office; DPW&T; Prince George's County Police Department; Prince George's County Fire and Emergency Medical Services; and other important partners including the State's Attorney's Office and MDOT. The role of the PGCHSEC is to evaluate the progress of the SRSP, provide oversight, direction, and resources.

The daily activities needed to implement the plan will be coordinated through Emphasis Area Committees (EAC). Each EAC will create an action plan to address the strategies outlined in SRSP. The Emphasis Area Committees will be comprised of subject matter experts and led by a chairperson. The chairperson for each EAC will also serve on the PGCHSEC.

GLOSSARY

Aggressive Driving-Related Crash: A crash in which a driver has one of the following values in both the primary and secondary contributing circumstance fields of the Maryland crash report: failed to yield right of way; failed to obey stop sign; failed to obey traffic signal; failed to obey other traffic control; failed to keep right of center; failed to stop for school bus; wrong way on one way; exceeded speed limit; too fast for conditions; followed too closely; improper lane change; or improper passing.

Bicyclist Crash: Bicycle crashes are defined as those involving a bicyclist or other pedalcyclist.

Distracted Driving-Related Crash: At least one driver in the crash was reported to be distracted, defined by having values of either ‘failure to give full time and attention’ or ‘cell phone in use’ in any of the four available contributing circumstance fields.

Emergency Event: Any event that requires or involves first responder or roadway assistance such as traffic stops, traffic crashes, disabled vehicles, or other fire and police activity.

Fatality: Defined as injury severity 05, based on the KABCO scale, as determined by law enforcement and also must be a person who dies due to injuries sustained in a motor vehicle crash (within 30 days of that incident) on Maryland traffic ways, as defined by the Maryland State Police, with guidance from ANSI D16.1 Manual on Classification of Motor Vehicle Traffic Accidents.

Five Year Rolling Average: An average of the last five (5) years in a given data set.

Highway Infrastructure-Related Crash: Run-off-the-road crashes, intersection-related crashes, and work zone crashes. Since an individual crash may encompass one, two, or all three components (e.g., intersection crash in a work zone), the sum of fatalities/serious injuries across all three components will exceed the total provided for highway infrastructure.

Impaired Driving-Related Crash: The Maryland definition of an impaired driving crash is at least one driver in the crash is determined to be impaired by the investigating officer as indicated through the driver condition, blood alcohol content (BAC), substance use detected and contributing factor fields on the Maryland crash report. Note that this number includes drug impairment; therefore, it will not match alcohol-impaired fatality figures provided by Fatality Analysis Reporting (FARS), which measures only those drivers with a recorded BAC greater than 0.08.

Intersection-Related Crash: Crashes reported as occurring in an intersection or being intersection-related. 'Intersection-related' is not a location type but a judgment about the effects of intersections and their traffic controls upon traffic and crash causation. If the crash is deemed to have occurred as a result of backed up traffic from an intersection (presumably at a non-intersection location) the junction relationship is 'intersection-related.'

Motorcycle Crash: All persons in a crash involving at least one motorcycle, defined as a 'motorcycle' body type. Operators and passengers on the motorcycle itself are included.

Motorist: Driver or passenger of a vehicle.

Older Driver-Related Crash: All persons in a crash where at least one driver in the crash was reported to be between the ages of 65 and 110.

Pedestrian Crash: All persons involved in a crash with a person reported as a pedestrian on foot.

Run-off-the-Road Crash: Crashes where the first event was recorded as striking a fixed object or running off the road or the location of the crash was reported as off-road or in the median.

Serious Injury: Defined as injury severity 04, based on the KABCO scale, as determined by law enforcement.

Speed-Related Crash: A crash where at least one driver in the crash was reported to be speeding, defined by having values of either 'exceeded speed limit' or 'too fast for conditions' in the first or second contributing circumstance fields.

Unrestrained Occupant: An unrestrained occupant is defined as a passenger vehicle (automobile, station wagon, van, SUV, pickup truck) occupant who is: less than 8 years of age recorded as not using a 'child/youth restraint'; 8 years of age or older recorded as not using a 'lap and shoulder belt' or 'air bag and belt'; or where restraint use was recorded as using 'none,' or 'air bag only.'

Work Zone Crash: Crashes reported by the officer as 'Yes' for Construction/Maintenance Zone.

Young Driver: All persons in a crash where at least one driver in the crash was reported to be between the ages of 16 and 20.