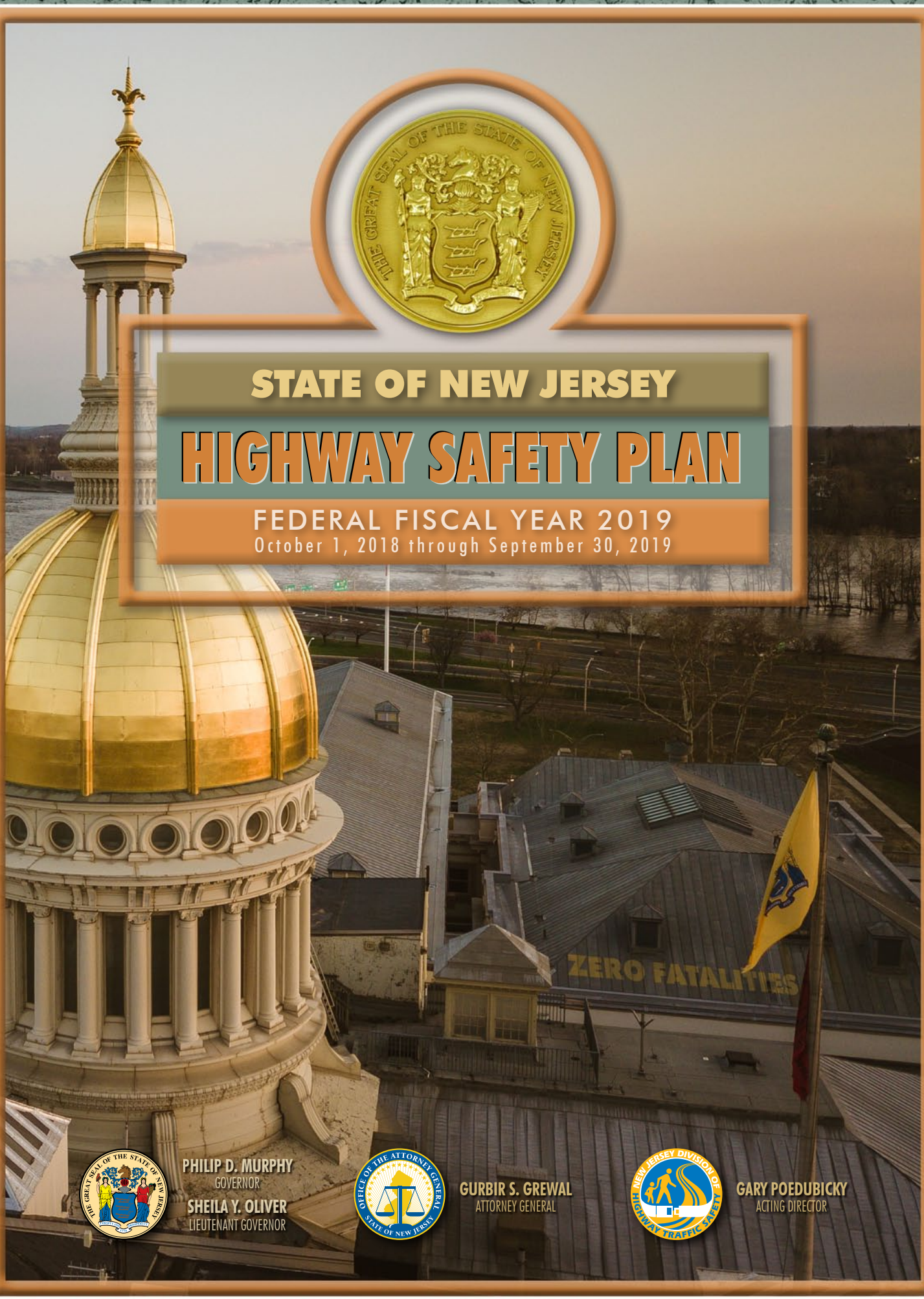

STATE OF NEW JERSEY

HIGHWAY SAFETY PLAN

FEDERAL FISCAL YEAR 2019

October 1, 2018 through September 30, 2019

PHILIP D. MURPHY
GOVERNOR

SHEILA Y. OLIVER
LIEUTENANT GOVERNOR

GURBIR S. GREWAL
ATTORNEY GENERAL

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THE GREAT SEAL OF THE STATE OF NEW JERSEY

NEW JERSEY FFY 2019 HIGHWAY SAFETY PLAN

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OVERVIEW

The New Jersey Division of Highway Traffic Safety (DHTS) is responsible for the administration of the federally-funded State and Community Highway Safety Program and coordination of highway safety activities. The State and Community Highway Safety Program originated under the Highway Safety Act of 1966, 23 U.S.C. 402.

DHTS is responsible for establishing goals to reduce motor vehicle crashes using performance measures based on assessments of the roadway environment. The New Jersey Highway Safety Plan (HSP) is required by federal law to serve as a framework for setting performance goals and measures for reducing traffic crashes, fatalities and injuries, and creating a safer and more efficient transportation system.

The Governor's Representative for Highway Safety is required to send the HSP to the National Highway Traffic Safety Administration (NHTSA) and the Federal Highway Administration (FHWA). NHTSA and FHWA approve the proposed activities and recommended expenditures eligible for federal funding.

MISSION STATEMENT

Pursuant to N.J.S.A. 27:5-F-18 et seq., DHTS is responsible for developing and implementing, on behalf of the Governor, the New Jersey Highway Safety Program. The mission of DHTS is the safe passage of all roadway users in New Jersey as we move towards zero fatalities. To achieve our mission, the DHTS promotes statewide traffic safety programs through education, engineering and enforcement activities. DHTS administers and coordinates funding for State and local projects.

EXECUTIVE SUMMARY

The annual plan is referred to as the Highway Safety Plan (HSP). The Federal Fiscal Year (FFY) 2019 HSP addresses the national priority program areas of NHTSA and FHWA. The following program areas will be addressed in FFY 2019: alcohol and other drug countermeasures, pedestrian and bicycle safety, occupant protection, police traffic services, community traffic safety programs, roadway safety, traffic records, emergency medical services and motorcycle safety. The State and Community Highway Safety grant program, known as the Section 402 Program, is the primary source of funding for these initiatives. Federal law requires that 40 percent of these funds be used by or for the benefit of local government. Grants are also accepted from federally tax-exempt, nonprofit organizations that provide traffic safety services throughout the State. The Plan provides for a budget of 71 percent for projects that benefit local jurisdictions.

In addition to the Section 402 Program, several other funding sources in FFY 2019 will be used to continue the highway safety program. These include the Section 405(b) Occupant Protection grant, Section 405(c) Traffic Safety Improvements grant, Section 405(d) Impaired Driving grant, Section 405(e) Distracted Driving grant, Section 405(f) Motorcycle Safety grant, Section 405(g) Graduated Driver Licensing Laws grant and Section 405(h) Non-motorized Safety grant.

The FFY 2019 HSP includes a budget of nearly $22 million that will be allocated as illustrated below:

FFY 2019 FEDERAL HIGHWAY SAFETY FUNDING		
SECTION 402	STATE AND COMMUNITY GRANT PROGRAM	$7,288,000
SECTION 405(b)	OCCUPANT PROTECTION	$1,400,000
SECTION 405(c)	TRAFFIC SAFETY INFORMATION SYSTEM IMPROVEMENTS	$1,800,000
SECTION 405(d)	IMPAIRED DRIVING	$5,500,000
SECTION 405(e)	DISTRACTED DRIVING	$4,250,000
SECTION 405(f)	MOTORCYCLE SAFETY	$ 200,000
SECTION 405(h)	NON-MOTORIZED SAFETY	$1,600,000

The FFY 2019 HSP begins with a description of the planning cycle followed by the problem identification process, goal development and project selection. A statewide overview of fatalities and injuries is followed by a performance report describing the progress towards meeting performance targets from the previous fiscal year and in the upcoming HSP.

The Performance Plan includes the performance targets for each program area. This is followed by the identification of problems by program areas, countermeasure strategies, projects and funding and concludes with a description of the evidence-based traffic safety enforcement program.

A certification statement, signed by the Governor's Representative for Highway Safety, is found in the next part of the Plan and provides assurances that the State will comply with applicable laws and regulations and financial and programmatic requirements.

The last section of the Plan includes a detailed cost summary reflecting the State's proposed allocation of funds (including carry-forward funds) by program area.

DHTS manages and implements programs by region as illustrated on the chart. The regional supervisors and their staff are responsible for coordinating, monitoring and evaluating the activities and programs within these three regions.

NEW JERSEY DIVISION OF HIGHWAY TRAFFIC SAFETY REGIONS	
REGION I	ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER AND SALEM
REGION II	HUNTERDON, MERCER, MIDDLESEX, MONMOUTH, OCEAN, SOMERSET AND UNION
REGION III	BERGEN, ESSEX, HUDSON, MORRIS, PASSAIC, SUSSEX AND WARREN

DHTS has a strong working relationship with federal, State and local agencies, as well as other transportation and safety planning organizations in the State. These agencies are active partners in assisting DHTS in promoting traffic safety throughout the year. They include, but are not limited to:

Division of Criminal Justice
Division of State Police
Division of Alcoholic Beverage Control
Department of Community Affairs
Center for Hispanic Policy and Development
Department of Transportation
Motor Vehicle Commission
Department of Health and Human Services
Office of Emergency Medical Services
Federal Highway Administration
National Highway Traffic Safety Administration
Metropolitan Planning Organizations
County and Municipal Traffic Engineer Association
Association of Chiefs of Police
Traffic Officers Association
AAA
New Jersey State Safety Council
Administrative Office of the Courts
MADD
Transportation Management Associations
New Jersey Inter-Scholastic Athletic Association
Municipal Excess Liability Joint Insurance Fund
Partnership for a Drug-Free New Jersey
New Jersey Licensed Beverage Association

PLANNING CYCLE

October
1. Begin to close out projects.
2. Reprogram carryover funds from the prior year into the current Highway Safety Plan.
3. Grantees are reminded that final claims are due.

November
1. Receive program reports from DHTS staff and continue to receive final claims from grantees.
2. Begin to prepare the Highway Safety Plan Annual Report.
3. Utilize new monies and carryover funds to implement projects in current fiscal year.

December
1. Finalize close out and submit final voucher to the NHTSA.
2. Carryover funds and reprogram into current Highway Safety Plan.
3. Place notice of grant availability for next fiscal year into the New Jersey Register.
4. Complete the Highway Safety Plan Annual Report and submit to the NHTSA.

January
1. Monitor current project performance.
2. Make adjustment to the Highway Safety Plan as necessary.
3. Receive applications from potential grantees.

February
1. Begin to review grant applications.
2. Set up initial meeting with program staff to begin planning for the Highway Safety Plan.
3. Monitor progress of current grantees.

March
1. Program staff completes the grant application review process.
2. Second meeting is held to discuss Highway Safety Plan development.
3. Monitor progress of current grantees.

April
1. Program staff meets with Director to finalize grant awards for the upcoming Fiscal Year.
2. Highway Safety Plan continues to be developed.
3. Monitor progress of current grantees.

May
1. The draft of the Highway Safety Plan is prepared and submitted to the Director for review.
2. Monitor progress of current grantees.

June
1. A draft copy of the Highway Safety Plan is sent to the Office of the Attorney General for review and approval.
2. The Highway Safety Plan is finalized and submitted to the NHTSA.
3. Monitor progress of current grantees.

July
1. Notify representatives from selected grant applications and inform them of the intent to award a highway safety grant.
2. Monitor progress of current grantees.

August
1. Grantees are contacted and reminded that no funds can be used for current grant activity after September 30.
2. Monitor progress of current grantees.

September
1. Begin to prepare final reports for current year projects.

PROBLEM IDENTIFICATION PROCESS

DHTS uses two primary sources of crash data to identify and analyze traffic safety problem areas: the New Jersey Crash Records system maintained by the Department of Transportation (DOT), Bureau of Safety Programs, and the Fatality Analysis Reporting System (FARS), maintained by the Division of State Police. All reportable crashes in the State are submitted to DOT for entry into the statewide crash records system. The data contained in the New Jersey Crash Records System provides for the analysis of crashes within specific categories defined by person (i.e., age and gender), location (i.e. roadway type and geographic location) and vehicle characteristics (i.e. conditions), and the interactions of various components (i.e. time of day, day of week, driver actions, etc.). At both the State and local level, the Crash Analysis Tool is also used to analyze crash data. The Crash Analysis Tool is a support tool, maintained by two Transportation Safety Analysts at Rutgers University, which is used by county and local engineers, law enforcement agencies and other decision makers to help identify and assess the most cost-effective ways to improve safety on the State's roadways through a data driven approach.

The New Jersey Institute of Technology (NJIT) conducts seat belt observational surveys and provides usage rate data to DHTS. In addition, DHTS also requests information and data from other traffic safety groups. These include, but are not limited to the following: Motor Vehicle Commission (licensing data), Department of Transportation (crash data), and Administrative Office of the Courts (citation data).

Data sources are used to identify problem areas and to analyze the nature of the problem. Members of the program staff begin to meet in February to develop the Highway Safety Plan. An analysis of statewide crash data over a period of several years is conducted to identify the most significant problems and what projects should be funded to address them. Within the crash data, each of the following was reviewed as part of the problem identification process: crash severity, driver age, driver gender, time of day and where the crashes were occurring.

The problem identification process covers the following program areas: alcohol and other drug countermeasures, pedestrian and bicycle safety, occupant protection, police traffic services, younger and older drivers, community traffic safety programs, public information and paid media, motorcycle safety, traffic records and roadway safety.

Program staff established priorities for types of projects that would have the greatest impact on generating a reduction in traffic crashes, injuries and fatalities in the State. At the end of the planning sessions, it was the consensus of the group that certain types of projects were strategic in reducing the State's mileage death rate and the number of motor vehicle related injuries. Projects in the following areas will receive priority in FFY 2019:

- **Planning and Administration:** The planning, development, administration, and coordination of an integrated framework for traffic safety planning and action among agencies and organizations.
- **Alcohol and Other Drug Countermeasures:** Enforcement and education programs that are necessary to impact impaired driving.
- **Pedestrian and Bicycle Safety:** Development and implementation of education and enforcement programs that will enhance pedestrian and bicycle safety.
- **Occupant Protection:** Development and implementation of programs designed to increase usage of safety belts and proper usage of child restraints for the reduction of fatalities and severity of injuries from vehicular crashes.
- **Police Traffic Services:** Enforcement necessary to directly impact traffic crashes, fatalities and injuries. Comprehensive law enforcement initiatives and training opportunities for law enforcement officers will be pursued.

- **Younger and Older Driver Safety Programs:** Enforcement and education programs that are aimed at enhancing safety of drivers age 20 and younger, and mature drivers over 65.
- **Community Traffic Safety Programs:** Commitment and participation of various groups of individuals working together to solve traffic safety related problems and issues.
- **Public Information and Paid Media:** Designed to heighten traffic safety awareness and support enforcement efforts throughout the State.
- **Motorcycle Safety:** The development of programs that remind all motorists to safely "share the road" with motorcyclists and be alert.
- **Traffic Records:** The continued development and implementation of programs designed to enhance the collection, analysis and dissemination of crash data that will increase the capability for identifying problems.
- **Roadway Safety:** Professional and technical engineering services necessary for the improvement of the roadway system in order to reduce the incidence and severity of crashes.

GOAL DEVELOPMENT

The goals identified are determined in accordance with the problem identification process and are established for the various program priority areas and the specific thresholds.

Program managers review the statistical information which has been compiled. Program managers then examine the data from the past five years, review projects recommended for funding and how these projects will impact the identified problems. Crash data, vehicle miles travelled and population are also used to establish goals for priority areas. In addition, past trends and staff experience are used in setting goals.

Additionally, the DOT is the lead agency in the development of the State's Strategic Highway Safety Plan. Periodic meetings are held with a broad cross section of stakeholders that include engineers, planners, advocates, public health officials, law enforcement officers, educators and emergency response providers. This broad cross section of stakeholders provides input into the vision, mission and goals of the HSP. Members of the Highway Traffic Safety Policy Advisory Council which includes representatives from the Department of Education; Department of Health; DOT; Motor Vehicle Commission; Division of State Police; Administrative Office of the Courts; municipal law enforcement agencies (New Jersey Association of Chiefs of Police and New Jersey Police Traffic Officers Association); Governor's Advisory Council on Emergency Medical Services; New Jersey State First Aid Council; private sector corporate representatives; and members of the general public are also included in the preparation of the plan and its goals. There is also a standing Traffic Records Coordinating Committee that is asked for its input. Recommendations from all the agencies represented are taken into consideration when developing goals.

The State has adopted the national vision for highway safety – *Toward Zero Deaths: A National Strategy on Highway Safety (Toward Zero Deaths)*. This calls for a national goal of reducing the number of traffic fatalities by half by the year 2030. New Jersey's crash reduction goal will be achieved with the support of all safety partners. Toward that end, the Strategic Highway Safety Plan is linked to the division's HSP, the Highway Safety Improvement Program and the Comprehensive Statewide Freight Plan, both of which are prepared by the DOT. The DHTS and the DOT, in collaboration with their safety partners, are committed to implementing both the Strategic Highway Safety Plan and the HSP.

The Plans identify key safety emphasis areas and the supporting strategies that are likely to have the greatest impact on improving safety on the roadways. Also, the HSP renews the State's commitment to direct resources to those safety strategies with a goal of reducing crashes, traffic fatalities and serious injuries.

It is required that both the Highway Safety Plan and the Strategic Highway Safety Plan agree on the core performance goals (number of traffic fatalities, number of serious injuries and fatalities/vehicle miles traveled). Meetings were held with agency representatives during the planning process to ensure that these goals are identical.

Overall fatalities in the State have increased for four consecutive years. Though the mission at the DHTS is to reduce the number of fatalities occurring on the roadways through means of safety programing, the performance goals outlined in this Plan represent the trends of fatalities experienced on the State's roadways, and in some cases, represent increases. New Jersey has seen increases in pedestrian and bicyclist fatalities, and the predicted values are based on these trends. The law enforcement community has also been collecting additional data-points pertaining to drugged and distracted driving, and because of increased detection, the predicted values reveal an increase as well.

PROJECT SELECTION

Projects are designed to impact problems that are identified through the problem identification process. Decisions on resource allocations are based on the potential for significant improvement in particular problem areas.

The process for funding State and local safety programs begins in December with a notification in the New Jersey Register containing a description of the purpose, eligibility, and qualifications of submitting a grant application for highway safety projects. State agencies and political subdivisions, including counties, municipalities, townships, and nonprofit organizations are eligible and must submit highway safety grant applications by a designated deadline.

The criterion DHTS uses to review and approve grant applications includes:

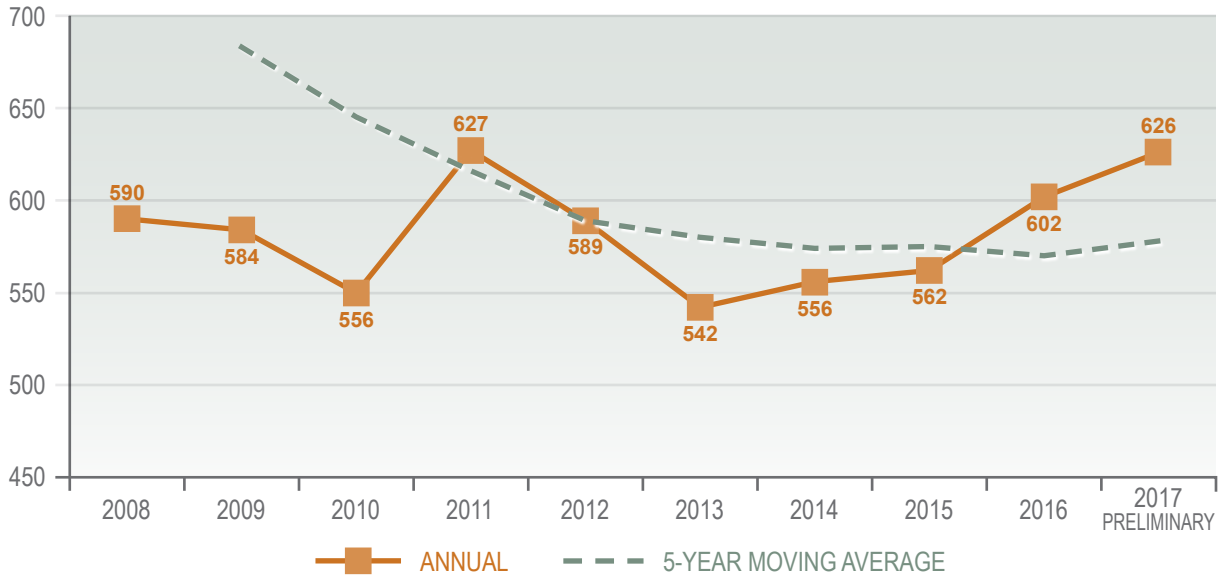
1. The degree to which the proposal addresses a State identified problem area. Primary consideration is granted to those projects addressing statewide traffic safety problems. Also, projects are considered if they are well substantiated through data analysis and support identified problem areas.
2. The extent to which the proposal meets the published criteria.
3. The degree to which the applicant is able to identify, analyze and comprehend the local or State problem. Applicants who do not demonstrate a traffic safety problem or need are not considered for funding.
4. The assignment of specific and measurable objectives with performance indicators capable of assessing project activity.
5. The extent to which the estimated cost justifies the anticipated results.
6. The ability of the proposed efforts to generate additional identifiable highway safety activity in the program area and the ability of the applicant to become self-sufficient and to continue project efforts once federal funds are no longer available.

The applications are rated for potential traffic safety impact, performance of previous grants received, and seriousness of identified problems. The review also reflects how well the grant application was written. Each individual considering the grant application is provided with a review sheet. The review sheet allows for recommendations and comments on each section of the grant application. Priority for funding is given to grant applications which demonstrate a highway safety problem defined by NHTSA or DHTS.

STATEWIDE OVERVIEW

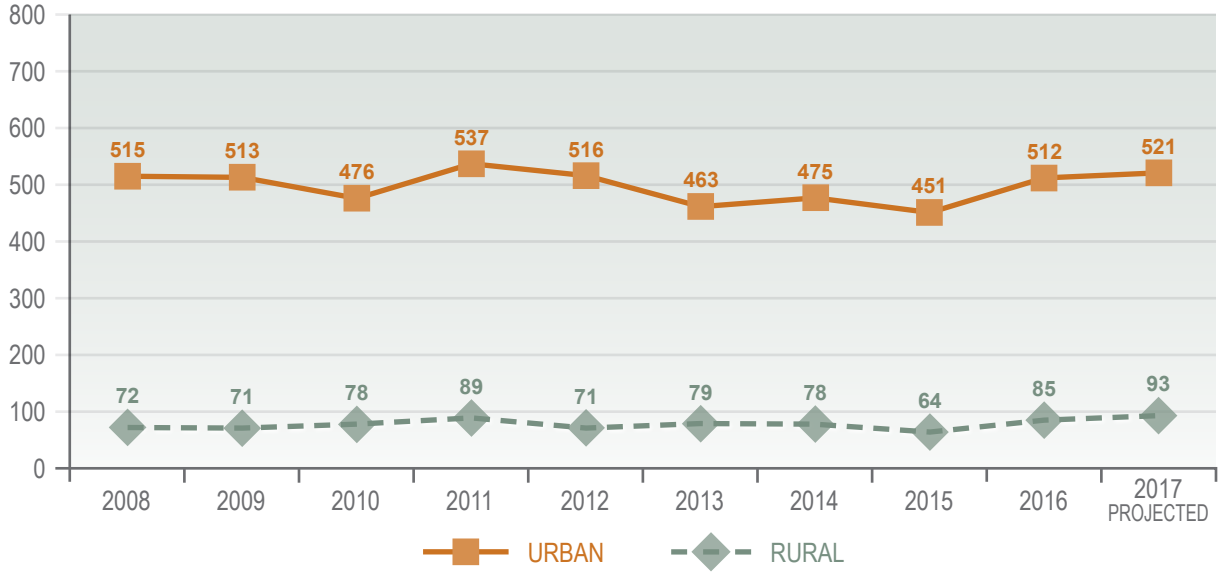
In 2017, the State experienced 626 fatalities on its roadways, the highest since 2011. This resulted in a 3.83 percent increase in overall traffic fatlities from the previous year (2016). The graph depicts overall traffic fatalities in New Jersey as well as the 5-year moving average of those fatalities.

NEW JERSEY MOTOR VEHICLE FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



Fatalities by roadway function are shown in the chart below. The figures from 2017 are projections based on 2016 figures. Urban roadway fatalities in 2016 increased 11.9 percent from 2015, and rural roadway fatalities increased 24.7 percent from 64 in 2015 to 85 in 2016.

FATALITIES BY ROADWAY FUNCTION* – RURAL AND URBAN



* Excludes undefined Roadway Function.

Comparing fatalities by operator category in 2017, *Driver* (259 or 41.4%) and *Passenger* (85 or 14.6%) fatalities decreased compared to the 2016 total fatalities. *Pedestrian* fatalities (183 or 29.3%) increased by 11.5 percent from 2016. *Bicyclist* (17 or 2.7%) decreased by 1 fatality and *Motorcyclist* fatalities (81 or 13%) increased by 18.5 percent from 2016.

TRAFFIC RELATED FATALITIES BY CATEGORY, 2008 - 2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
DRIVER	238	249	233	270	239	248	235	226	268	259
PASSENGER	115	99	101	105	103	95	80	96	88	85
PEDESTRIAN	135	158	139	142	156	129	168	173	162	183
BICYCLIST	20	13	13	17	14	14	11	17	18	17
MOTORCYCLIST	82	65	70	93	77	56	62	50	66	81
NJ STATE TOTALS	590	584	556	627	589	542	556	562	602	625
FATAL CRASHES	555	549	530	586	554	508	525	520	569	592

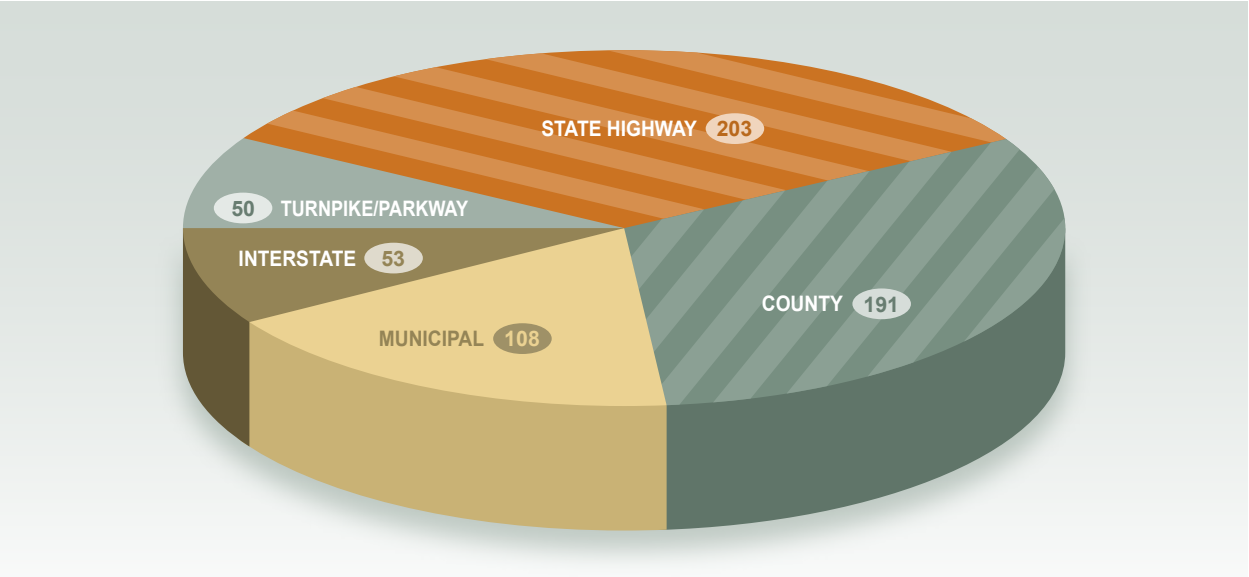
In 2017, pedestrian fatalities were the most prevalent in Essex County (22) accounting for 12 percent of all pedestrians killed in the State. The County with the highest number of motor vehicle fatalities (53) was Ocean County and was comprised mostly from driver fatalities followed by pedestrians. The most bicycle fatalities (4) occurred in Ocean County followed by Hudson County with 3 bicycle fatalities. Burlington County had the highest number of motorcycle fatalities in 2017 (10).

2017 VICTIM CLASSIFICATION BY COUNTY

	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	TOTAL
ATLANTIC	18	5	10	0	3	36
BERGEN	10	5	8	1	3	27
BURLINGTON	21	5	12	0	10	48
CAMDEN	15	6	15	1	7	44
CAPE MAY	4	5	2	0	5	16
CUMBERLAND	15	4	5	1	1	26
ESSEX	9	3	22	1	5	40
GLOUCESTER	21	9	9	1	4	44
HUDSON	2	2	15	3	4	26
HUNTERDON	7	0	1	0	0	8
MERCER	11	2	11	0	2	26
MIDDLESEX	22	7	12	2	4	47
MONMOUTH	21	6	11	1	4	43
MORRIS	11	5	7	1	5	29
OCEAN	23	8	13	4	5	53
PASSAIC	8	4	5	0	2	19
SALEM	12	1	0	0	4	17
SOMERSET	9	2	8	1	4	24
SUSSEX	5	0	1	0	0	7
UNION	10	3	14	0	7	34
WARREN	5	3	2	0	1	11
NJ STATE TOTALS	259	85	183	17	81	625

State Highways experienced the highest total of roadway fatalities (203 or 32%) in the State followed by County roadways (191 or 31%).

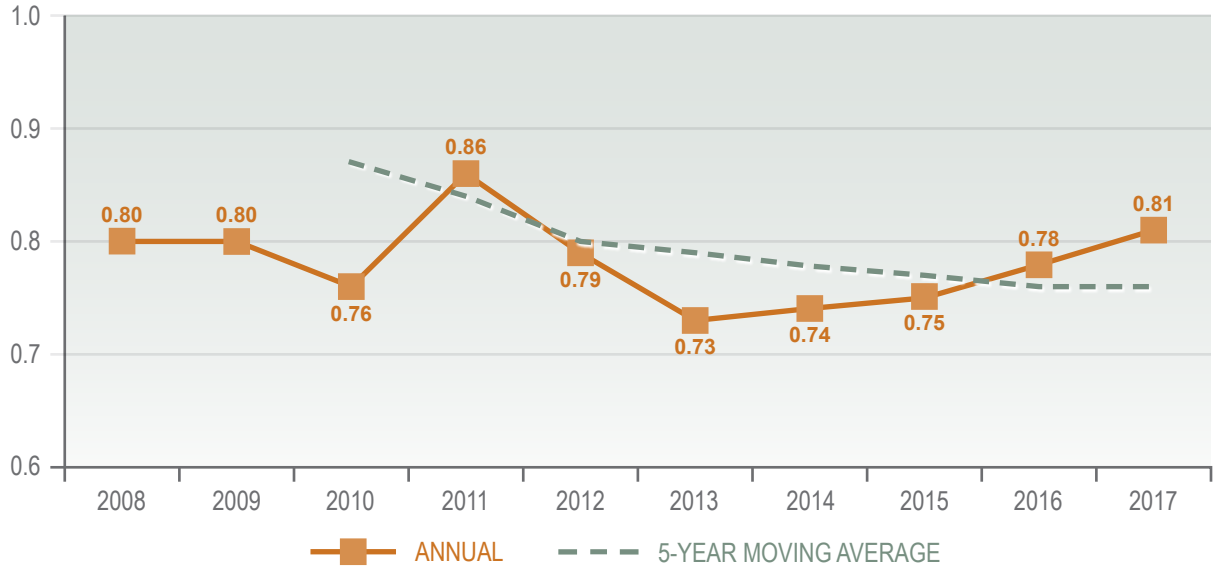
FATALITIES BY ROADWAY SYSTEM*, 2017



* Excludes undefined Roadway System (21 fatalities).

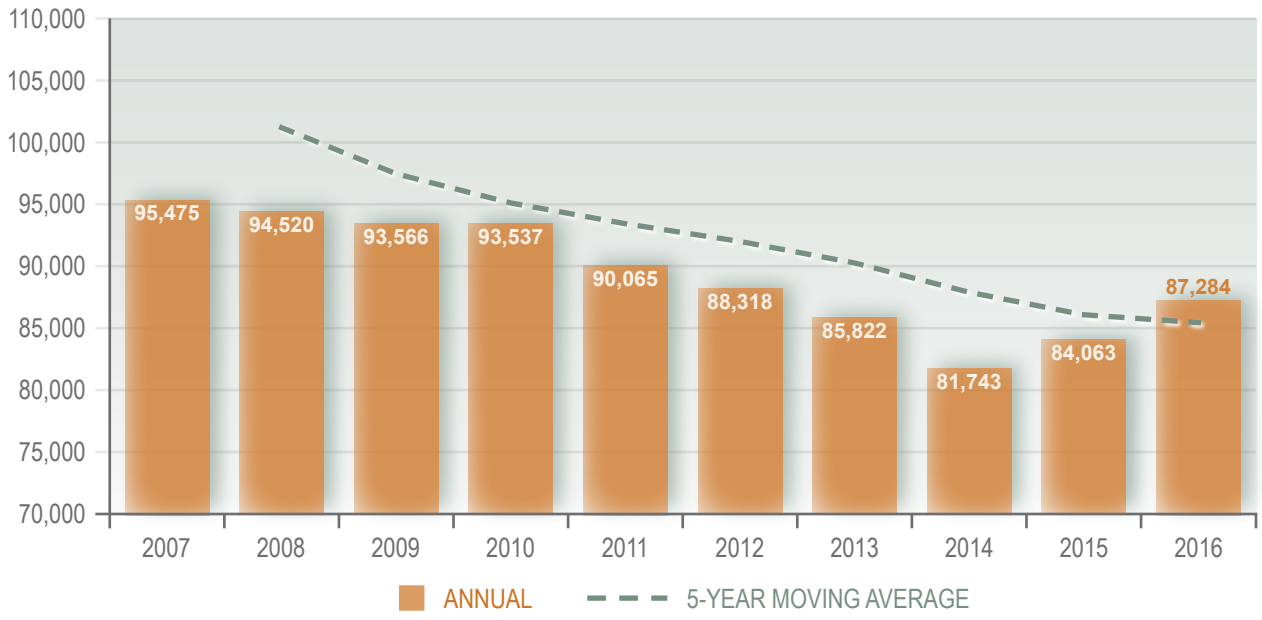
The statewide fatality rate per 100 million vehicle miles traveled increased from 0.78 in 2016 to 0.81 in 2017. The fatality rate for 2017 was calculated using forecasted VMT totals based on historic trends.

FATALITY RATE PER 100 MILLION VEHICLE MILES TRAVELED, ANNUAL AND 5–YEAR MOVING AVERAGE



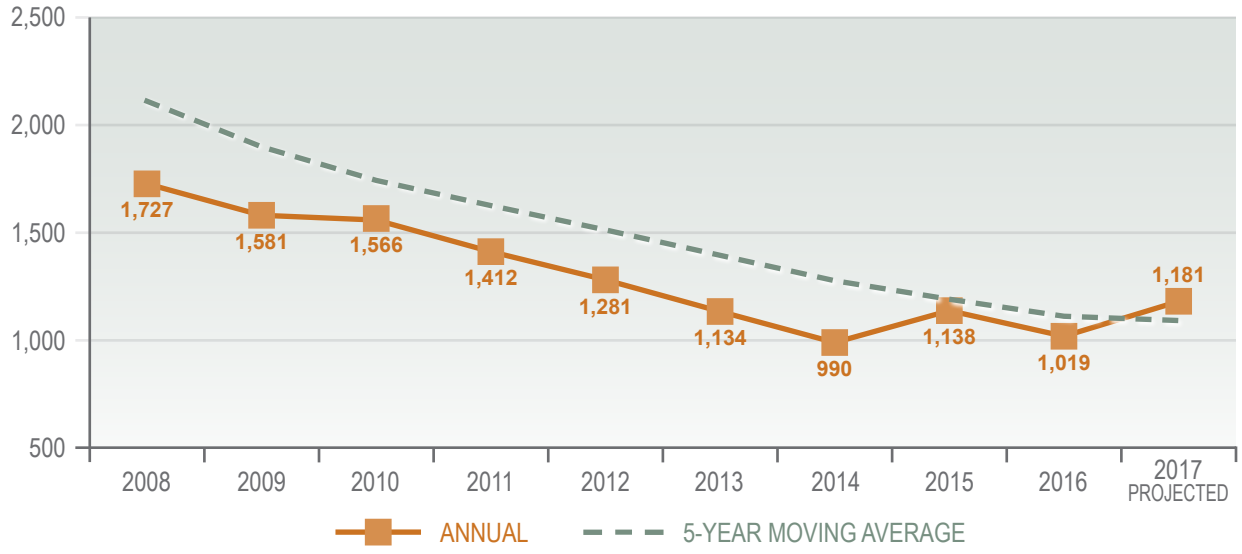
The overall number of motor vehicle injuries sustained in 2016 increased for the second consecutive year, increasing from 81,743 in 2014 to 84,063 in 2015, to 87,284 in 2016.

TOTAL INJURIES SUSTAINED IN MOTOR VEHICLE CRASHES



Serious injuries sustained on New Jersey's roadways in 2016 (1,019) decreased from 2015 (1,138). Preliminary figures are forecasting an increase in 2017 to 1,181 serious injuries.

SERIOUS INJURIES, ANNUAL AND 5–YEAR MOVING AVERAGE



The majority of crashes on New Jersey's roadways had one or more contributing circumstances reported at the time of the crash. The contributing circumstance or causation factor can provide context to the types of reasons why crashes occur on the State's roadways. The Tables that follow depict a cumulative breakdown of Driver Actions, Vehicle Factors and Road/Environmental factors that contributed to motor vehicle crashes. The figures shown are the cumulative totals for each cited circumstance.

For Driver Actions, *Driver Inattention* is cited as the State's largest contributing circumstance in crashes annually and was a cited reason in 29.8 percent of all vehicles involved in 2016, up from 29.7 percent in 2015. *Driver Inattention* can consist of a number of different factors, such as cell phone use, applying make-up, talking, eating, and attending to children. It remains a serious contributing factor of crashes on New Jersey's roadways and efforts are in place to provide education and outreach to motorists on the importance of reducing distractions while operating their vehicle. *Following Too Closely* was the second-most common circumstance in crashes. *Following Too Closely* can also be a factor in aggressive driving behavior as well as *Unsafe Speed* (4th). *Failure to Yield Right-of-Way to Another Vehicle or Pedestrian* was the third-most common circumstance in crashes..

Though Vehicle factors are the least common factors in motor vehicle crashes, they are important indicators to monitor each year. *Brake* and *Tire* failure were the most commonly cited circumstances in crashes, followed by *Steering* and *Wheel* malfunction.

Road and Environmental factors are the second leading factor in motor vehicle crashes statewide. *Road Surface Condition*, consisting of snowy, slushy, icy, wet, sandy and oily, was the leading Road/Environmental factor in crashes. *Animal Crashes* also play a factor in crashes on New Jersey's roadways, especially in the Fall months.

TOP CONTRIBUTING DRIVER ACTIONS IN CRASHES, 2012 - 2016

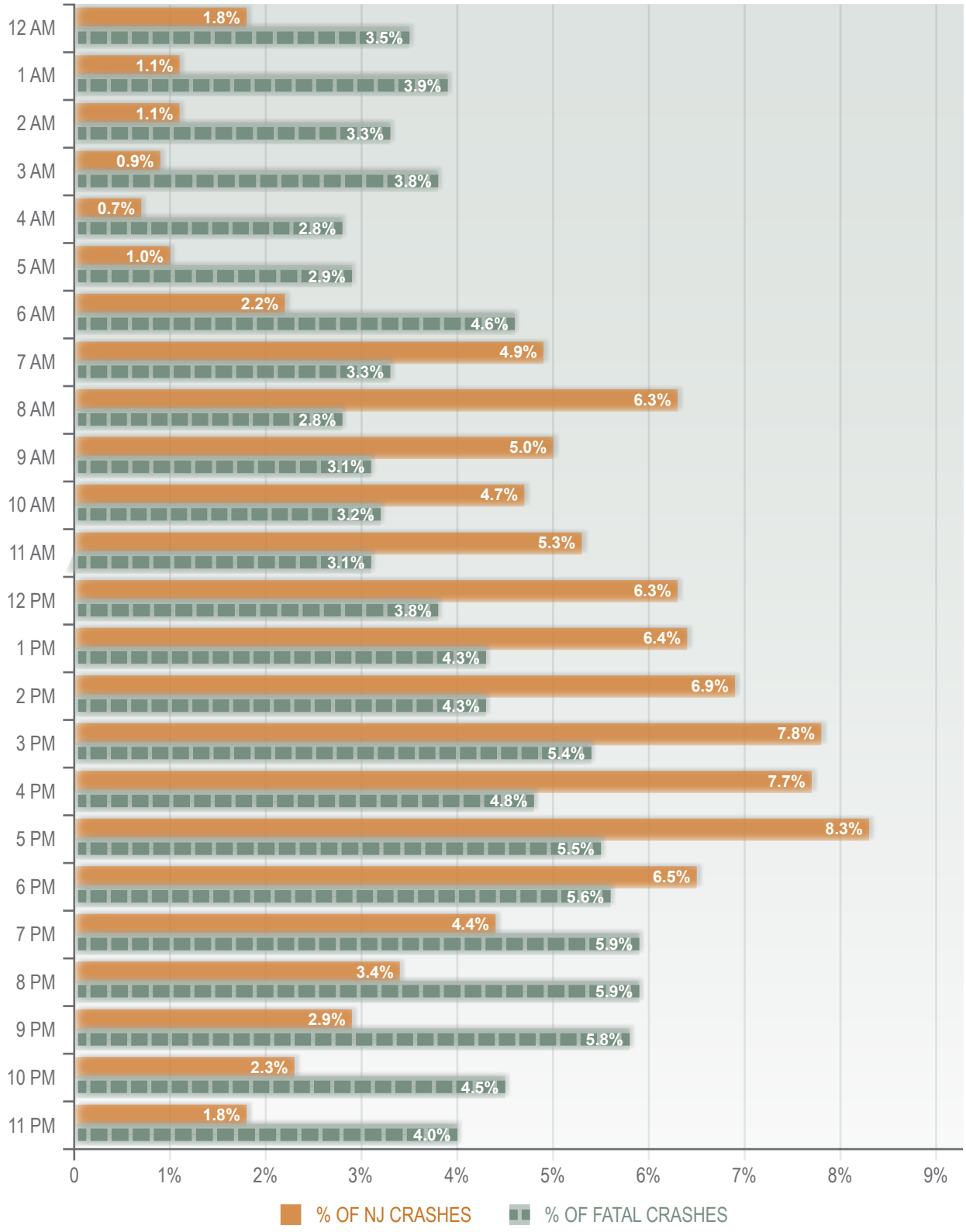
CONTRIBUTING DRIVER ACTION	2012	2013	2014	2015	2016	TOTAL
DRIVER INATTENTION	160,660	164,433	163,956	152,433	158,416	799,898
FOLLOWING TOO CLOSELY	28,964	30,972	32,422	33,497	38,500	164,355
FAILED TO YIELD RIGHT OF WAY TO VEHICLE/PEDESTRIAN	22,707	23,041	21,856	22,297	24,541	114,442
UNSAFE SPEED	17,878	18,556	18,430	18,018	16,252	89,134
BACKING UNSAFELY	22,236	23,099	20,908	10,750	11,277	88,270
IMPROPER LANE CHANGE	11,684	12,671	13,501	14,438	16,078	68,372
FAILED TO OBEY TRAFFIC CONTROL DEVICE	9,264	9,170	9,004	9,461	25,541	62,440
IMPROPER TURNING	8,818	8,896	9,321	8,605	9,552	45,192
IMPROPER PASSING	5,934	5,939	6,055	6,123	6,764	30,815
IMPROPER PARKING	3,461	3,734	3,599	2,105	2,291	15,190
FAILURE TO KEEP RIGHT	2,639	2,564	2,439	2,265	2,425	12,332
WRONG WAY	659	611	604	608	621	3,103
IMPROPER USE/FAILED TO USE TURN SIGNAL	486	514	450	433	450	2,333
IMPROPER USE/NO LIGHTS	135	128	161	124	141	689
OTHER DRIVER ACTION	13,703	12,835	12,783	11,619	11,714	62,654
NONE	253,556	260,648	259,635	247,811	258,461	1,280,111

TOP CONTRIBUTING VEHICLE FACTORS IN CRASHES, 2012 - 2016						
CONTRIBUTING VEHICLE FACTOR	2012	2013	2014	2015	2016	TOTAL
BRAKES	1,784	1,668	1,749	1,563	1,627	8,391
TIRES	1,106	1,257	1,004	1,074	1,122	5,563
STEERING	496	486	486	503	511	2,492
WHEELS	354	391	332	365	391	1,833
VEHICLE COUPLING/HITCH/SAFETY CHAINS	134	138	176	134	123	705
WINDOWS/WINDSHIELD	147	154	157	112	134	704
DEFECTIVE LIGHTS	98	89	78	81	67	413
MIRRORS	43	32	37	31	30	173
WIPERS	13	9	21	11	16	70
OTHER VEHICLE FACTOR	2,493	2,547	2,598	2,182	2,201	12,021

TOP CONTRIBUTING ROAD / ENVIRONMENTAL FACTORS IN CRASHES, 2012 - 2016						
CONTRIBUTING ROAD / ENVIRONMENTAL FACTOR	2012	2013	2014	2015	2016	TOTAL
ROAD SURFACE CONDITION	7,691	10,665	14,180	12,101	7,679	52,316
ANIMALS IN ROADWAY	8,764	9,077	9,171	8,955	9,976	45,943
OBSTRUCTION/DEBRIS IN ROAD	2,258	2,225	2,454	2,221	2,336	11,494
SUN GLARE	1,343	1,588	1,558	1,367	1,866	7,722
PHYSICAL OBSTRUCTIONS (VIEW)	971	815	904	706	713	4,109
RUTS/ HOLES/ BUMPS	187	328	747	408	243	1,913
CONTROL DEVICE DEFECTIVE OR MISSING	362	129	137	106	88	822
IMPROPER/INADEQUATE LANE MARKINGS	64	46	33	56	39	238
IMPROPER WORK ZONE	40	37	40	36	27	180
OTHER ROADWAY FACTORS	652	624	690	536	577	3,079

The majority of crashes taking place on New Jersey's roadways occur between the hours of 7am and 6pm. Over the last five years, 76.2 percent of all crashes occurred between those hours. Compared to total crashes over the last 5 years, only 49.3 percent of fatal crashes took place between 7am and 6pm, the rest occurring during nighttime hours.

NJ CRASH % VERSUS FATAL CRASH % BY TIME OF DAY, 2012 - 2016



Statewide motor vehicle crashes by crash type show that *Same Direction – Rear End* crashes remain the most common crash type, which is also the majority of crash types when one is *Following Too Closely* (2nd most cited contributing circumstance). The 2012-2016 interval saw *Same Direction – Side Swipe* crashes move from 4th (2011-2015 Total) to second, and *Struck Parked Vehicle* moved from 2nd to fourth.

TOP CRASH TYPES, 2012 - 2016						
CRASH TYPE	2012	2013	2014	2015	2016	TOTAL
SAME DIRECTION - REAR END	79,546	80,891	80,529	83,986	88,474	413,426
SAME DIRECTION - SIDE SWIPE	34,150	34,724	35,866	38,370	40,769	183,879
RIGHT ANGLE	36,755	37,194	36,292	35,731	37,771	183,743
STRUCK PARKED VEHICLE	37,464	38,681	40,348	31,962	32,269	180,724
FIXED OBJECT	35,011	35,220	34,331	32,085	29,769	166,416
BACKING	24,816	25,490	24,365	11,126	11,797	97,594
ANIMAL	8,243	8,752	9,104	8,958	10,072	45,129
LEFT TURN / U TURN	6,597	6,446	6,098	6,538	6,687	32,366
PEDESTRIAN	5,350	5,250	4,829	4,406	4,528	24,363
OPPOSITE DIRECTION - HEAD ON/ANGULAR	4,100	4,397	4,629	4,450	4,363	21,939
NON-FIXED OBJECT	2,011	2,445	3,209	3,860	3,759	15,284
OTHER	2,869	3,024	3,059	2,997	2,721	14,670
OPPOSITE DIRECTION - SIDE SWIPE	2,373	2,464	2,846	2,526	2,621	12,830
PEDALCYCLIST	2,048	1,849	1,737	1,791	1,813	9,238
OVERTURNED	1,697	1,689	1,610	1,681	1,502	8,179
ENCROACHMENT	864	792	869	812	795	4,132
RAILCAR-VEHICLE	26	27	27	17	24	121

New Jersey monitors motor vehicle crash trends in several program areas to make assessments on overall crash circumstances on the roadways. Below is a list of areas that DHTS monitors from year-to-year to determine fluctuations within the program areas, which aids in targeting safety programing needed to make New Jersey's roads safer.

MOTOR VEHICLE CRASH TRENDS, 2012 - 2016						
CRASH RECORD TOTALS	2012	2013	2014	2015	2016	TOTAL
TOTAL CRASH RECORDS	284,065	289,460	289,873	271,445	279,874	1,414,717
TOTAL VEHICLES INVOLVED IN CRASHES	535,628	546,015	546,459	512,773	532,054	2,672,929
TOTAL DRIVERS INVOLVED IN CRASHES	535,628	546,015	546,459	512,773	532,054	2,672,929
TOTAL OCCUPANTS INVOLVED IN CRASHES	648,010	652,909	643,233	624,252	642,800	3,211,204
TOTAL PEDESTRIANS INVOLVED IN CRASHES	8,706	8,358	7,775	7,303	7,334	39,476
PROGRAM AREA	2012	2013	2014	2015	2016	TOTAL
DISTRACTED DRIVING CRASHES	149,192	151,779	151,034	142,107	147,572	741,684
UNSAFE SPEED INVOLVED CRASHES	17,470	18,140	17,549	17,610	15,884	86,653
PEDESTRIAN INVOLVED CRASHES	5,732	5,649	5,214	4,709	4,840	26,144
BICYCLIST INVOLVED CRASHES	2,211	2,010	1,863	1,959	1,923	9,966
YOUNG DRIVER INVOLVED CRASHES	38,951	37,959	36,040	35,942	36,352	185,244
OLDER DRIVER INVOLVED CRASHES	45,294	47,770	47,779	43,729	46,265	230,837
MOTORCYCLE INVOLVED CRASHES	2,632	2,414	2,193	2,300	2,188	11,727
UNRESTRAINED OCCUPANT CRASHES	4,768	4,476	4,376	3,741	3,661	21,022
WORK ZONE RELATED CRASHES	5,969	6,561	6,594	5,221	4,454	28,799
LIVE ANIMAL CRASHES	9,645	10,061	10,274	10,114	11,270	51,364
ALCOHOL INVOLVED CRASHES	8,342	7,849	7,595	7,101	7,007	37,894
DRUGGED DRIVING CRASHES	1,126	1,016	988	1,119	1,129	5,378
SINGLE VEHICLE CRASHES	53,768	54,564	54,246	51,844	50,588	265,010
DROWSY DRIVING CRASHES	2,642	2,754	2,740	2,753	2,834	13,723
HEAD-ON COLLISION CRASHES	6,473	6,861	7,475	6,976	6,984	34,769
CURVE RELATED CRASHES	27,077	27,468	26,703	26,004	25,542	132,794
RUN OFF ROAD CRASHES	22,391	23,420	22,468	23,465	21,837	113,581

FATALITIES, SERIOUS INJURIES AND FATALITY RATE

The State met its goal of reducing total fatalities by 2.5 percent from 586 to 571 by 2016 with a 5-year average of 570 fatalities. Total fatalities have increased in each of the prior four years (2014-2017) with the highest number of fatalities recorded at 626 in 2017. The last decrease in overall fatalities occurred in 2013 when there was an 8.7 percent decrease from the previous year. Driver fatalities accounted for over 40 percent of all fatalities from 2013-2017. The second largest category of fatalities is represented by pedestrians accounting for approximately 30 percent of all statewide fatalities in 2017.

Serious injuries continue to move in a downward trend from a total of 1,281 in 2012 compared to 1,019 in 2016. Serious injuries are forecasted to be 1,181 in 2017. The State met its goal of reducing serious injuries by 2.5 percent from 1,919 to 1,871 by 2016.

The goal to reduce the fatality rate from 0.79 to 0.76 in 2016 was met with a rate of 0.758 (2012-2016 average). Fatality rates per 100 million vehicle miles traveled have increased in each of the last five years (2013-2017).

Programs offered in the 2019 HSP will target enforcement based on data indicating high crash locations and will continue to increase awareness of the negative effects of all traffic violations.

OCCUPANT PROTECTION

The State met its goal of increasing seat belt usage rates from 87.59 percent to 90.59 percent in 2016 with a rate of 91.59 percent (2010-2016 average). The usage rate for front seat occupants in passenger motor vehicles was 94.07 percent in 2017, an increase of 0.12 percent from the previous year. Back seat occupant rates for adults increased to 48 percent in 2017, and the overall rear-seat passenger usage rates had no change of 79 percent in 2016 and 2017. The highest usage rate observed was of children between 0-8 years of age at 93 percent, an improvement from 90 percent in 2016. Passengers between the ages of 8-18 show a usage rate increase from 60 percent in 2016 to 70 percent in 2017.

The State also met its goal of reducing unrestrained fatalities by 4 percent from 148 to 142 with a total of 135 fatalities (2010-2016 average). Preliminary numbers for 2017 indicate a decrease in the number of unrestrained fatalities from 148 (2016) to 137 (2017); however, nearly 42 percent of occupants killed in crashes were unbuckled in 2016 and an additional 22 lives could have been saved if every occupant in a motor vehicle was using a belt at the time of the crash.

The 2019 HSP will continue to provide funds for the *Click It or Ticket* mobilization. Year-round occupant protection enforcement efforts will be expanded to include nighttime enforcement programs when possible. Education programs will continue to be offered to help parents and caregivers get access to car seats and teach the importance of car seats and how to properly use and install them.

IMPAIRED DRIVING

The State met its goal of reducing total alcohol related fatalities by 3 percent from 168 to 163 with a total of 146 fatalities (2012-2016 average). A reduction in the number of alcohol impaired driving fatalities from 137 in 2016 to 129 in 2017 is forecasted. The overall percentage of alcohol impaired driving deaths is decreasing; however, 22.8 percent of all fatalities in 2016 still involved alcohol.

Drug related fatalities account for approximately 20 percent of crashes. Drivers from 16-35 years of age account for nearly 49 percent of all alcohol involved crashes and 54 percent of all drug related crashes. There were 1,075 drug related crashes during the five-year period from 2012-2016.

High visibility enforcement campaigns will be conducted during national mobilization periods to address these problem areas. Underage drinking initiatives will also be implemented by bringing undercover law enforcement establishments together in partnership to deter the sale of alcohol to underage individuals. Drug recognition and standardized training in the detection and apprehension of DWI offenders will also be provided to the law enforcement community. The criminal justice system plays a critical role in deterring unsafe driving behaviors and assigning appropriate consequences for impaired driving and other traffic offenses. From arrest to prosecution to adjudication, it is important that all facets of the criminal justice system are aware of the efforts being made to reduce traffic fatalities.

DISTRACTED DRIVING

The State did not meet its goal of reducing distracted driving related crashes by 3 percent from 144,190 to 139,865 with a total of 148,329 (2012-2016 average). The goal for the Number of Distracted Driving Involved fatalities in motor vehicle crashes was not established in FY16, therefore this target is in progress until FY21. Crashes related to driver inattention increased in 2016 to 147,572 from 142,107 (2015). Driver inattention remains the most significant cause of fatal and incapacitating crashes. Distracted driving fatalities have fluctuated from year-to-year and declined from 127 in 2016 to 111 in 2017.

Responding to an 8 percent spike in traffic fatalities in 2016, a new initiative was implemented in 2017 that is providing state residents with a method to report dangerous drivers. The State's #77 alert system, previously used for reporting aggressive driving, can also be used to report all forms of dangerous driving, including drivers on a cell phone. Warning letters addressing the dangers of driving distracted are sent to drivers spotted talking or texting while driving. This initiative will continue to be implemented in 2019 and will include enforcement by State and local police and public awareness to promote the program.

SPEED

The State met its goal of reducing speed related fatalities by 4 percent from 150 to 144 with a total of 126 fatalities (2012-2016 average). The State did not establish a goal for the number of speed related crashes in FY16, therefore this target is in progress until FY21.

Speeding is a factor in approximately 6 percent of all traffic crashes and nearly 22 percent of all fatalities. The 16-30 year old driver is the most prominent age group involved in speed related crashes. The percentage of deaths involving speeding is generally higher on minor roads than on interstates or other major roadways and occurs about half the time on roads with speed limits lower than 55 miles per hour.

The 2019 HSP will continue to provide funds for enforcement and education programs to police departments in areas of the State that are overrepresented in speed related crashes..

MOTORCYCLES

The State met its goal of reducing motorcycle fatalities by 15 percent from 75 to 64 with a total of 63 fatalities (2012-2016 average). Motorcycle deaths accounted for 13 percent of all motor vehicle crash deaths in the State in 2017. There was a 32 percent increase in motorcycle fatalities from 50 in 2015 to 66 in 2016, and a 18 percent increase from 2016 to 2017 (81 fatalities) which was higher than anticipated. In addition, the goal of reducing unhelmeted motorcycle fatalities by 2.5 percent from 6 to 5 was achieved with a total of 4 fatalities (2012-2016 average). According to preliminary figures, the number of unhelmeted fatalities declined from 5 in 2016 to 3 in 2017.

In an effort to reduce motorcycle related crashes and fatalities, the 2019 HSP will include efforts to promote the *Share the Road* message to the general public and support the State's motorcycle safety education programs offered by the Motor Vehicle Commission.

YOUNGER DRIVERS (16-20 YEARS OF AGE)

The State did not meet its goal of reducing young driver fatalities by 2.5 percent from 65 to 57 with total of 58 fatalities (2012-2016 average). Motor vehicle fatalities remain the leading cause of death among teenage males and females in the State. Young drivers were involved in 11 percent of total motor vehicle fatalities in 2017. Fatalities involving younger drivers increased from 58 in 2014 and 2015 to 64 in 2016. The five-year moving average declined from 62 in 2015 to 58 in 2016.

A continuation in the efforts to educate both parents and teens in the pre-permit or permit stage of licensure will be continued in 2019. Legislative initiatives requiring permit holders under the age of 21 to complete a minimum of 50 hours of practice driving, 10 of which must be completed during hours of darkness, will provide additional support in the effort to reduce young driver crashes and fatalities.

PEDESTRIANS AND BICYCLES

The State did not meet its goal of reducing pedestrian fatalities by 2.5 percent from 142 to 139 with a total of 157 fatalities (2012-2016 average). Reducing pedestrian injuries and fatalities continues to be a challenge. Efforts continue to promote safe driving as well as the use and practice of safe walking in and around the State. The overall number of pedestrian fatalities decreased in 2016 from 170 in 2015 to 162, however, New Jersey saw a 13 percent increase in pedestrian fatalities in 2017 (183).

The State did not meet its goal of reducing bicyclist fatalities by 2.5 percent from 15 to 13 with a total of 15 (2012-2016 average). The overall number of bicycle fatalities decreased to 18 in 2016 to 17 in 2017.

Enforcement grants from both State and Federal funding sources that target high pedestrian crash locations will continue to be funded in 2019 in an effort to increase the exercise of due care on the roadway and compliance with appropriate traffic laws by motorists, pedestrians, and cyclists. The DHTS will continue to partner with the New Jersey Bicycle and Pedestrian Advisory Council to advance bicycling and walking as safe and viable forms of transportation.

OLDER DRIVERS (65+)

The State met its goal of reducing older driver fatalities by 2.5 percent from 66 to 65 with a total of 65 fatalities (2012-2016 average).

Older drivers accounted for nearly 24 percent of all driver fatalities in the State in 2016 and preliminary estimates are showing nearly 30 percent of all driver fatalities in 2017. Older driver fatalities in 2016 increased slightly to 64 from 60 in 2015, preliminary estimates for 2017 are 77, a 20 percent increase. As the licensed driver population is likely to grow for this age group, the challenge will be to balance mobility for older drivers with safety for all road users while the goal is to enable older drivers to retain as much mobility through driving as is consistent with safety on the road for themselves, their passengers and other road users.

Programs in the 2019 HSP will include partnering with the Motor Vehicle Commission to provide educational materials in understanding how aging effects driving, the effects of medications and health conditions and guiding them in restricting their driving in more risky situations. Other efforts will include providing support for the AAA *Car Fit* Program.

ROADWAY SAFETY

The State did not meet its goal of reducing work zone related crashes by 3 percent from 5,749 to 5,577 with a total of 5,759 (2012-2016 average).

Work zone safety continues to be a priority for traffic engineering professionals and highway agencies. With as many as 200 highway and bridge projects under way at any given time in the State, motorists are likely to travel through work zones on a regular basis. Roadway construction and maintenance activities result in significant safety and mobility issues for both workers and motorists. Awareness of proper work zone setup, maintenance, personal protection, and driver negotiation are all factors to be considered in establishing a safe work zone.

Work zone related crashes decreased by 14.7 percent from 2015 to 2016.

SOCIAL MEDIA ENGAGEMENTS

The State did not establish a goal for the Number of Social Media Engagements in FY16, therefore this target is in progress until FY21.

Public information is the cornerstone of the work in highway safety. The primary function is to educate the public about traffic safety and to induce the public to change their attitudes and behaviors in a way that leads to greater safety on the roads. DHTS has active social media accounts that engage the public on traffic safety topics, safety awareness around holidays and special events, as well as safety related tips and tricks for our users of the roadways. These efforts have led to monthly increases in the audience base, thus broadening the exposure of targeted safety messages.

DHTS will continue to work with an online marketing firm with expertise in social media optimization to produce and promote content that furthers the division's mission. The campaign will continue to increase awareness of the State's traffic safety initiatives, including National sponsored events such as *Click it or Ticket*, *U Drive U Text U Pay*, and *Drive Sober or Get Pulled Over* campaigns. Twitter, Facebook and Instagram pages will be created that engage and inform the public about the division's campaigns and programs. DHTS aims to engage its audience no less than 50 times in the upcoming year with relevant and informative messaging on traffic safety

PERFORMANCE GOALS

It is the ultimate goal of the NJ Division of Highway Traffic Safety to reduce the number of fatalities occurring on New Jersey's roadways through enforcement, education and encouragement through a variety of safety strategies. In some cases, the performance goals shown are reflected as increases over the moving average cycle, namely overall fatalities, drugged driving, pedestrian, bicyclist and distracted driving. The performance goals were driven on trend analysis and mirror the methodologies set forth in the Strategic Highway Safety Plan (SHSP) to establish realistic targets that can be achieved through safety programs.

CORE PERFORMANCE GOALS

NUMBER OF TRAFFIC FATALITIES*

BASELINE VALUE	570	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	605	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT: Limit the forecasted increase of total fatalities to less than -6.10% from 570 (2012-2016 average) to 605 (2015-2019 average).

JUSTIFICATION: The difference in fatalities from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. A 9.8% decrease is forecasted from 2017-2018 and a 2.62% increase is forecasted for 2018-2019.

NUMBER OF SERIOUS INJURIES*

BASELINE VALUE	1,112	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	1,101	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT: Decrease total serious traffic injuries by 0.99% from 1112 (2012-2016 average) to 1,101 (2015-2019 Average)

JUSTIFICATION: The difference in serious injuries from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. A -66.50 decrease is forecasted from 2017-2018, and a -61.25 decrease is forecasted from 2018-2019.

FATALITIES/VMT*

BASELINE VALUE	0.758	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	0.780	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT: Limit the increase of fatalities/VMT to less than -2.95% from .758 (2012-2016 average) to .780 (2015-2019 Average).

JUSTIFICATION: VMTs for 2017, 2018 and 2019 were forecasted based on calculating the difference from year to year for the past 5 years and averaging those figures to determine a future rate. 2015 VMTs were used as a base for calculation purposes involving these years. The years 2008, 2012 + 2016 are adjusted for Leap Years (366 days).

NUMBER OF UNRESTRAINED FATALITIES

BASELINE VALUE	134.8	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	131.1	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT: Reduce unrestrained passenger fatalities by 2.73% from 134.8 (2012-2016 Average) to 131.1 (2015-2019 Average).

JUSTIFICATION: The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. A -11 decrease is forecasted from 2016-2017, a -8 decrease is forecasted for 2017-2018, and a -4 decrease is forecasted for 2018-2019.

* These three performance measures are common in both the HSP and SHSP

CORE PERFORMANCE GOALS (Continued)

NUMBER OF ALCOHOL INVOLVED FATALITIES

BASELINE VALUE	143.6	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	122.8	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Reduce total alcohol related fatalities 14.45% from 143.6 (2012-2016 Average) to 122.8 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. A -8 reduction is forecasted from 2016-2017, a -7 reduction is forecasted for 2017-2018, and a -3 reduction is forecasted for 2018-2019.

NUMBER OF SPEED RELATED FATALITIES

BASELINE VALUE	126.4	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	137.3	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted speed related fatalities to less than -8.61% from 126.4 (2012-2016 Average) to 137.3 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations was calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. A +5 increase is forecasted for 2016-2017, a +7 increase is forecasted for 2017-2018, and a +8 increase is forecasted for 2018-2019. Large increases were seen from 2008-2011 and these large increases overshadow the smaller year-to-year decreases, thus deriving a negative decrease for future years. New Jersey expects the number of speed related fatalities to remain consistent, however the moving average is expected to increase over the next 3 years.

NUMBER OF MOTORCYCLE FATALITIES

BASELINE VALUE	62.2	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	72.2	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase in motorcycle fatalities to less than -15.35% from 62.6 (2012-2016 Average) to 72.2 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. Preliminary figures were used in 2017. A -0.4 decrease is forecasted for 2017-2018, and a -0.14 decrease is forecasted for 2018-2019. New Jersey experienced an increase in motorcycle fatalities over the last 2 years. New Jersey expects the number of motorcycle fatalities to reduce in future years, however the moving average is expected to increase over the next 3 years.

NUMBER OF UNHELMETED MOTORCYCLE FATALITIES

BASELINE VALUE	4.9	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	3.2	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Reduce total unhelmeted motorcycle fatalities 34.11% from 4.9 (2012-2016 Average) to 3.2 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. Preliminary figures were used in 2017. A -1.2 decrease is forecasted for 2017-2018, and a -0.92 decrease is forecasted for 2018-2019.

CORE PERFORMANCE GOALS (Continued)

NUMBER OF YOUNG DRIVER FATALITIES

BASELINE VALUE	58.6	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	56.5	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Reduce young driver involved fatalities 3.62% from 58.6 (2012-2016 Average) to 56.5 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. A -5.8 decrease is forecasted for 2016-2017, a -4.78 decrease is forecasted for 2017-2018, and a -4.66 decrease is forecasted for 2018-2019. New Jersey has made great progress in the area of young driver education and safety. Young drivers are mandated to participate in a Graduated Drivers License period (probationary) that limits the number of occupants riding in the vehicle and the hours in which they can operate the vehicle. These efforts have led to the reduction in the number of younger driver involved fatalities, a trend that is forecasted to continue.

NUMBER OF PEDESTRIAN FATALITIES

BASELINE VALUE	157	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	178.6	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase in total pedestrian fatalities to less than -13.75% from 157 (2012-2016 Average) to 178.4 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 5-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. Preliminary figures were used for 2017. A +3 increase is forecasted for 2017-2018, and a +5 increase is forecasted for 2018-2019. New Jersey experienced a 12.6% increase in pedestrian fatalities in 2016 from 2017. This large increase overshadows the smaller year-to-year decreases, thus deriving a negative decrease for future years.

NUMBER OF BICYCLIST FATALITIES

BASELINE VALUE	15	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	17.6	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase of total bicyclist fatalities to less than -17% (2.6) from 15 (2012-2016 Average) to 17.6 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 5-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. Preliminary figures were used for 2017. A +1 increase is forecasted for 2017-2018, and no change is forecasted for 2018-2019. New Jersey experienced a +7 increase in bicyclist fatalities in 2015 from 2014. This large increase overshadows the smaller year-to-year decreases, thus deriving a negative decrease for future years.

SEAT BELT OBSERVATIONAL USE

BASELINE VALUE	0.9159	BASELINE START YEAR	2013	BASELINE END YEAR	2017
TARGET VALUE	0.9366	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Obtain a seatbelt observational usage rate of no less than 93.66%.

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. A +0.0027 increase is forecasted for 2017-2018, and a +0.0026 increase is forecasted for 2018-2019.

NUMBER OF CITATIONS ISSUED OR ARRESTS MADE DURING GRANT FUNDED ENFORCEMENT ACTIVITIES

SEAT BELT	33,986	IMPAIRED DRIVING	4,908	SPEEDING	27,596

ADDITIONAL PERFORMANCE GOALS

NUMBER OF DRUG INVOLVED FATALITIES

BASELINE VALUE	117.2	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	119	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase in drug involved fatalities to less than -1.56% from 117.2 (2012-2016 Average) to 119 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. Preliminary figures were used for 2017. A +10 increase is forecasted for 2017-2018, and a +9 increase is forecasted for 2018-2019. New Jersey is actively training law enforcement personnel to better detect driver impairment through the DRE Program, and has resulted in higher accounts of drug use among drivers. NJ expects to see an increase in detected impairment, therefore a slight increase in drug involved crashes is predicted.

NUMBER OF DRUG INVOLVED CRASHES

BASELINE VALUE	1,075.2	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	1,139.4	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase in drug involved crashes to -5.97% from 1,075.2 (2012-2016 Average) to 1,139.4 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using the associated reduction rate to determine 5-year rolling averages for the target years. A +7.1 increase is forecasted from 2016-2017, +13.71 increase decrease is forecasted from 2017-2018, and a +13.48 increase is forecasted from 2018-2019. New Jersey is actively training law enforcement personnel to better detect driver impairment through the DRE Program, and has resulted in higher accounts of drug use among drivers. NJ expects to see an increase in detected impairment, therefore a slight increase in drug involved crashes is predicted.

NUMBER OF DISTRACTED DRIVING RELATED FATALITIES

BASELINE VALUE	93.4	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	117.2	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase in distracted driving related fatalities to less than -24.46% from 93.4 (2012-2016 Average) to 117.2 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 5-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. Preliminary figures were used in 2017. A +7 increase is forecasted for 2017-2018, and a +12 increase is forecasted for 2018-2019. Tracking distracted driving as a contributing circumstance in fatal crashes began in 2010. There have been large fluctuations in year-to-year trends, making the regression model difficult to predict. Distracted Driving data collection and detection has improved the past few years, deriving higher totals of occurrence. New Jersey expects the number of distracted driving related fatalities to remain consistent to trends seen since 2014, however the moving average is expected to increase over the next 3 years

NUMBER OF DISTRACTED DRIVING RELATED CRASHES

BASELINE VALUE	148,329	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	147,072	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Reduce total distracted driving related crashes by 0.85% from 148,329 (2012-2016 Average) to 147,072 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. A +1,138 increase is forecasted for 2016-2017, a +6 increase is forecasted for 2017-2018, and a -463 decrease is forecasted for 2018-2019.

ADDITIONAL PERFORMANCE GOALS (Continued)

NUMBER OF SPEED RELATED CRASHES

BASELINE VALUE	17,330	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	15,400	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Reduce total speed related fatalities by 11.14% from 17,330 (2012-2016 Average) to 15,400 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. A -575 decrease is forecasted for 2016-2017, a -824 decrease is forecasted for 2017-2018, and a -768 decrease is forecasted for 2018-2019.

NUMBER OF OLDER DRIVER FATALITIES

BASELINE VALUE	64.6	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	71.1	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Limit the forecasted increase in older driver fatalities to less than -10.14% from 64.6 (2012-2016 Average) to 71.1 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2018 and 2019 were calculated using this reduction rate to determine rolling averages for the target years. Preliminary figures were used in 2017. A -0.6 decrease is forecasted for 2017-2018, and a +1.94 increase is forecasted for 2018-2019. New Jersey experienced an increase in older driver fatalities over the last 3 years with the largest occurring from 2016 to 2017. New Jersey expects the number of older driver fatalities to remain consistent, however the moving average is expected to increase over the next 3 years.

NUMBER OF WORK ZONE RELATED CRASHES

BASELINE VALUE	5,759.8	BASELINE START YEAR	2012	BASELINE END YEAR	2016
TARGET VALUE	4,422.7	TARGET START YEAR	2015	TARGET END YEAR	2019

GOAL STATEMENT

Reduce work zone related crashes by 10.50% from 5,759.8 (2012-2016 Average) to 4,422.7 (2015-2019 Average).

JUSTIFICATION

The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were calculated leading up to the base period. Using this method, the predicted figures for 2017, 2018 and 2019 were calculated using this reduction rate to determine 5-year rolling averages for the target years. A -140 decrease is forecasted from 2016-2017, a -188.2 decrease is forecasted for 2017-2018, and a -127.22 decrease is forecasted for 2018-2019.

PLANNING AND ADMINISTRATION

Project Name: **PLANNING AND ADMINISTRATION**

Sub-Recipient: **DIVISION OF HIGHWAY TRAFFIC SAFETY**

Total Project Amount: **$500,000**

Project Description:

The DHTS is responsible for the planning, development, administration, and coordination of an integrated framework for traffic safety planning and action among agencies and organizations in New Jersey. The successful implementation of traffic safety programs must involve the combined efforts of a number of organizations in order to be successful.

Although the primary responsibility for managing traffic safety lies with the DHTS, a number of State and local government agencies and other organizations must also play a role if the entire traffic safety system is to be effective.

Funds from this task include the salaries of the management, fiscal and clerical support staffs and division operating costs. Funds will also be used for the maintenance of the eGrants system SAGE (System for Administering Grants Electronically). In addition, funds will be used by DHTS personnel for travel related expenses to attend traffic safety seminars, workshops, and conferences as well as for Federal or State training related costs.

Funding Source: **SECTION 402** Local Benefit: **0**

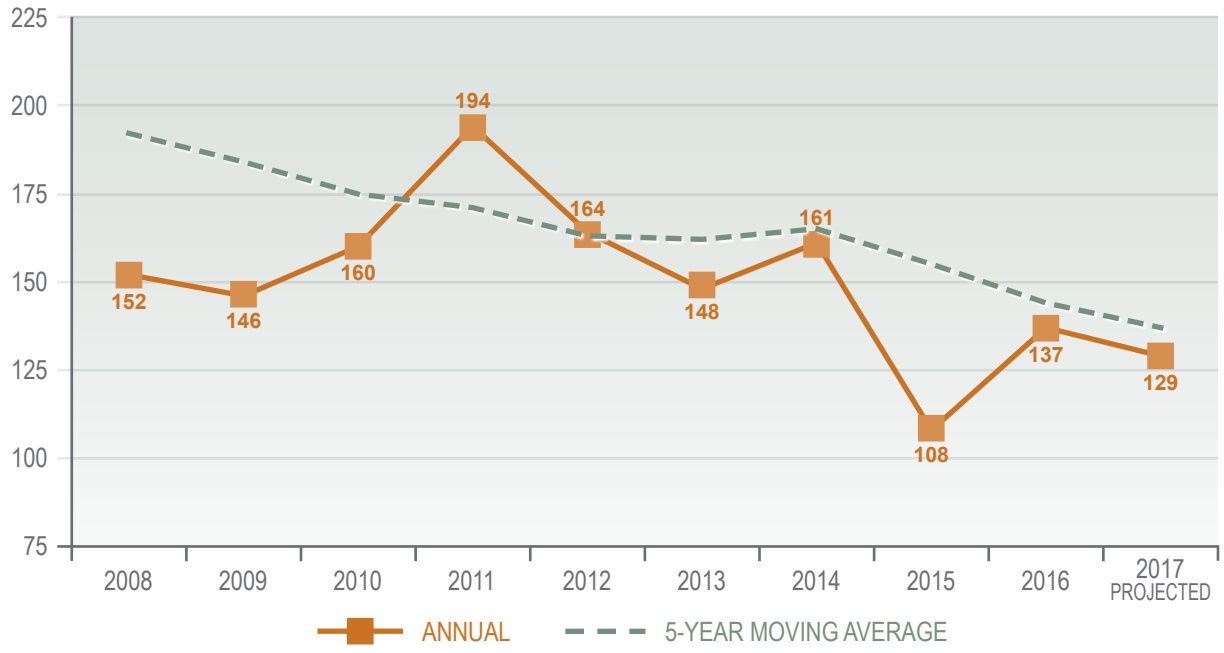
ALCOHOL IMPAIRED • GENERAL OVERVIEW

Due to the large volume of alcohol related pending cases that remain open in 2017, the numbers analyzed in this area are based on 2016 fatal records and preliminary data from 2017.

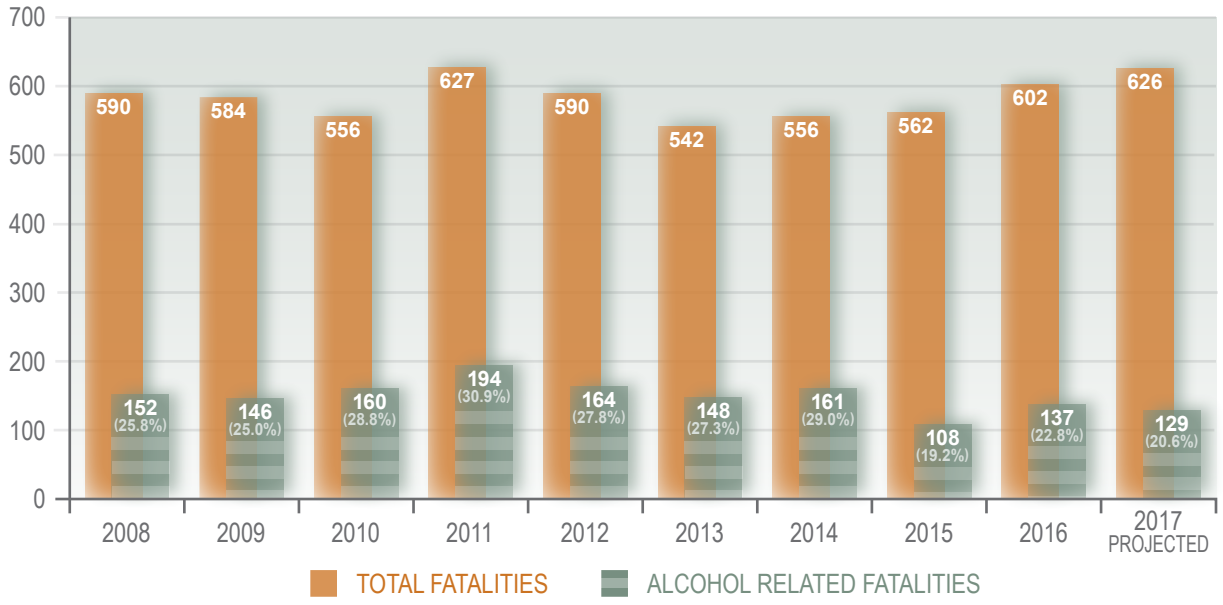
Alcohol involved crashes are defined as any crash where one or more drivers had a blood alcohol concentration level of 0.01 or greater, unless otherwise stated. Alcohol impaired fatalities are defined as any crash where one or more drivers had a blood alcohol concentration level of 0.08 or greater.

Over the past five years, New Jersey's roadways have experienced 37,964 alcohol involved crashes, resulting in 718 fatalities (2012-2016). Driving while intoxicated remains a major factor in contributing to fatalities, crashes and injuries on the State's roadways. Preliminary figures in 2017 show a decline in alcohol related fatalities statewide. In terms of alcohol related crashes overall, there was a 0.3 percent reduction from 2015 to 2016 and a 17.8 percent reduction from 2012 to 2016, although alcohol impaired driving accounts for a large portion of fatalities occurring on the roadways (22.8% in 2016 and 20.6% in 2017 based on preliminary numbers).

ALCOHOL IMPAIRED DRIVING FATALITIES (BAC OF .08 AND ABOVE), ANNUAL AND 5–YEAR MOVING AVERAGE

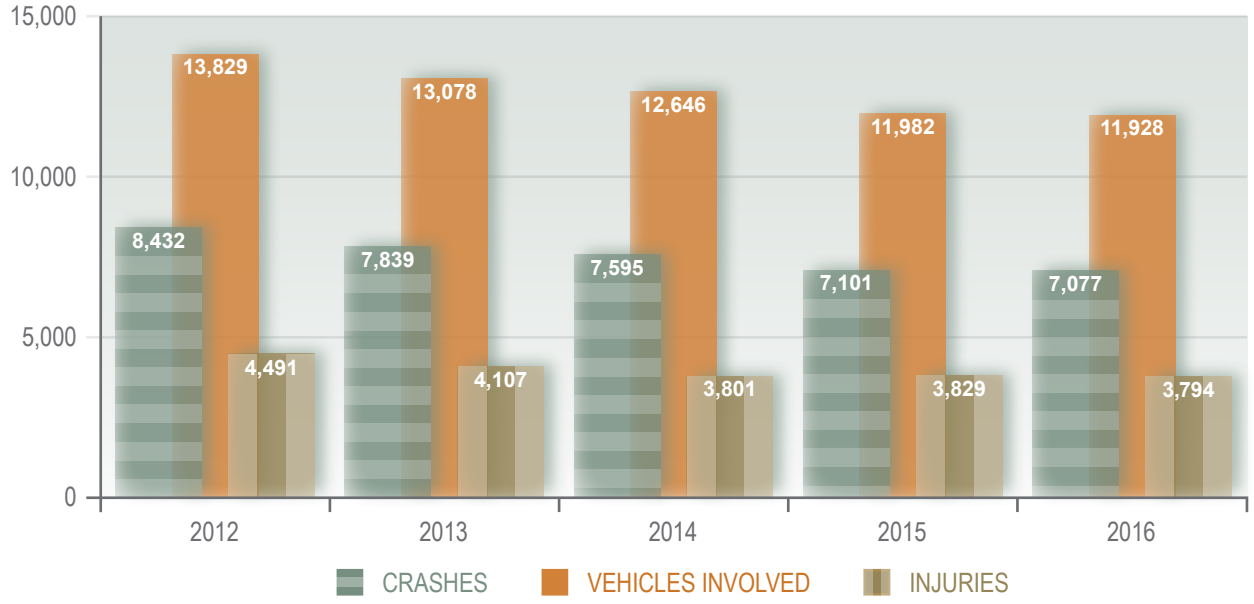


PROPORTION OF ALCOHOL RELATED FATALITIES VERSUS TOTAL NEW JERSEY MV FATALITIES



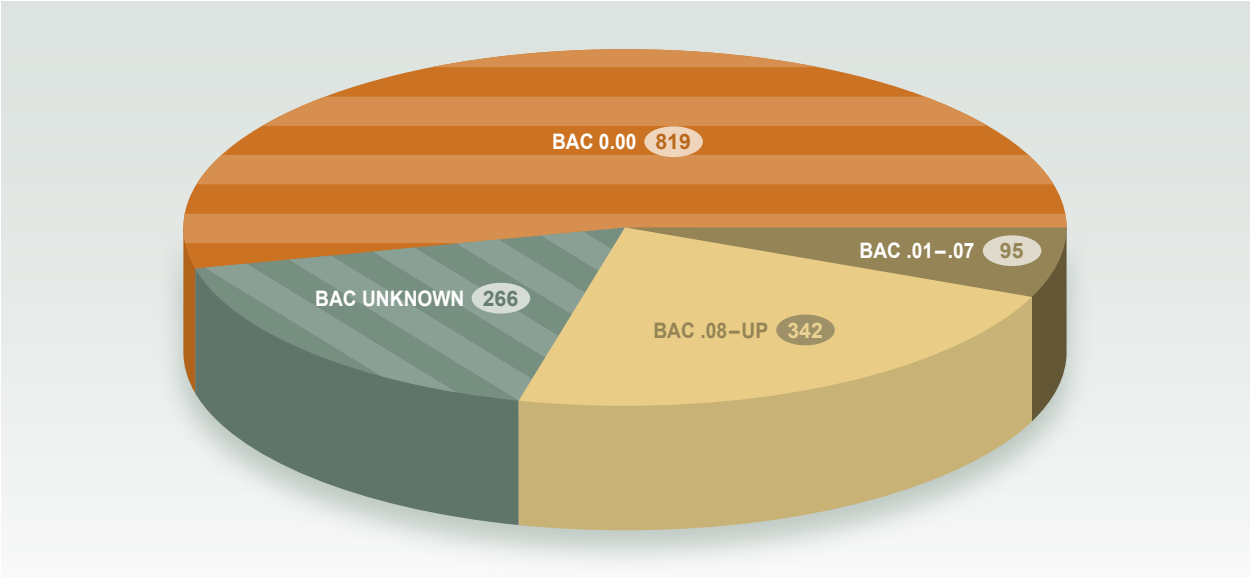
Over 63 percent of all crashes involving alcohol during the past five years (2012-2016) were single-vehicle crashes involving only one driver.

GENERAL OUTCOME OF ALCOHOL RELATED CRASHES, 2012 - 2016



One thousand five hundred twenty-two (1,522) drivers died in motor vehicle crashes on New Jersey's roadways between 2012 and 2016. Fifty-four percent (819) had no alcohol in their system. Just over six percent (95) had a BAC between .01 - .07, below the legal limit, and approximately 22.5 percent (342) had a blood alcohol concentration of .08 or higher. Eighteen percent (266) of drivers fatally injured were not tested for alcohol.

BLOOD ALCOHOL CONCENTRATIONS OF FATALLY INJURED DRIVERS, 2012 - 2016



There are many other circumstances present in alcohol involved crashes. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have multiple causation factors. Below is a representation of crashes involving alcohol and how they combine with other performance areas. From 2012-2016, 13.9 percent of crashes involving alcohol also involved drug impairment. About 17.5 percent of crashes involving alcohol also involved speed, 7.1 percent involved a younger driver and 6.7 percent involved an older driver.

ALCOHOL INVOLVED CRASHES AND OTHER PERFORMANCE AREAS, 2012 - 2016

ALCOHOL INVOLVEMENT AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
DRUG INVOLVEMENT	1,101	992	972	1,101	1,115	5,281	1,056.2	13.9%
DISTRACTED DRIVING	5,409	5,208	5,004	4,741	4,732	25,094	5,018.8	66.1%
UNSAFE SPEED	1,499	1,443	1,330	1,263	1,117	6,652	1,330.4	17.5%
YOUNG DRIVERS	654	540	526	504	457	2,681	536.2	7.1%
OLDER DRIVERS	518	517	518	505	480	2,538	507.6	6.7%
MOTORCYCLES	103	101	79	83	73	439	87.8	1.2%
PEDESTRIANS	357	291	302	260	273	1,483	296.6	3.9%
UNRESTRAINED PASSENGER	570	503	449	372	379	2,273	454.6	6.0%
TOTAL ALCOHOL INVOLVED CRASHES	8,342	7,849	7,595	7,101	7,077	37,964	7,592.8	100.0%

ALCOHOL IMPAIRED • ANALYSIS OF AGE/GENDER

The difference in age and gender was a factor in the likelihood of an individual being involved in alcohol involved crashes. Notably, these demographic groups with elevated crash likelihoods are commonly referred to as "high-risk" drivers. In New Jersey, the particular age group that is the most susceptible to being involved in drug and alcohol related crashes are the 21-35 year old drivers. This group represents 44 percent of drivers involved in alcohol related crashes for both male and female drivers from 2012-2016. Male drivers account for nearly 70 percent of all alcohol related crashes that occurred from 2012-2016.

% OF ALCOHOL RELATED CRASHES BY AGE GROUP AND GENDER, 2012 - 2016					
% OF ALL AGE GROUPS	AGE GROUP	---------- AGE % OF GENDER ----------		--------- GENDER % OF AGE GROUP ---------	
		MALE	FEMALE	MALE	FEMALE
0.02%	0-15	0.02%	0.01%	75.0%	25.0%
5.33%	16-20	5.17%	5.71%	67.3%	32.7%
16.82%	21-25	16.90%	16.65%	69.8%	30.2%
14.87%	26-30	15.01%	14.56%	70.1%	29.9%
12.11%	31-35	12.50%	11.22%	71.7%	28.3%
9.87%	36-40	9.98%	9.64%	70.2%	29.8%
9.13%	41-45	9.07%	9.27%	69.0%	31.0%
9.26%	46-50	8.85%	10.19%	66.4%	33.6%
8.40%	51-55	8.27%	8.70%	68.4%	31.6%
6.02%	56-60	6.00%	6.06%	69.3%	30.7%
3.68%	61-65	3.73%	3.58%	70.4%	29.6%
4.49%	66+	4.52%	4.42%	70.0%	30.0%
100.00%	TOTALS*	100.00%	100.00%	69.5%	30.5%

* Excludes undefined driver age or gender type.

Essential characteristics of fatally injured drivers and their corresponding crash information are depicted in the table below. A total of 437 drivers with a blood alcohol concentration level of .01 or greater died on New Jersey's roadways from 2012-2016. The "high-risk" drivers, age 21-34, accounted almost 50 percent of all fatally injured drivers over the past five years. Of all fatally injured drivers in alcohol-involved crashes, the overwhelming majority, 85 percent, were male. More than half of alcohol involved driver fatalities were single-vehicle occurrences (65%). Over nine out of ten fatally injured drivers with a BAC of .01 or greater were New Jersey residents.

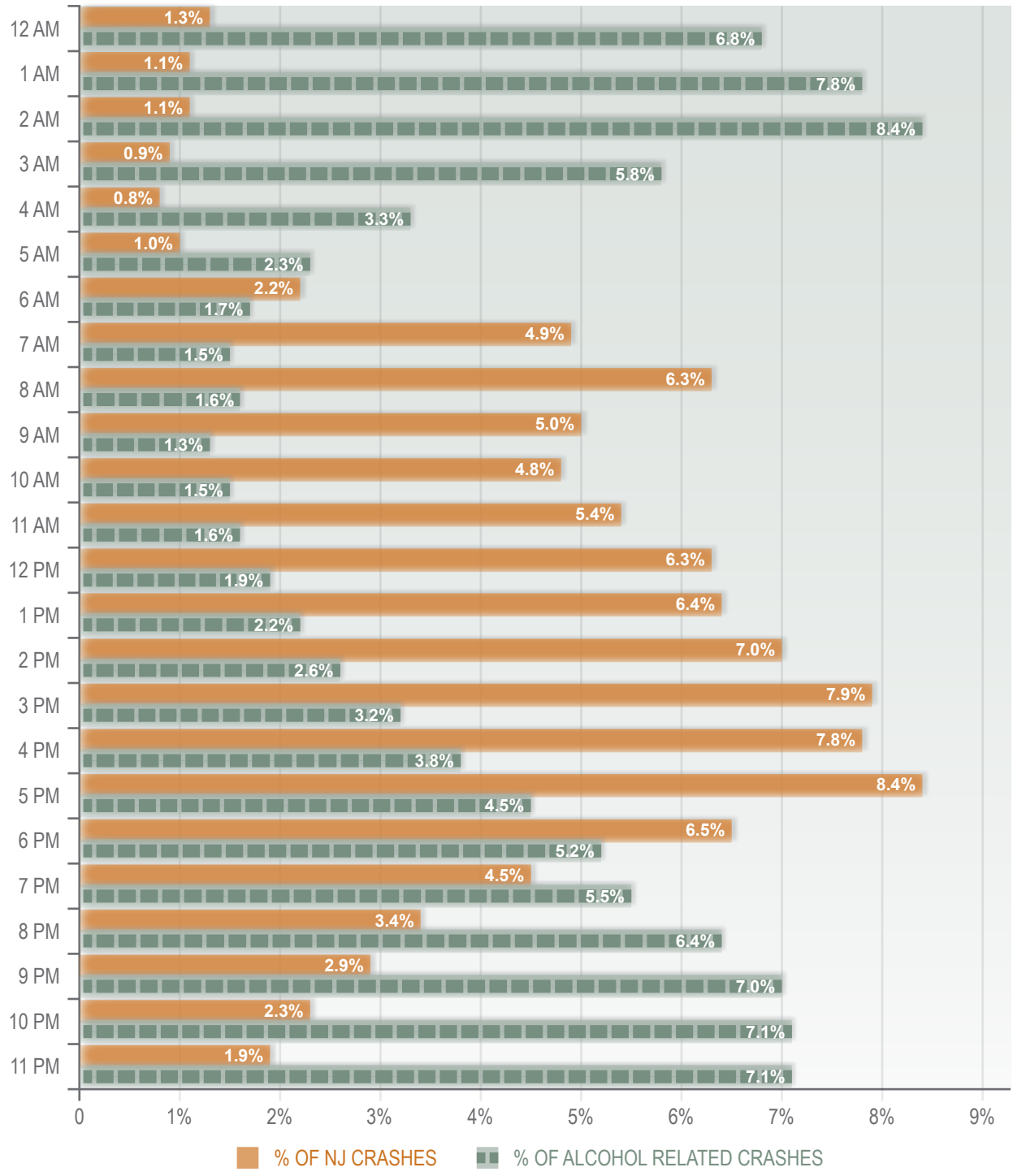
Approximately seven percent of fatally injured drivers with a BAC of 0.01 or greater from 2012 to 2016 had a previous DWI. In 2016, 18.3 percent of fatally injured drivers with a BAC of 0.01 or greater had no valid license (not licensed 5.4%, suspended 12.9%, or revoked license 0.0%).

CHARACTERISTICS OF FATALLY INJURED DRIVERS BY%, BAC > 0.00							
		2012	2013	2014	2015	2016	TOTAL
AGE	<21	5.9%	2.3%	7.6%	6.3%	5.4%	5.5%
	21-34	47.5%	51.1%	40.2%	50.8%	60.2%	49.9%
	35-49	15.8%	23.9%	26.1%	27.0%	23.7%	22.9%
	50+	30.7%	22.7%	26.1%	15.9%	10.8%	21.7%
SEX	MALE	87.1%	86.4%	80.4%	88.9%	83.9%	85.1%
	FEMALE	12.9%	13.6%	19.6%	11.1%	16.1%	14.9%
VEHICLE NUMBER	SINGLE VEHICLE	66.3%	62.5%	62.0%	73.0%	63.4%	65.0%
	MULTIPLE VEHICLES	33.7%	37.5%	38.0%	27.0%	36.6%	35.0%
LICENSE AND RESIDENCE	VALID LICENSE	96.0%	96.6%	94.6%	76.2%	79.6%	89.5%
	PREVIOUS DWI	5.9%	4.5%	8.7%	3.2%	10.8%	6.9%
	NJ RESIDENT	86.1%	95.5%	96.7%	92.1%	90.3%	92.0%
SPEED RELATED	NO	52.5%	39.8%	51.1%	50.8%	52.9%	48.7%
	YES	44.6%	51.1%	38.0%	49.2%	47.1%	45.1%
TOTAL FATALLY INJURED DRIVERS		101	88	92	63	93	437

ALCOHOL IMPAIRED • ANALYSIS OF OCCURRENCE

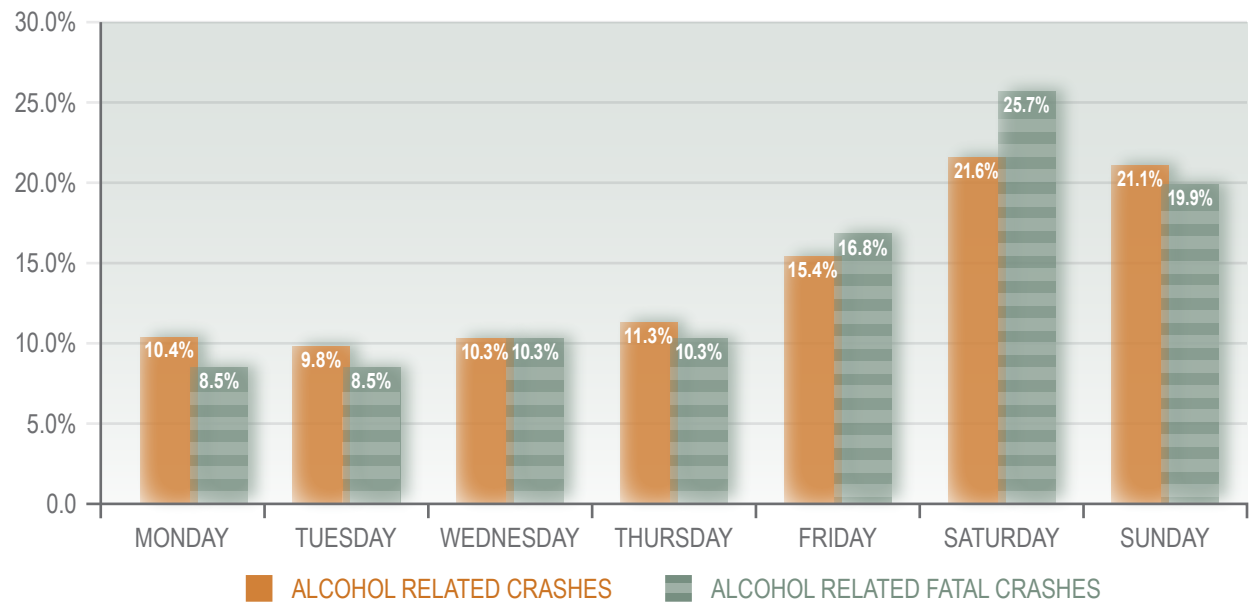
To assist in targeting the enforcement of drivers driving under the influence of alcohol, it is important to observe when alcohol involved crashes are most likely to occur. Not surprisingly, most alcohol involved crashes take place during the evening hours on weekends. Compared to when all crashes in the State are occurring, an overrepresentation of alcohol involved crashes can be seen starting at 7pm and ending at 5am. Sixty-seven percent of all alcohol involved crashes take place during this ten-hour interval.

NJ CRASH % VERSUS ALCOHOL RELATED CRASH % BY TIME OF DAY, 2012 - 2016



Times of day occurrences are one of the more important indicators to help shed light on the issue of alcohol impaired driving. There is a small amount of deviation among the day of week distribution of fatal versus non-fatal alcohol-involved crashes, with a higher proportion of fatal alcohol-related crashes observed on Saturdays. It is important to note that elevated levels of alcohol involved crashes and fatal alcohol involved crashes (58% and 62%, respectively) occur on Friday through Sunday, typically between the hours of 12am and 5am.

ALCOHOL RELATED CRASH % VERSUS ALCOHOL RELATED FATAL CRASH % BY DAY OF WEEK, 2012 - 2016



Similarly, there is not much of a deviation of frequency from month-to-month in alcohol involved crashes. A slight uptick in alcohol involvement is seen in the warmer months (May, June, July and August).

% OF ALCOHOL RELATED CRASHES AS ANNUAL TOTAL BY MONTH, 2012 - 2016

MONTH	2012	2013	2014	2015	2016
JANUARY	7.7%	8.5%	7.7%	6.9%	6.70%
FEBRUARY	7.3%	7.6%	7.7%	6.2%	6.62%
MARCH	8.2%	9.2%	8.6%	8.5%	7.11%
APRIL	8.8%	8.4%	7.7%	7.6%	7.26%
MAY	8.4%	8.7%	9.3%	8.5%	7.67%
JUNE	8.8%	8.2%	8.1%	7.9%	7.47%
JULY	8.5%	8.1%	8.3%	9.2%	7.92%
AUGUST	8.9%	8.5%	9.1%	8.8%	7.05%
SEPTEMBER	8.8%	7.8%	8.0%	7.8%	6.45%
OCTOBER	8.1%	7.4%	7.9%	8.9%	7.24%
NOVEMBER	7.7%	8.7%	8.8%	9.2%	6.67%
DECEMBER	8.9%	8.8%	8.9%	10.6%	6.68%
TOTAL ALCOHOL RELATED CRASHES	8,608	8,342	7,839	7,595	7,077

ALCOHOL IMPAIRED • ANALYSIS OF LOCATION

A breakdown of the year-to-year changes of total number of alcohol involved crashes by County reflects the percent change of alcohol involved crashes from the previous year, as well as a five-year cumulative trend. All counties have experienced a slight decrease in the total number of alcohol involved crashes over the past five years. Mercer and Middlesex Counties experienced a 14 and 13 percent increase in alcohol involved crashes, respectively, from 2015–2016; Hudson experienced a 12 percent increase; Monmouth experienced a 11 percent increase; Bergen experienced a 5 percent increase; and Hunterdon and Sussex Counties experienced less than 2 percent increases, respectively. It is important to note that the total number of alcohol involved crashes has reduced over the last five years.

% CHANGE FROM PREVIOUS YEAR IN ALCOHOL RELATED CRASHES BY COUNTY, 2012 - 2016

	COUNTY	2012	2013	2014	2015	2016	2012 - 2016 CHANGE
REGION I	ATLANTIC	-1.1%	-3.4%	-4.2%	-12.8%	-2.9%	-5.0%
	BURLINGTON	-2.6%	-3.5%	-3.4%	-1.5%	-3.5%	-2.9%
	CAMDEN	-11.6%	4.5%	-8.5%	-12.9%	-7.6%	-7.4%
	CAPE MAY	-8.8%	1.1%	-25.1%	-9.0%	-3.3%	-9.5%
	CUMBERLAND	1.0%	8.5%	-3.5%	4.5%	-22.4%	-3.0%
	GLOUCESTER	-8.8%	-19.1%	10.8%	-1.4%	0.0%	-4.2%
	SALEM	-5.2%	-7.6%	10.6%	-22.3%	0.0%	-5.5%
REGION II	HUNTERDON	-0.7%	-12.5%	0.8%	1.7%	0.8%	-2.1%
	MERCER	-3.3%	-13.5%	2.2%	-14.5%	13.7%	-3.7%
	MIDDLESEX	-4.5%	-7.1%	-2.9%	-5.8%	13.4%	-1.7%
	MONMOUTH	-6.5%	-0.3%	-8.9%	-6.2%	10.6%	-2.5%
	OCEAN	0.2%	-8.1%	-8.5%	-3.6%	-5.5%	-5.2%
	SOMERSET	2.0%	-5.9%	-0.8%	2.5%	-21.3%	-5.1%
	UNION	-4.8%	-9.0%	12.0%	-7.5%	-1.4%	-2.4%
REGION III	BERGEN	3.9%	-5.6%	0.4%	-15.7%	5.3%	-2.7%
	ESSEX	3.1%	-14.8%	3.5%	1.8%	-0.4%	-1.6%
	HUDSON	3.5%	-12.2%	-1.4%	-7.6%	11.9%	-1.5%
	MORRIS	-4.4%	-6.8%	-4.9%	-0.7%	-9.0%	-5.2%
	PASSAIC	2.7%	-12.1%	-0.7%	-14.1%	-1.1%	-5.3%
	SUSSEX	-19.5%	3.2%	-11.1%	-5.6%	1.5%	-6.7%
	WARREN	-18.1%	17.7%	-30.1%	25.8%	-6.0%	-4.4%
TOTAL PERCENTAGE CHANGE		-3.1%	-6.0%	-3.1%	-6.5%	-0.3%	-3.8%

Monmouth (9.0%) and Bergen (8.4%) Counties had the most alcohol involved crashes. Middlesex accounted for eight percent of crashes, Essex accounted for 7.2 percent of crashes, and Ocean accounted for 6.8 percent of alcohol related crashes. Of the total alcohol involved fatalities between 2012 and 2016 (718), Burlington, Middlesex, and Monmouth Counties accounted for over one-quarter of alcohol involved fatalities in the State.

Alcohol involved crashes representing the top three municipalities for each county are provided in the following table.

ALCOHOL INVOLVED CRASHES (BAC > 0.00), TOP 3 MUNICIPALITIES BY COUNTY			
	ALCOHOL-RELATED CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
ATLANTIC COUNTY	2,079		-4.85%
EGG HARBOR TOWNSHIP	365	17.56%	-0.27%
ATLANTIC CITY	361	17.36%	-9.98%
HAMILTON	290	13.95%	-7.64%
BERGEN COUNTY	3,222		-2.6%
TEANECK	187	5.8%	1.08%
HACKENSACK	157	4.87%	-0.63%
GARFIELD	150	4.66%	-1.96%
BURLINGTON COUNTY	2,310		-2.9%
MOUNT LAUREL	228	9.87%	6.54%
EVESHAM	204	8.83%	5.7%
PEMBERTON TOWNSHIP	164	7.1%	-4.65%
CAMDEN COUNTY	2,841		-7.28%
CAMDEN	590	20.7 %	-2.48%
PENNSAUKEN	368	12.95%	-4.17%
CHERRY HILL	302	10.63%	-9.85%
CAPE MAY COUNTY	732		-9.41%
MIDDLE	146	19.95%	-17.05%
LOWER	140	19.13%	-7.28%
UPPER	104	14.21%	-7.96%
CUMBERLAND COUNTY	1,077		-2.71%
VINELAND	404	37.51%	-0.25%
BRIDGETON	201	18.66%	-8.22%
MILLVILLE	169	15.69%	8.33%
ESSEX COUNTY	2,576		-1.64%
NEWARK	877	34.05%	3.3%
EAST ORANGE	273	10.6%	-5.54%
BLOOMFIELD	249	9.67%	-3.11%
GLOUCESTER COUNTY	1,382		-4.56%
WASHINGTON	245	17.73%	-9.59%
DEPTFORD	167	12.08%	-4.57%
MONROE	157	11.36%	-2.48%

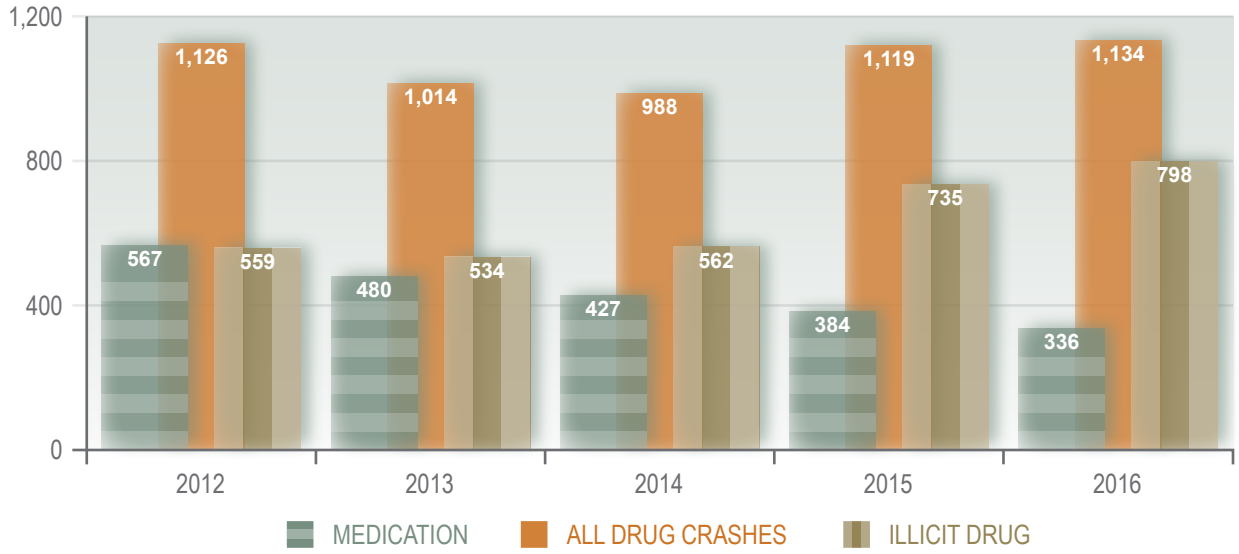
	ALCOHOL-RELATED CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
HUDSON COUNTY	1,825		-1.56%
JERSEY CITY	529	28.99%	-0.19%
UNION CITY	213	11.67%	-4.91%
KEARNY	190	10.41%	-8.65%
HUNTERDON COUNTY	621		-2.2%
READINGTON	91	14.65%	-2.15%
CLINTON TOWNSHIP	84	13.53%	12%
RARITAN	76	12.24%	-5%
MERCER COUNTY	1,394		-3.86%
HAMILTON	414	29.7%	-8.81%
TRENTON	284	20.37%	0%
EWING	111	7.96%	7.77%
MIDDLESEX COUNTY	2,740		-1.79%
OLD BRIDGE	268	9.78%	-1.47%
WOODBRIDGE	267	9.74%	0.38%
EDISON	266	9.71%	-2.56%
MONMOUTH COUNTY	3,172		-2.64%
MIDDLETOWN	327	10.31%	-2.97%
WALL	286	9.02%	-1.04%
HOWELL	265	8.35%	-2.21%
MORRIS COUNTY	2,056		-5.17%
PARSIPPANY-TROY HILLS	270	13.13%	-12.34%
MORRISTOWN	152	7.39%	-6.17%
ROCKAWAY TOWNSHIP	147	7.15%	5.76%
OCEAN COUNTY	2,723		-5.09%
TOMS RIVER	609	22.37%	-6.31%
BRICK	412	15.13%	0.24%
LAKEWOOD	324	11.9%	-0.31%
PASSAIC COUNTY	2,134		-5.2%
PATERSON	516	24.18%	4.03%
CLIFTON	486	22.77%	-10%
PASSAIC	325	15.23%	-5.8%
SALEM COUNTY	417		-5.44%
CARNEYS POINT	89	21.34%	-7.29%
PITTSGROVE	73	17.51%	-2.67%
MANNINGTON	62	14.87%	-11.43%

	ALCOHOL-RELATED CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
SOMERSET COUNTY	1,169		-4.73%
BRIDGEWATER	181	15.48%	-5.73%
FRANKLIN	175	14.97%	-2.23%
NORTH PLAINFIELD	116	9.92%	5.45%
SUSSEX COUNTY	737		-7.18%
VERNON	119	16.15%	-9.16%
SPARTA	100	13.57%	-15.97%
WANTAGE	79	10.72%	0%
UNION COUNTY	2,190		-2.45%
UNION	355	16.21%	-2.2%
ELIZABETH	317	14.47%	1.93%
LINDEN	277	12.65%	4.53%
WARREN COUNTY	567		-4.71%
PHILLIPSBURG	76	13.4 %	-12.64%
ALLAMUCHY	53	9.35 %	-14.52%
HACKETTSTOWN	45	7.94 %	-22.41%

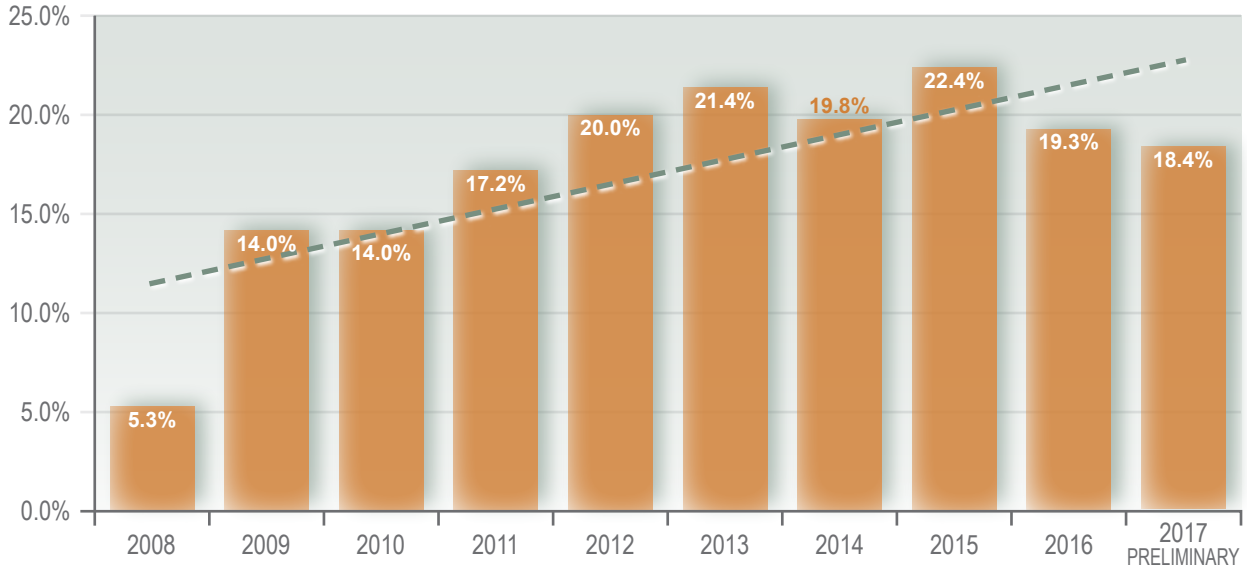
DRUGGED DRIVING • GENERAL OVERVIEW

It is important to recognize and address the increase of dangers imposed by drivers under the influence of illicit drugs and prescription medications. The number of illegal drug related crashes increased in 2016, from 735 in 2015 to 798; however, the number of prescription drug related crashes declined in 2016, from 384 in 2015 to 336. The State is continuing to experience a surge in the number of illicit drug related crashes, accounting for over 70 percent of all drug impaired crashes (medication vs. illicit). Drugged driving involved (illicit or medication) crashes overall comprised 22 and 19 percent of motor vehicle fatalities in 2015 and 2016, respectively. Note the drug-related fatal crashes for 2017 are preliminary and subject to increase.

DRUG RELATED (ILLICIT & MEDICATION) CRASHES, 2012 - 2016



DRUGGED DRIVING FATALITIES AS A % OF TOTAL FATALITIES, 2008 - 2017



There are many other circumstances present in drug involved crashes. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have multiple causation factors. Below is a representation of crashes involving drugs and how they combine with other performance areas. From 2012-2016, 98.1 percent of crashes involving drugs also involved alcohol impairment. About 15 percent of crashes involving alcohol also involved speed, 9.6 percent involved a younger driver and 11.4 percent involved an older driver.

DRUGGED DRIVING CRASHES AND OTHER PERFORMANCE AREAS, 2012 - 2016

DRUGGED DRIVING AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	1,101	992	972	1,101	1,115	5,281	1,056.2	98.1%
DISTRACTED DRIVING	746	677	674	744	761	3,602	720.4	80.2%
UNSAFE SPEED	162	139	97	144	132	674	134.8	15.0%
YOUNG DRIVERS	91	69	87	91	94	432	86.4	9.6%
OLDER DRIVERS	112	110	98	107	87	514	102.8	11.4%
MOTORCYCLES	7	3	8	8	6	32	6.4	0.7%
PEDESTRIANS	14	7	13	20	10	64	12.8	1.4%
UNRESTRAINED PASSENGER	76	79	73	51	78	357	71.4	7.9%
TOTAL DRUG INVOLVED CRASHES	1,126	1,014	988	1,119	1,134	5,381	1,076.2	100.0%

DRUGGED DRIVING • ANALYSIS OF AGE/GENDER

The difference in age and gender was a factor in the likelihood of an individual being involved in a crash where drugs are involved. The 21-35 year old male driver accounted for over 35 percent of total drug-related crashes that occurred from 2012-2016, and male drivers overall accounted for 68.7 percent of all drugged driver involved crashes.

% OF DRUG INVOLVED CRASHES BY AGE GROUP AND GENDER, 2012 - 2016

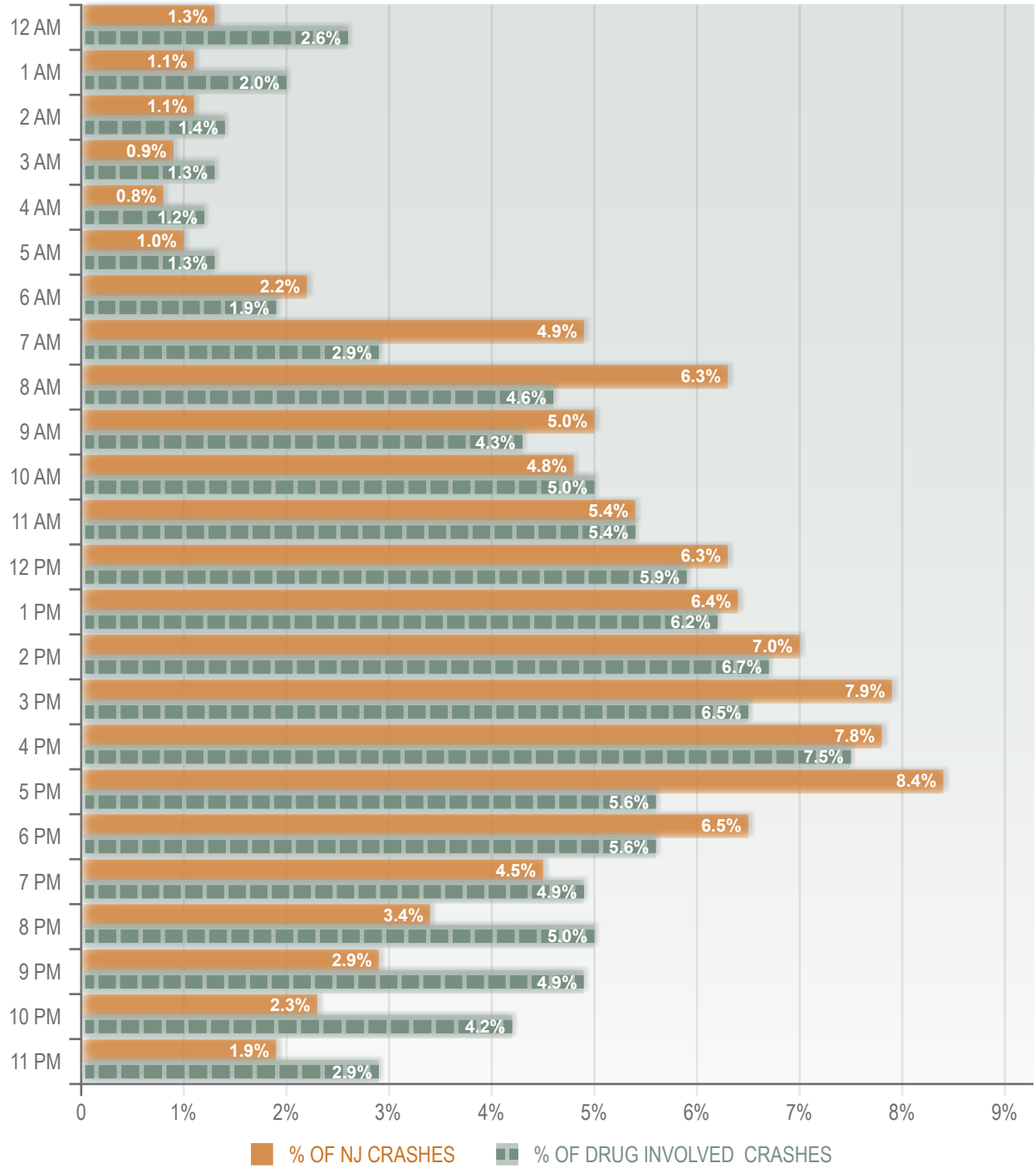
% OF ALL AGE GROUPS	AGE GROUP	AGE % OF GENDER		GENDER % OF AGE GROUP	
		MALE	FEMALE	MALE	FEMALE
0.02%	0-15	0.03%	0.00%	100.0%	0.0%
6.09%	16-20	6.43%	5.32%	72.6%	27.4%
16.33%	21-25	17.73%	13.25%	74.6%	25.4%
17.10%	26-30	18.01%	15.12%	72.3%	27.7%
14.30%	31-35	15.00%	12.76%	72.0%	28.0%
10.79%	36-40	10.69%	11.01%	68.0%	32.0%
8.06%	41-45	7.62%	9.01%	64.9%	35.1%
7.09%	46-50	6.68%	7.99%	64.7%	35.3%
7.62%	51-55	6.35%	10.41%	57.2%	42.8%
4.72%	56-60	4.72%	4.72%	68.7%	31.3%
3.22%	61-65	2.68%	4.42%	57.1%	42.9%
4.47%	66+	3.89%	5.75%	59.7%	40.3%
100.00%	TOTALS*	100.00%	100.00%	68.7%	31.3%

* Excludes undefined driver age or gender type.

DRUGGED DRIVING • ANALYSIS OF OCCURRENCE

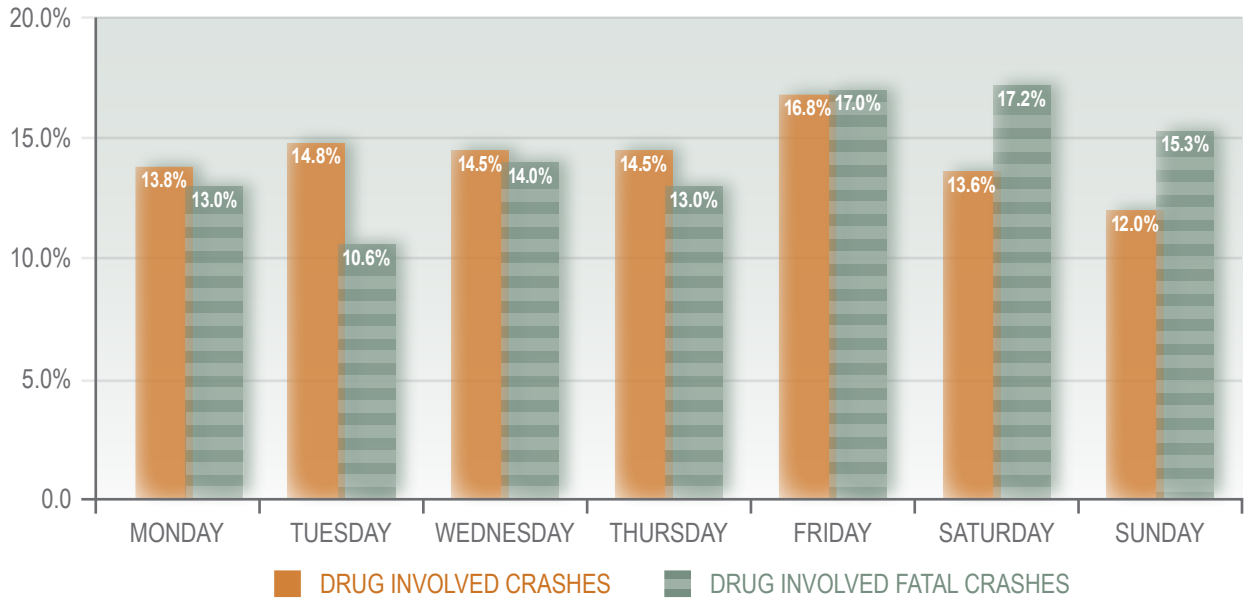
To assist in targeting the enforcement of drivers driving under the influence of drugs, it is important to observe when drug involved crashes are most likely to occur. Most drug involved crashes occur during the evening hours. Similar to trends seen in alcohol involvement, there is an overrepresentation of drug involved crashes beginning at 7pm and ending at 5am. However, only 32 percent of drug involved crashes take place during that time interval compared to 67 percent of alcohol involved crashes during the same interval. The data shows how drugged driving is mirrored in crash occurrences and is an inherent factor for crashes on the State's roadways. This creates a challenge for law enforcement in targeting likely intervals of drugged driving, similar to alcohol use.

NJ CRASH % VERSUS DRUG INVOLVED CRASH % BY TIME OF DAY, 2012 - 2016



Day-of-week occurrences are one of the more important indicators to help shed light on the issue of drug impaired driving. As seen in the graph, there is an overrepresentation of drug involved crashes and drug involved fatal crashes throughout the weekend. It is important to note that almost 33 percent of all drug involved fatalities occur on Friday and Saturday, typically between the hours of 7pm and 5am.

DRUG INVOLVED CRASH % VERSUS DRUG INVOLVED FATAL CRASH % BY DAY OF WEEK, 2012 - 2016



Similar to alcohol impairment, there is little deviation of frequency from month-to-month in drug involved crashes. The table depicts a slight uptick in drug involvement during the summer months in most years.

% OF DRUG INVOLVED CRASHES AS ANNUAL TOTAL BY MONTH, 2012 - 2016

MONTH	2012	2013	2014	2015	2016
JANUARY	6.0%	9.0%	8.1%	5.6%	5.9%
FEBRUARY	8.2%	8.7%	7.1%	5.7%	7.2%
MARCH	9.1%	9.4%	7.2%	6.6%	9.8%
APRIL	8.8%	10.2%	9.5%	7.4%	9.0%
MAY	9.5%	10.2%	9.9%	7.5%	7.4%
JUNE	8.8%	8.9%	7.6%	8.9%	10.7%
JULY	9.1%	7.6%	8.8%	9.1%	9.4%
AUGUST	9.3%	7.3%	8.7%	8.9%	9.7%
SEPTEMBER	7.8%	9.2%	10.0%	9.2%	7.8%
OCTOBER	9.1%	7.6%	8.3%	9.7%	9.0%
NOVEMBER	7.3%	6.5%	7.8%	9.7%	7.2%
DECEMBER	6.9%	5.6%	7.0%	11.5%	6.9%
TOTAL DRUG INVOLVED CRASHES	1,126	1,014	988	1,119	1,134

DRUGGED DRIVING • ANALYSIS OF LOCATION

The table represents the top three municipalities in each county that have the highest number of drug involved crashes.

DRUG INVOLVED CRASHES, TOP 3 MUNICIPALITIES BY COUNTY			
	DRUG-RELATED CRASHES 2012 - 2016	PERCENT OF STATE/COUNTY TOTAL	% CHANGE FROM 2011- 2015
ATLANTIC COUNTY	290		4.32%
HAMILTON	52	17.93 %	10.64%
EGG HARBOR TOWNSHIP	48	16.55 %	-2.04%
GALLOWAY	41	14.14 %	10.81%
BERGEN COUNTY	357		-1.92%
TEANECK	18	5.04 %	5.88%
RIDGEWOOD	15	4.2 %	15.38%
SADDLE BROOK	15	4.2 %	15.38%
BURLINGTON COUNTY	401		4.16%
EVESHAM	45	11.22 %	12.5%
MOUNT LAUREL	41	10.22 %	-2.38%
WESTHAMPTON	26	6.48 %	8.33%
CAMDEN COUNTY	595		-6%
CAMDEN	168	28.24 %	-4.55%
GLOUCESTER TOWNSHIP	64	10.76 %	-18.99%
CHERRY HILL	62	10.42 %	-8.82%
CAPE MAY COUNTY	81		-3.57%
MIDDLE	31	38.27 %	14.81%
LOWER	13	16.05 %	-7.14%
WILDWOOD	8	9.88 %	33.33%
CUMBERLAND COUNTY	68		4.62%
VINELAND	27	39.71 %	12.5%
MILLVILLE	11	16.18 %	-15.38%
MAURICE RIVER	6	8.82 %	0%
ESSEX COUNTY	360		-6.74%
NEWARK	134	37.22 %	-1.47%
BLOOMFIELD	36	10 %	-10%
FAIRFIELD	32	8.89 %	23.08%
GLOUCESTER COUNTY	266		0%
DEPTFORD	57	21.43 %	11.76%
WASHINGTON	42	15.79 %	-8.7%
MONROE	28	10.53 %	16.67%

	DRUG-RELATED CRASHES 2012 - 2016	PERCENT OF STATE/COUNTY TOTAL	% CHANGE FROM 2011 - 2015
HUDSON COUNTY	232		-0.85
JERSEY CITY	101	43.53 %	0
BAYONNE	37	15.95 %	12.12
KEARNY	19	8.19 %	-5
HUNTERDON COUNTY	106		6
RARITAN	22	20.75 %	0
CLINTON TOWNSHIP	19	17.92 %	11.76
READINGTON	14	13.21 %	16.67
MERCER COUNTY	200		5.82
HAMILTON	51	25.5 %	-7.27
TRENTON	48	24 %	20
HOPEWELL	21	10.5 %	10.53
MIDDLESEX COUNTY	354		0.57
WOODBRIDGE	51	14.41 %	4.08
OLD BRIDGE	38	10.73 %	8.57
EDISON	36	10.17 %	5.88
MONMOUTH COUNTY	411		0.74
MIDDLETOWN	56	13.63 %	-8.2
WALL	50	12.17 %	6.38
HOWELL	43	10.46 %	2.38
MORRIS COUNTY	304		3.05
PARSIPPANY-TROY HILLS	48	15.79 %	-14.29
ROCKAWAY TOWNSHIP	29	9.54 %	20.83
ROXBURY	25	8.22 %	-3.85
OCEAN COUNTY	457		-3.79
TOMS RIVER	130	28.45 %	-4.41
BRICK	62	13.57 %	-4.62
JACKSON	49	10.72 %	11.36
PASSAIC COUNTY	247		-4.26
PATERSON	76	30.77 %	4.11
CLIFTON	45	18.22 %	-2.17
WAYNE	28	11.34 %	-22.22
SALEM COUNTY	67		-6.94
MANNINGTON	19	28.36 %	-17.39
CARNEYS POINT	11	16.42 %	-8.33
OLDMANS	6	8.96 %	-14.29

	DRUG-RELATED CRASHES 2012 - 2016	PERCENT OF STATE/COUNTY TOTAL	% CHANGE FROM 2011 - 2015
SOMERSET COUNTY	122		-2.4
BRIDGEWATER	17	13.93 %	0
WARREN	15	12.3 %	66.67
FRANKLIN	13	10.66 %	0
SUSSEX COUNTY	93		-2.11
FRANKFORD	11	11.83 %	22.22
VERNON	11	11.83 %	-8.33
SPARTA	9	9.68 %	-18.18
UNION COUNTY	266		1.53
UNION	61	22.93 %	-1.61
ELIZABETH	36	13.53 %	5.88
CLARK	24	9.02 %	33.33
WARREN COUNTY	101		-2.88
ALLAMUCHY	13	12.87 %	-13.33
HACKETTSTOWN	11	10.89 %	-21.43
LOPATCONG	11	10.89 %	22.22

Project Name: **ALCOHOL AND OTHER DRUG COUNTERMEASURES PROGRAM MANAGEMENT**

Sub-Recipient: **DIVISION OF HIGHWAY TRAFFIC SAFETY**

Total Project Amount: **$340,000**

Project Description:

Funds will be provided for program managers to coordinate alcohol and drug countermeasure activities with local, State and community organizations. These include working with local, State and community organizations to develop awareness campaigns; supporting and assisting local, county and State task force initiatives and providing technical assistance to project directors. Funds will be used for salaries, fringe benefits, travel and other administrative costs that may arise for program supervisors and their respective staff.

Salary distributions are calculated by determining the percentage of grants program staff are responsible for administering in each program area. This is accomplished by comparing the total number of grants by program area to the total number of all approved grants. This percentage is then used to determine the distribution of salaries for each supervisor and their staff both in this program management area and those that follow.

Salaries and fringe benefits account for $335,000 of the budgeted amount in the alcohol and other drug countermeasures program area. Additionally, another $5,000 is budgeted for travel and other miscellaneous expenditures.

Funding Source: **SECTION 402** **Local Benefit:** **0**

COUNTERMEASURE STRATEGY: LAW ENFORCEMENT TRAINING

Effectiveness of Countermeasure

Officers have used Standardized Field Sobriety Tests (SFST) for more than 20 years to identify impaired drivers. The SFST is a test battery that includes the horizontal gaze nystagmus test, the walk-and-turn test, and the one leg-stand test. Research shows the combined components of the SFST are 91 percent accurate in identifying drivers with BACs above the legal limit of .08 (Stuster & Burns, 1998).

As of August 2014, all 50 States and the District of Columbia had Drug Recognition and Classification programs, which are designed to train officers to become DREs. These programs have prepared approximately 1,500 instructors and trained more than 7,000 officers (National Sobriety Testing Resource Center, 2014). Several studies have shown DRE judgments of drug impairment are corroborated by toxicological analysis in 85 percent or more of cases (NHTSA, 1996).

Assessment of Safety Impacts

Training members of the law enforcement community in alcohol and drug impairment will help to ensure officers receive the skill set necessary to identify and apprehend the impaired driver and increase drunk driving arrests. Providing training and guidance to prosecutors who oversee court related issues will also assist in increasing drunk driving conviction rates. Training law enforcement officers to identify drug related drivers and to categorize the type of impairing substance can assist in prosecuting cases of suspected drugged driving because of the limitations of toxicology testing.

Driving under the influence of alcohol has been known to cause thousands of crashes, injuries and fatalities each year. Recently the magnitude of this problem has been complicated by drug impaired drivers. The increase of cases involving drug impaired drivers has created serious issues in several counties. This problem has created a need to create an education program to train local officers on drug related DWI investigations, a DRE program

and systematic call list for certified DRE's. The call-out program provides law enforcement officers in the field at the municipal and county level to contact a certified DRE when needed to gather evidence that is necessary to substantiate or strengthen charges of drug influence in DWI cases. The officers will also be available to not only process individuals, but to also follow through with the case and testify in court.

Linkage between Problem Identification and Performance Targets

Standardized field sobriety testing (SFST) and Drug Recognition Expert (DRE) training are the cornerstones to DWI enforcement. Giving officers the skills and confidence is a critical investment in any DWI enforcement program. Officers who can clearly and concisely describe an arrest become even more important in obtaining DWI convictions.

The five-year average (2012-2016) for drugged driving related crashes was 1,076. In 2016, approximately 19 percent of all fatalities were drug related. There was also a 9 percent increase in drug related crashes in 2016 from 1,119 in 2015 to 1,129 in 2016. The DRE call-out program will assist in helping to identify impairment in drivers under the influence of drugs other than alcohol. Manpower shortage in local law enforcement agencies makes this an especially important initiative in today's environment of shared services. Increases in drug related crashes and the use of drugs while driving has resulted in the need to have additional law enforcement officers trained and made available for assistance to local police agencies.

Project Name: **DWI TRAINING, DRUG RECOGNITION EXPERT PROGRAM & ADVANCED ROADSIDE IMPAIRED DRIVING ENFORCEMENT (ARIDE) TRAINING**

Sub-Recipients: **DIVISION OF STATE POLICE AND NEW JERSEY ASSOCIATION OF DRUG RECOGNITION EXPERTS**

Total Project Amount: **$1,100,000**

Project Description:

The Alcohol Drug Testing Unit (A/DTU) at the Division of State Police is the lead agency in the State that oversees the coordination and administration of the Drug Recognition Expert training program, along with issuing field certifications and validations to officers. State and municipal police officers will also be trained in DWI/Standardized Field Sobriety Testing. The course includes instruction in the detection, apprehension, processing, and prosecution of DWI offenders as well as standardized field sobriety testing and horizontal gaze nystagmus. Thirty DWI/SFST classes and forty DWI/SFST refresher courses are anticipated in FY 2019. Additionally, three DRE regional courses and one DRE Instructor course is expected to be conducted.

The ARIDE program was created to address the gap in training between the SFST and DRE program by providing officers with general knowledge related to drug impairment and by promoting the use of DRE's. Fifteen classes are scheduled to be conducted. The New Jersey Association of Drug Recognition Experts will also receive funds for training purposes.

Funds will also be used to obtain training in the latest trends in drug use and abuse, litigation and new resources. Under the authority of the Attorney General, the A/DTU also spearheads the on-going training and re-certification of police officers to operate approved chemical breath test instruments that recognize alcohol indicators present in suspects. Funds will be used to maintain breathalyzer related instruments used for training and testing.

Funding Source: **SECTION 405(d)** **Local Benefit:** **$700,000**

Project Name: **DRE CALL-OUT PROGRAM**

Sub-Recipients: **COUNTY PROSECUTOR OFFICES**

Total Project Amount: **$415,000**

Project Description:

The DRE call-out program will be operational in six counties. The Division of State Police will also participate in the program. DRE training will be provided to law enforcement officers. County and municipal Prosecutors will be included in the conversation to provide an understanding of the depth of the training and the expertise it creates for a successful prosecution. Chiefs of Police will also need to have an understanding of the training and what is required. Law enforcement officers in the counties will be advised of the program so they can call on a DRE when needed. Funds will be used to pay for the services provided by the DRE at the time of the call-out.

Funding Source: **SECTION 405(d)** Local Benefit: **$415,000**

COUNTERMEASURE STRATEGY: HIGH VISIBILITY SATURATION PATROLS

Effectiveness of Countermeasure

At a sobriety checkpoint, law enforcement officers stop vehicles at a predetermined location to check whether the drivers are impaired. The purpose of a checkpoint is to deter driving after drinking by increasing the perceived risk of arrest. Checkpoints should be highly visible, publicized extensively, and conducted regularly, as part of a publicized sobriety checkpoint program.

The Centers for Disease Control and Prevention systematic review of 15 high-quality studies found that checkpoints reduce alcohol-related fatal crashes by 9 percent (Guide to Community Preventive Services, 2012). Publicized sobriety checkpoint programs are proven effective in reducing alcohol-related crashes among high risk populations including males and drivers 21 to 34 (Bergen et al., 2014).

A saturation patrol (also called a blanket patrol or dedicated DWI patrol) consists of a large number of law enforcement officers patrolling a specific area to look for drivers who may be impaired. These patrols usually take place at times and locations where impaired driving crashes commonly occur.

A demonstration program in Michigan, where sobriety checkpoints are prohibited by State law, revealed that saturation patrols can be effective in reducing alcohol-related fatal crashes when accompanied by extensive publicity (Fell, Langston, Lacey, & Tippetts, 2008).

Assessment of Safety Impacts

Enforcement is the most critical element in the system for controlling drinking drivers. Highly visible patrols making arrests for driving while intoxicated, particularly when coupled with an effective public information campaign, can reduce the incidence of alcohol related crashes by increasing the perceived risk of arrest.

Linkage between Problem Identification and Performance Targets

A review of alcohol related crashes by county over a five-year period (2012-2016) reveals an overall decrease in crashes. However, over a one-year period, there has been an increase in alcohol involved crashes in Bergen, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, and Sussex counties. The primary focus of the alcohol enforcement activities will be on increasing the overall level of surveillance particularly in those towns and counties that are identified as high-risk areas.

Project Name: **DWI ENFORCEMENT**

Sub-Recipients: **STATE, COUNTY AND MUNICIPAL LAW ENFORCEMENT AGENCIES**

Total Project Amount: **$3,345,000**

Project Description:

The national drunk driving campaign, *Drive Sober or Get Pulled Over*, is a comprehensive impaired driving prevention program that combines high-visibility enforcement and public awareness. Nearly 200 State, county and local police agencies will partner with DHTS during the summer holiday enforcement campaign that will be conducted from August 16 — September 2, 2019. In addition, another 175 police departments are expected to participate in the winter holiday season crackdown which will be held from December 13, 2018 — January 1, 2019.

County-wide enforcement grants will also be provided to conduct sustained year-long DWI enforcement efforts separate from the mobilization crackdowns. Funds will be provided for overtime enforcement. In addition to Federal funds being used for the enforcement efforts, the Alcohol Education, Rehabilitation and Enforcement Fund receive monies from a tax imposed on the sale of liquors. The Fund receives approximately $11 million in annual deposits from alcohol beverage tax collections. Of the balances in the Fund, 75 percent is spent on alcohol rehabilitation initiatives, 15 percent on enforcement initiatives, and 10 percent on education initiatives.

A five-year analysis of alcohol related crashes by county is conducted to determine which counties are experiencing a high number of alcohol involved crashes. This information is used when selecting county participation in year-long impaired driving initiatives. Funds are provided to these counties to conduct sustained enforcement efforts through both impaired driving checkpoint programs and saturation patrols.

An analysis is also conducted to determine those municipalities that have the highest number of impaired crashes by county. Those that are overrepresented are invited to participate in the two *Drive Sober or Get Pulled Over* mobilizations to conduct high visibility enforcement during the 2-3 week campaigns.

To help spread the *Drive Sober or Get Pulled Over* message, a statewide press release is issued prior to the start of each crackdown. Police agencies also engage their communities through the dissemination of local press releases and public service announcements. Additional campaign awareness is generated by the use of variable message boards displaying campaign slogans.

The Drunk Driving Enforcement Fund (DDEF) also provides funds from a surcharge collected on each drunk driving conviction. Monies in this Fund are distributed to municipal, county, State, and interstate police agencies to increase enforcement of impaired driving laws. Every law enforcement agency whose officers make arrests leading to DWI convictions and imposition of the surcharge are entitled to grants representing its proportionate contribution to the Fund. At least 50 percent of the monies collected must be used on enforcement. The monies from this Fund are used on a statewide basis as a supplement to the federal funds and provide sustained enforcement throughout the year.

Funding Source: **SECTION 405(d)** **Local Benefit:** **$3,100,000**

COUNTERMEASURE STRATEGY: UNDERAGE DRINKING ENFORCEMENT

Effectiveness of Countermeasure

In a compliance check, law enforcement officers watch as underage people attempt to purchase alcohol and cite the vendor for a violation if a sale is made. Several studies document that well-publicized and vigorous compliance checks reduced sales to youth; for example, a review of eight high quality studies found that compliance checks reduced sales to underage people by an average of 42 percent (Elder et al., 2007).

Assessment of Safety Impacts

Compliance checks are most effective when they are frequent, well publicized and well designed; solicit community support and impose penalties on the licensed establishment. Frequent use of compliance checks can potentially decrease alcohol sales to minors and decrease alcohol availability and lead to a reduction in alcohol related problems and crashes in young drivers.

Linkage between Problem Identification and Performance Targets

Underage alcohol use remains a persistent problem with serious health and safety consequences. In addition to the age 21 minimum legal drinking age, zero-tolerance laws make it illegal for individuals under age 21 to drive after drinking with any alcohol in their system. Despite underage drinking laws and prevention programs, underage alcohol consumption remains at elevated levels. Drivers in New Jersey under the age of 21 are involved in 5 percent of all alcohol-involved crashes and account for 5 percent of all licensed drivers.

Project Name: UNDERAGE ENFORCEMENT

Sub-Recipients: DIVISION OF ALCOHOLIC BEVERAGE CONTROL AND DIVISION OF STATE POLICE

Total Project Amount: $450,000

Project Description:

The purchase and consumption of alcohol by underage persons, as well as the over-consumption of alcohol by patrons in licensed beverage establishments has been a long-standing problem. Using the resources provided by this task, the Division of Alcoholic Beverage Control will undertake efforts intended to result in administrative disciplinary charges against the offending license-holders as well as criminal charges against those who purchase and/or provide alcoholic beverages to underage persons.

Funds will be used to continue the *Cops In Shops* program for a seven-month period in municipalities with a college or university either within its borders or in a neighboring community. The program will be implemented in Atlantic, Bergen, Camden, Essex, Gloucester, Mercer, Middlesex, Monmouth, Morris, Ocean, Union and Warren Counties. Additionally, the same program will be implemented during the summer in the State's shore communities. The program will be conducted in various municipalities in Atlantic, Cape May, Monmouth, and Ocean Counties.

Training of municipal police officers in the *Cops In Shops* program is conducted by the Division of Alcoholic Beverage Control's Enforcement Unit. Two undercover officers are assigned to work four-hour shifts in the evening. One officer works undercover as an employee or patron in each establishment and stops any individual under the age of 21 attempting to purchase alcohol or use false identification. The second officer serves as a "backup" outside the establishment to determine if alcoholic beverages have been purchased by an adult and passed off to an underage drinker. A key ingredient for success of the program is public awareness. Signage and brochures are provided to promote the program.

Alcoholic Beverage Control acts and other related laws pertaining to underage alcohol use and/or intoxicated patrons will also be enforced. The use of undercover State and local police is intended to identify underage persons who order and/or consume alcoholic beverages as well as those who serve them. Appropriate criminal and/or administrative charges will be initiated against underage persons, those providing alcoholic beverages to underage persons as well as liquor licensees that allow this activity on their premises. This project reduces the purchase and consumption of alcohol by underage persons, while sending a strong message to the owners of licensed beverage establishments.

Throughout the term of the grant, teams will be dispatched to conduct undercover investigative operations in licensed establishments, as well as, conducting surveillance of licensed liquor stores. The teams will consist of Investigators from the ABC and Detectives from the Division of Criminal Justice working at times in conjunction with other law enforcement agencies. An operation involving licensed beverage establishments is anticipated to last approximately six (6) hours. Team members are placed in the licensed establishments

to survey the presence of underage purchase or consumption, or intoxicated patrons or employees. These members will communicate with other members when sufficient surveillance is conducted to locate those suspected of illegal conduct. At this time, additional team members shall enter the establishment and conduct the appropriate criminal and administrative investigation. As for licensed liquor stores, surveillance will be conducted by teams at each liquor store to uncover underage purchase/sale activity. Whenever violations are uncovered, an appropriate criminal and administrative investigation will take place. A total of $250,000 will be allocated for the year-long program.

Funds will be provided for overtime salaries of police officers to work in an undercover capacity in liquor stores to identify and bring criminal charges against underage persons who purchase or attempt to purchase alcoholic beverages and adults who purchase alcoholic beverages for minors.

Funding Source: **SECTION 405(d)** **Local Benefit:** **$350,000**

COUNTERMEASURE STRATEGY: YOUTH PROGRAMS

Effectiveness of Countermeasure

Virtually all college students experience the effects of college drinking, whether they drink or not (National Institute on Alcohol Abuse and Alcoholism, 2013). Therefore, it is important to address dangerous drinking behaviors and the cultural expectations, habits, and behaviors that occur among college students. Studies reveal that over 1,700 college student deaths each year are linked to alcohol, with a majority due to automobile crashes.

The 2014 Monitoring the Future Study finds 35.4 percent of college students report binge drinking compared to 29.3 percent of their peers not enrolled in college. The National Council on Alcoholism and Drug Dependence in 2015 reports that about four out of five college students drink alcohol and approximately half of those students consume through binge drinking.

Assessment of Safety Impacts

General awareness programs are important to remind students about the risks of driving after drinking and a message that requires constant reinforcement. However, these general awareness programs are best combined with other programs that focus on individual behavior change and enhanced enforcement.

Linkage between Problem Identification and Performance Targets

The 16-25 year old age group in the State represents 23 percent of drivers involved in alcohol related crashes. According to the American College Health Association, National College Health Assessment conducted at select New Jersey colleges and universities indicates that upwards to 66 percent of college students consume alcohol and 19 percent drive after drinking.

Project Name: **COLLEGE CAMPUS INITIATIVES**

Sub-Recipients: **COLLEGE AND UNIVERSITIES**

Total Project Amount: **$190,000**

Project Description:

The College of New Jersey (CNJ) will hold statewide events such as the Peer Institute as a way to share ideas, methods, and strategies to create substance-free events on college campuses. The event trains students from New Jersey colleges and the tri-state area to become peer educators on their respective campuses. Programs will also be developed with the CNJ campus police force and Ewing Township Police Department to address alcohol and other drug-related issues. Police from both agencies will work collaboratively to patrol off-campus housing and popular student gathering spots.

Stockton University will sponsor alcohol/drug education workshops on campus emphasizing the risks associated with alcohol/drug abuse and driving. In addition, personnel from local taverns and restaurants will be trained on how to prevent drunk driving by student customers. The prevention program will include an intensive, three-hour training session leading to certification from Stockton University and regular communication with local restaurants and taverns to offer confidential counseling programs to students who are experiencing problems with drinking and driving. In addition, peer educators from the university will present alcohol and drunk driving awareness programs to local high school juniors and seniors emphasizing the consequences of intoxicated driving, peer pressure and decision making.

The Rutgers Comprehensive Alcohol and Traffic Education and Enforcement Program will focus on helping to reduce the number of people killed or seriously injured in crashes caused by impaired drivers. The program combines community prevention efforts in law enforcement with innovative educational and community outreach activities on campus. A series of supplemental enforcement programs will be scheduled, which include DWI stops and the comprehensive *Check for 21* program. The education component will provide training resources for police officers to disseminate materials throughout the Rutgers community. Rutgers police officers will also receive training on alcohol and drug abuse prevention techniques. Police officers will serve as mentors and conduct drug and alcohol abuse education programs for the campus population.

New Jersey City University will focus on strengthening the relationship between university students and high school students in the Jersey City area through interactive role modeling exercises and a peer education training program. The program will focus on training peer educators to present interactively on various issues including alcohol use and abuse and reaching out to the campus community by providing university students with information and resources on alcohol and driving.

William Paterson University will provide creative and innovative ways to educate students about the negative consequences of drinking and driving and encourage the use of designated drivers. A multi-dimensional health educational program will promote positive, safe and healthy choices for William Paterson University students. The use of innovative technology, such as social media, will be used to promote and guide these educational awareness programs throughout the grant period. Funds will be used to strengthen partnerships with existing university Clubs, Greeks, Peer Health Advocates, Residence Life, Athletics, Administration, Faculty and Staff to continue to help promote the campaign.

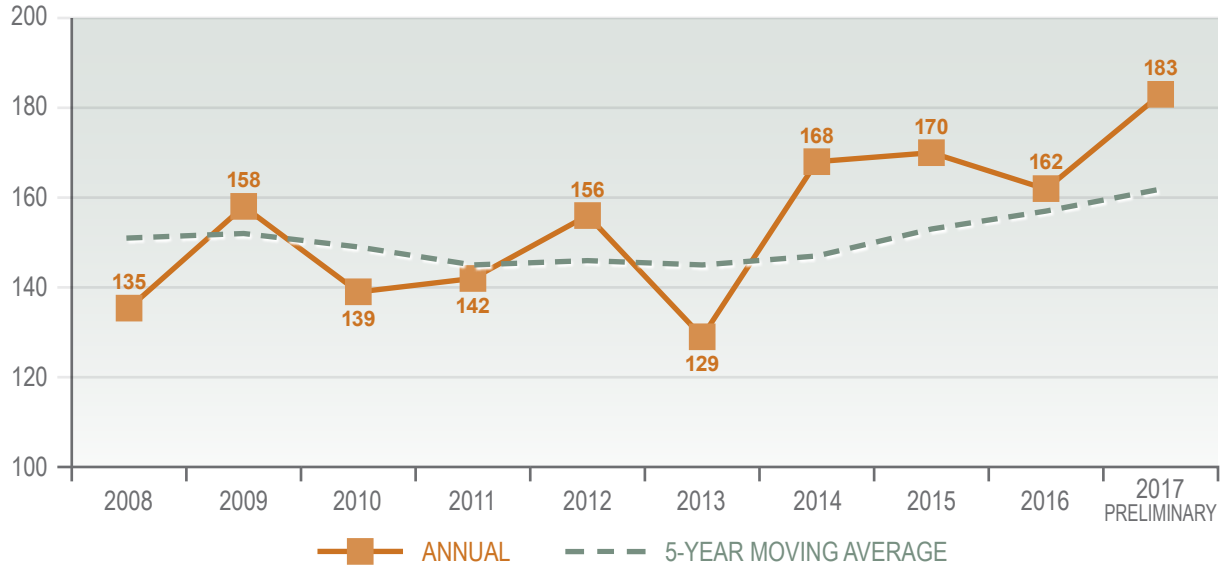
Funds will be used for educational materials that will be distributed at campus events, peer education trainings regarding drinking and driving and enforcement overtime for campus police.

Funding Source: **SECTION 405(d)** **Local Benefit:** **$190,000**

PEDESTRIAN SAFETY • GENERAL OVERVIEW

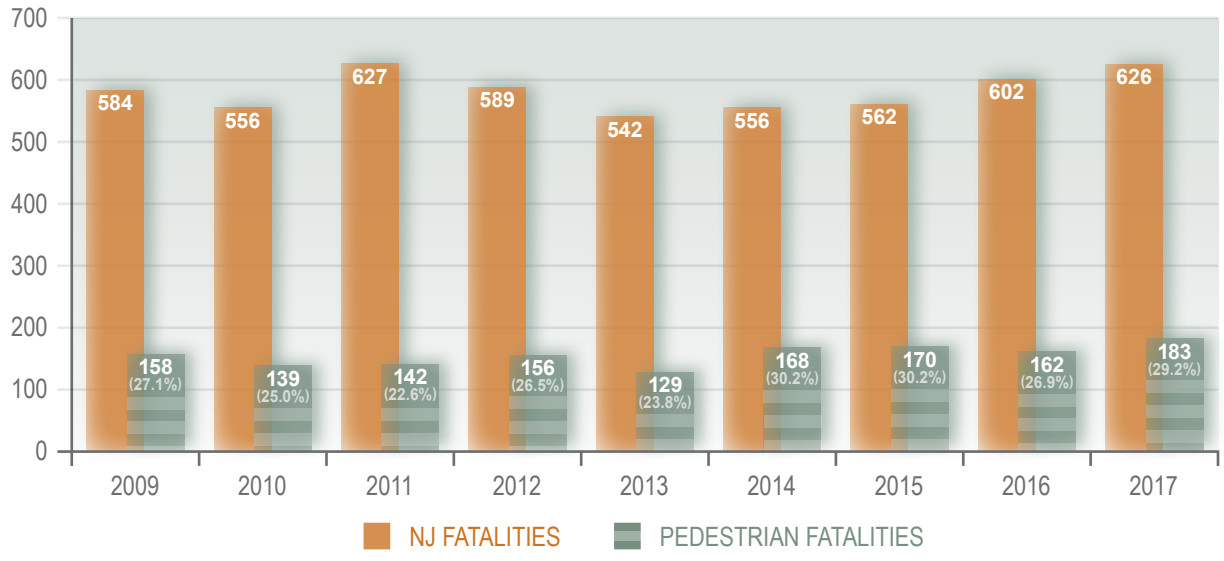
Over the past ten years, from 2008-2017, there have been a total of 1,542 pedestrian fatalities in the State. In 2016, 162 pedestrian fatalities occurred, representing a 4.7 percent decline from the previous year. However, in 2017, a preliminary total of 183 pedestrians were killed on New Jersey's roadways, resulting in a 13 percent increase from 2016 and a new ten-year high.

PEDESTRIAN FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



Pedestrian safety remains a major focus of educational and enforcement programs in New Jersey. Pedestrian fatalities accounted for over 30 percent of total roadway fatalities in 2015, 27 percent in 2016, and 29 percent in 2017.

PROPORTION OF PEDESTRIAN FATALITIES VERSUS TOTAL NEW JERSEY FATALITIES, 2009 - 2017



Reductions in the number of crashes between motor vehicles and pedestrians have been seen throughout the State each year since 2012, with a slight increase in 2016. Thorough outreach and education efforts have been made to enhance the awareness of pedestrians in roadways and the visibility of the most dangerous intersections as well as improvements to pedestrian infrastructure in "hot-spot" locations. As a result of those efforts, a reduction in the non-fatal injury rate for pedestrians can been seen from 2010 through 2014, with increases in non-fatal injuries occurring in 2015 and 2016.

PEDESTRIAN INJURIES BY SEVERITY, 2012 - 2016

	2012	2013	2014	2015	2016
KILLED	156	129	168	170	162
TOTAL INJURED	4,317	4,208	3,842	3,948	4,086
SERIOUS INJURY (A)	254	195	173	175	171
MODERATE INJURY (B)	1,251	1,199	1,064	1,214	1,220
MINOR INJURY (C)	2,812	2,814	2,605	2,559	2,699
FATALITY RATE PER 100,000 POPULATION	1.76	1.45	1.88	1.90	1.80
NON FATAL INJURY RATE PER 100,000 POPULATION	48.64	47.22	42.98	44.07	45.51
TOTAL PEDESTRIAN CRASHES	5,732	5,649	5,214	4,709	4,840

The majority of pedestrians involved in crashes had one or more contributing factors reported. Forty-five percent (44.5%) of crashes with pedestrians occurred at an intersection. The most common factor for pedestrians was "Crossing Where Prohibited" (2,277 or 12.3%), followed by "Running/Darting Across Traffic" (2,186 or 11.8%). Over the last five years, about 18.4 percent of the pedestrians struck were running or darting across traffic, crossing where they should not have been crossing, or were not visible to the driver because they were wearing dark clothing.

PEDESTRIAN CRASH CONTRIBUTING CIRCUMSTANCES BY INTERSECTION INVOLVEMENT, 2012 - 2016

CRASH CONTRIBUTING CIRCUMSTANCE	AT INTERSECTION	AT OR NEAR RAILROAD CROSSING	NOT AT INTERSECTION	TOTAL
FAILED TO OBEY TRAFFIC CONTROL DEVICE	544	0	162	706
CROSSING WHERE PROHIBITED	464	0	1,813	2,277
DARK CLOTHING/LOW VISIBILITY TO DRIVER	747	0	998	1,745
PEDESTRIAN INATTENTIVE	616	3	1,177	1,796
FAILURE TO YIELD ROW	121	0	231	352
WALKING ON WRONG SIDE OF ROAD	18	0	108	126
WALKING IN ROAD WHEN SIDEWALK PRESENT	97	0	380	477
RUNNING/DARTING ACROSS TRAFFIC	608	1	1,577	2,186
NONE	3,450	5	2,536	5,991
OTHER PEDESTRIAN FACTORS	952	1	1,911	2,864
UNKNOWN	11,530	22	13,547	25,099

There are many other circumstances present in pedestrian involved crashes. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have multiple causation factors. On the following page is a representation of crashes involving pedestrians and how they combine with other performance areas. From 2012-2016, 5.9 percent of crashes involved drugs or alcohol impairment. About 11 percent of crashes involving pedestrians also involved older drivers, 4.6 percent involved a younger driver and 2.8 percent involved unsafe speed.

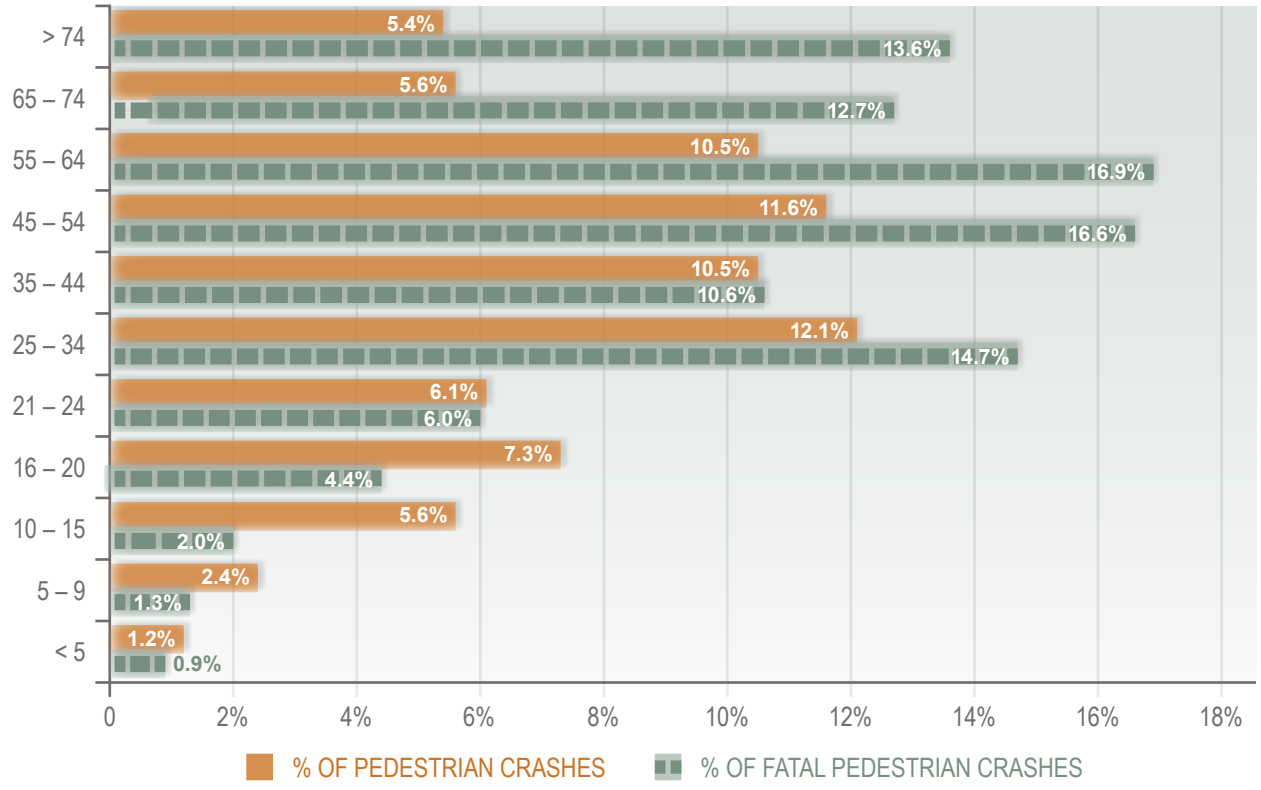
PEDESTRIAN CRASHES AND OTHER PERFORMANCE AREAS, 2012 - 2016								
PEDESTRIANS AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	357	291	302	260	273	1,483	296.6	5.7%
DRUG INVOLVEMENT	14	7	13	20	10	64	12.8	0.2%
DISTRACTED DRIVING	2,486	2,523	2,378	2,018	2,107	11,512	2,302.4	44.0%
UNSAFE SPEED	170	153	149	141	122	735	147	2.8%
YOUNG DRIVERS	285	261	257	201	186	1,190	238	4.6%
OLDER DRIVERS	784	76	756	643	705	2,964	592.8	11.3%
MOTORCYCLES	16	16	15	23	18	88	17.6	0.3%
TOTAL PEDESTRIAN INVOLVED CRASHES	5,732	5,649	5,214	4,709	4,840	26,144	5,228.8	100.0%

PEDESTRIAN SAFETY • ANALYSIS OF AGE/GENDER

Pedestrian related crashes continue to be a concern for younger travelers, specifically the 0-15 year-old age group, representing 9.3 percent of total pedestrians involved in motor vehicle crashes. The age group of 16–20 represented 7.3 percent of total pedestrians involved in crashes over the past five years (2012-2016). Pedestrian safety education is an important component for all genders and all age groups. Pedestrian safety is a particular concern for younger populations due to their lack of access to driving as a mobility option and inability of the youngest pedestrians to cognitively negotiate road traffic situations. Pedestrian safety is also a concern for older populations due to issues such as difficulty crossing at intersections with brief pedestrian signal intervals and being required to travel by foot in non-pedestrian friendly locations.

Over the past five years (2012-2016), the 55-64 year-old age group has represented the largest proportion of pedestrians being struck and killed (16.9%) in the State, followed by 45-54 years old (16.6%). The younger populations, 0-15 years old, represent 4.2 percent of total pedestrians being killed even though they are involved in 9.3 percent of pedestrian involved crashes.

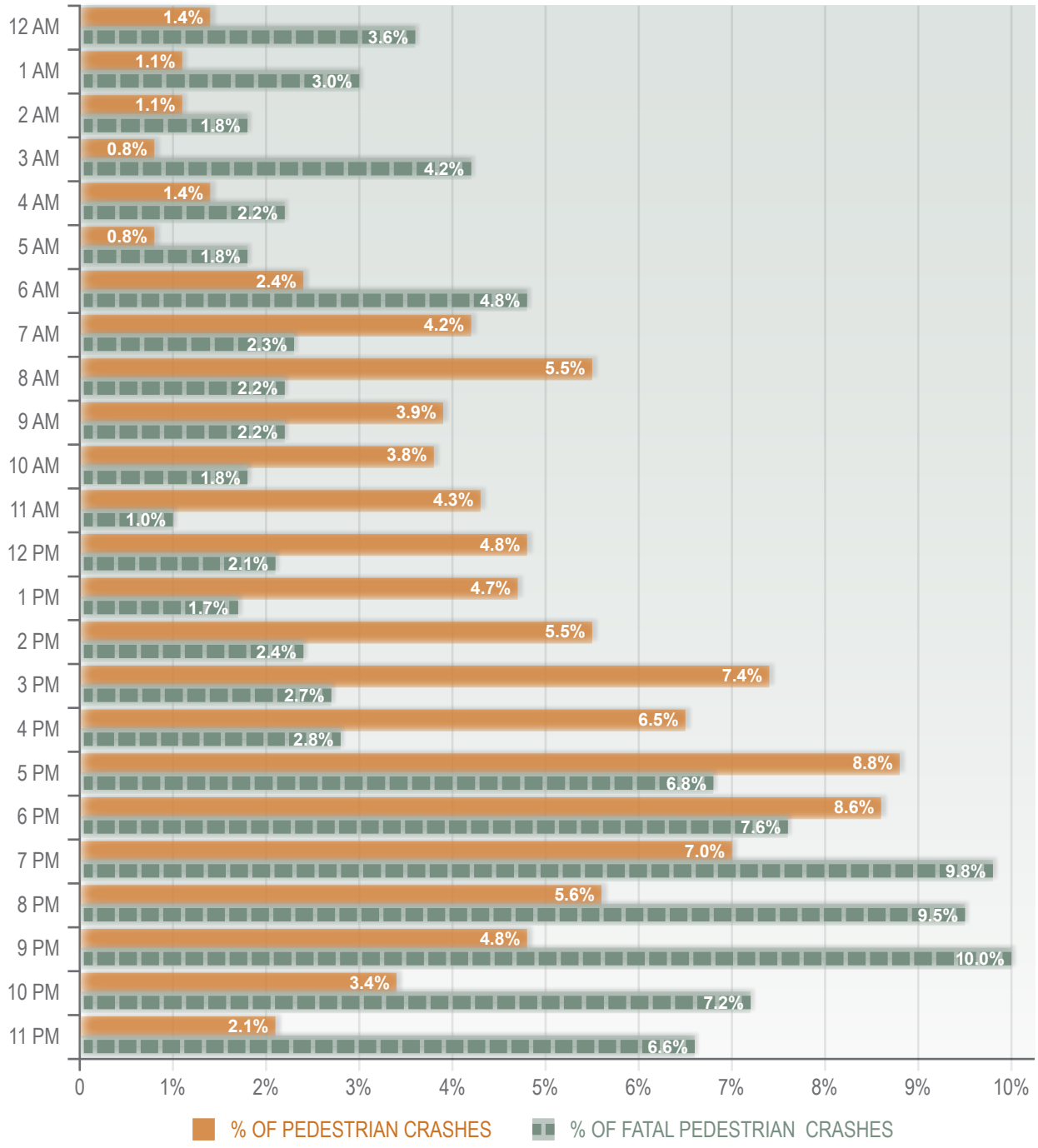
PEDESTRIAN CRASH % VERSUS FATAL PEDESTRIAN CRASH % BY AGE GROUP, 2012 - 2016



PEDESTRIAN SAFETY • ANALYSIS OF OCCURRENCE

The time-of-day occurrence of pedestrian related crashes provides insight as to when crashes between motor vehicles and pedestrians occur. The graph below indicates that from 2012-2016 there was an overrepresentation of fatal pedestrian crashes from 7pm until 6am, consisting of 64.4 percent of all pedestrian fatalities. The highest volume of pedestrian fatalities over the last five years occurred during the 9pm hour, (10.0% of all pedestrian fatalities). During the early commute times of 7-9 am, 13.6 percent of crashes involving pedestrians occurred and 6.7 percent of pedestrian fatalities occur. Twenty-four percent (24.3%) of crashes involving pedestrians occurred during the afternoon commute times of 5pm until 8pm.

PEDESTRIAN CRASH % VERSUS FATAL PEDESTRIAN CRASH % BY TIME OF DAY, 2012 - 2016



During the colder months of the year, the amount of daylight dwindles. The months of October, November and December see the highest incidents of pedestrian fatalities, consisting of 33.8 percent of all pedestrian fatalities over the past five years (2012-2016). With primary and secondary schools resuming in September and October, the number of pedestrians walking increases and with less daylight the number of crashes tend to increase during these months.

PEDESTRIAN INVOLVED CRASHES BY MONTH, 2012 - 2016

MONTH	FATAL PEDESTRIAN CRASHES		PEDESTRIAN CRASHES	
	CRASHES	PERCENTAGE	CRASHES	PERCENTAGE
JANUARY	67	8.6%	2,280	8.7%
FEBRUARY	55	7.1%	1,856	7.1%
MARCH	81	10.5%	2,023	7.7%
APRIL	47	6.1%	1,967	7.5%
MAY	51	6.6%	2,213	8.5%
JUNE	42	5.4%	2,044	7.8%
JULY	53	6.8%	1,856	7.1%
AUGUST	64	8.3%	1,915	7.3%
SEPTEMBER	53	6.8%	2,082	8.0%
OCTOBER	76	9.8%	2,498	9.6%
NOVEMBER	74	9.5%	2,656	10.2%
DECEMBER	112	14.5%	2,754	10.5%
TOTALS	775	100.0%	26,144	100.0%

PEDESTRIAN INVOLVED CRASHES BY DAY OF WEEK, 2012 - 2016

DAY	FATAL PEDESTRIAN CRASHES		PEDESTRIAN CRASHES	
	CRASHES	PERCENTAGE	CRASHES	PERCENTAGE
MONDAY	113	14.6%	3,794	14.5%
TUESDAY	106	13.7%	4,025	15.4%
WEDNESDAY	110	14.2%	4,014	15.4%
THURSDAY	104	13.4%	3,960	15.1%
FRIDAY	119	15.4%	4,409	16.9%
SATURDAY	122	15.7%	3,363	12.9%
SUNDAY	101	13.0%	2,579	9.9%
TOTALS	775	100.0%	26,144	100.0%

Although improvements have been made and concerted efforts to educate all users of the roadways on pedestrian safety and awareness continue, more work is required. Education on behalf of motorists and pedestrians needs to be provided to all age groups and regularly conditioned in our young and impressionable populations.

Through education, enforcement and outreach, the DHTS will continue to strive towards reducing pedestrian injuries and fatalities in FFY 2019.

PEDESTRIAN SAFETY • ANALYSIS OF LOCATION

A table that represents the Top 10 municipalities and counties where pedestrian crashes have occurred over the last five years is seen below. The municipalities in which pedestrian crashes are the highest are some of the heaviest populated areas in New Jersey. These municipalities typically experience the highest annual totals of pedestrian crashes and injuries, mostly due to their urban environs, traffic volumes, volume of transient populations commuting, and abundance of high-volume intersections. Over the last five years; 9.67 percent of all pedestrian crashes in the State occurred in Newark, followed by Jersey City (6.59%) and Paterson (4.24%).

PEDESTRIAN INVOLVED CRASHES, TOP 10 MUNICIPALITIES AND TOP 10 COUNTIES, 2012 - 2016

RANK	MUNICIPALITY	CRASHES	% OF TOTAL	COUNTY	CRASHES	% OF TOTAL
1	NEWARK	2,527	9.67%	ESSEX	4,898	18.73%
2	JERSEY CITY	1,724	6.59%	HUDSON	3,876	14.83%
3	PATERSON	1,109	4.24%	BERGEN	3,236	12.38%
4	IRVINGTON	547	2.09%	PASSAIC	2,276	8.71%
5	CAMDEN	518	1.98%	MIDDLESEX	1,834	7.01%
6	TRENTON	481	1.84%	UNION	1,627	6.22%
7	PASSAIC	464	1.77%	CAMDEN	1,312	5.02%
8	EAST ORANGE	433	1.66%	MONMOUTH	1,028	3.93%
9	UNION CITY	430	1.64%	OCEAN	1,015	3.88%
10	BAYONNE	394	1.51%	MERCER	975	3.73%

The number of pedestrian crashes that have occurred over the past five years by county and the top three municipalities for each county that had the highest volume of pedestrian crashes as well as the percent of the county total is found on the next page. Essex County (4,898 crashes) had the highest 5-year total (2012-2016) of pedestrian crashes in the State consisting of 18.7 percent of all pedestrian crashes up from 17.9 percent in 2011-2015. Over 50 percent of all pedestrian crashes in Essex County over the past five years occurred in Newark, followed by Irvington with 11.17 percent.

Hudson County had the second highest number of pedestrian crashes over the past five years (2012-2016 with 3,876) consisting of 14.83 percent of all pedestrian crashes. Over 40 percent of all pedestrian crashes in Hudson County over the past five years occurred in Jersey City, followed by Union City with 11.09 percent.

It is important to analyze trends occurring in municipalities and counties throughout the State, not only for the highest volumes of pedestrian crashes, but also the changes seen over time. Though a municipality or county may not have the highest, or even second-to-highest occurrence, it may be experiencing a pedestrian crash problem. For example, Elizabeth City in Union County had a 15.61 percent increase in pedestrian crashes over the last five years, Pennsauken Township in Camden County experienced a 13.64 percent increase, and Princeton in Mercer County experienced a 12.68 percent increase from between the 2011–2015 and 2012–2016 five-year periods. Overall, each county in New Jersey experienced a decrease in pedestrian crashes from 2011-2015 to 2012-2016. However, despite the decrease in crashes overall during this time, there was an increase in pedestrian fatalities, indicating the continued presence of pedestrian safety issues to be addressed at the local level. Further education and pedestrian awareness efforts should be enhanced to improve pedestrian safety, continue the decrease in pedestrian crashes overall, and avert future pedestrian fatalities.

PEDESTRIAN CRASHES, TOP 3 MUNICIPALITIES BY COUNTY			
	PEDESTRIAN CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
ATLANTIC COUNTY	830		-11.13%
ATLANTIC CITY	384	46.27%	-15.42%
EGG HARBOR TOWNSHIP	85	10.24%	-2.3%
GALLOWAY	72	8.67%	-12.2%
BERGEN COUNTY	3,236		-6.04%
HACKENSACK	344	10.63%	-4.97%
FORT LEE	225	6.95%	-4.66%
TEANECK	191	5.9%	0.53%
BURLINGTON COUNTY	651		-5.92%
MOUNT LAUREL	66	10.14%	-7.04%
WILLINGBORO	63	9.68%	-7.35%
PEMBERTON TOWNSHIP	43	6.61%	0%
CAMDEN COUNTY	1,312		-5.48%
CAMDEN	518	39.48%	-3%
PENNSAUKEN	125	9.53%	13.64%
CHERRY HILL	120	9.15%	-13.67%
CAPE MAY COUNTY	257		-3.02%
MIDDLE	61	23.74%	1.67%
OCEAN CITY	38	14.79%	5.56%
LOWER	34	13.23%	0%
CUMBERLAND COUNTY	378		-5.97%
VINELAND	162	42.86%	-6.36%
BRIDGETON	92	24.34%	-9.8%
MILLVILLE	92	24.34%	-1.08%
ESSEX COUNTY	4,898		-0.65%
NEWARK	2,527	51.59%	1.53%
IRVINGTON	547	11.17%	3.6%
EAST ORANGE	433	8.84%	-3.78%
GLOUCESTER COUNTY	369		-5.14%
WASHINGTON	58	15.72%	1.75%
MONROE	57	15.45%	1.79%
GLASSBORO	53	14.36%	-3.64%
HUDSON COUNTY	3,876		-1.15%
JERSEY CITY	1,724	44.48%	-0.4%
UNION CITY	430	11.09%	-4.02%
BAYONNE	394	10.17%	2.6%

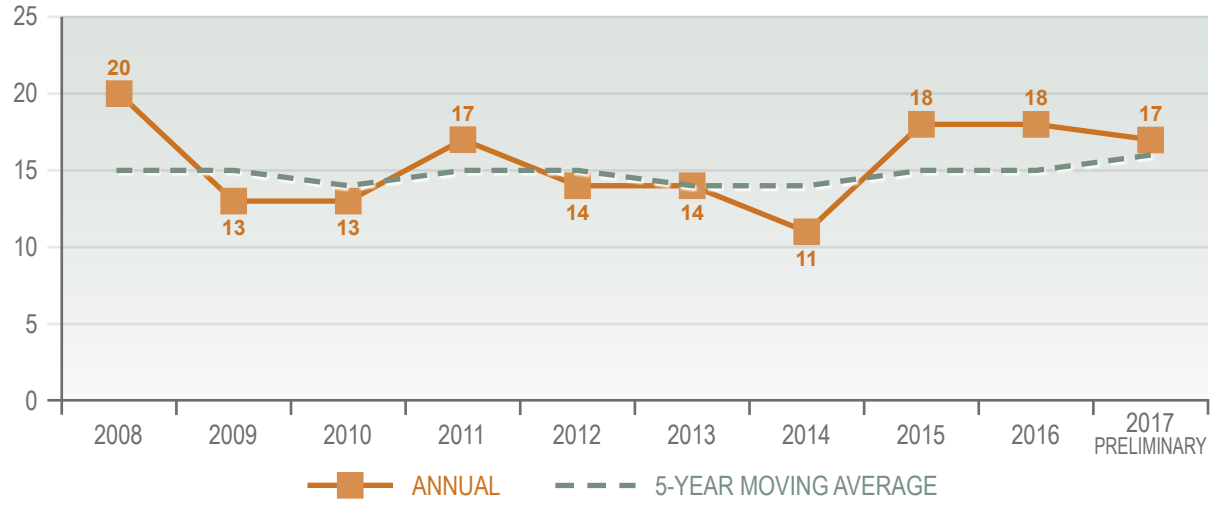
	PEDESTRIAN CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
HUNTERDON COUNTY	98		-7.55%
FLEMINGTON	21	21.43%	-19.23%
RARITAN	21	21.43%	5%
CLINTON	10	10.2%	25%
MERCER COUNTY	975		-5.34%
TRENTON	481	49.33%	-3.41%
HAMILTON	173	17.74%	-0.57%
PRINCETON	80	8.21%	12.68%
MIDDLESEX COUNTY	1,834		-5.27%
NEW BRUNSWICK	329	17.94%	-7.06%
PERTH AMBOY	257	14.01%	0.78%
WOODBRIDGE	256	13.96%	-3.76%
MONMOUTH COUNTY	1,028		-10.37%
NEPTUNE TOWNSHIP	106	10.31%	-2.75%
MIDDLETOWN	98	9.53%	-11.71%
ASBURY PARK	97	9.44%	-10.19%
MORRIS COUNTY	658		-8.61%
MORRISTOWN	120	18.24%	0%
DOVER	74	11.25%	0%
PARSIPPANY-TROY HILLS	64	9.73%	-22.89%
OCEAN COUNTY	1,015		-8.89%
LAKEWOOD	335	33%	0.9%
TOMS RIVER	203	20%	-16.8%
BRICK	106	10.44%	-12.4%
PASSAIC COUNTY	2,276		-6.45%
PATERSON	1,109	48.73%	-2.97%
PASSAIC	464	20.39%	-7.2%
CLIFTON	376	16.52%	-8.07%
SALEM COUNTY	64		-5.88%
CARNEYS POINT	14	21.88%	-6.67%
SALEM	12	18.75%	0%
MANNINGTON	9	14.06%	-25%
SOMERSET COUNTY	527		-2.95%
FRANKLIN	105	19.92%	0%
NORTH PLAINFIELD	88	16.7%	4.76%
BRIDGEWATER	53	10.06%	-8.62%

	PEDESTRIAN CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
SUSSEX COUNTY	113		-13.74%
NEWTON	30	26.55%	-11.76%
SPARTA	14	12.39%	-17.65%
FRANKLIN	11	9.73%	-8.33%
UNION COUNTY	1,627		-2.81%
ELIZABETH	348	21.39%	15.61%
PLAINFIELD	228	14.01%	-2.98%
UNION	219	13.46%	-10.61%
WARREN COUNTY	122		-15.86%
PHILLIPSBURG	33	27.05%	3.13%
HACKETTSTOWN	29	23.77%	-23.68%
WASHINGTON	15	12.3%	-6.25%

BICYCLE SAFETY • GENERAL OVERVIEW

Bicycling activity has increased in New Jersey in recent years, including for purposes of commuting to work, running errands, riding for leisure and fitness. Over the ten-year period from 2008-2017, there have been a total of 155 bicyclist fatalities in the State, 17 occurring in 2017 alone, one fewer than 2016. Bicycle fatalities represented 2.7 percent of total roadway fatalities in 2017. As indicated in the chart, the number of bicyclist fatalities has remained rather consistent over the 10-year period, despite there being a concerted effort throughout New Jersey to enhance bicycle safety and awareness.

BICYCLIST FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



In 2016, bicycles were involved in 0.69 percent of all crashes in the State. Outreach and education efforts have been made throughout the state to enhance the awareness of cyclists riding in roadways. However, the non-fatal injury rate in 2016 is higher than the 5-year average (16.55 non-fatal injuries per 100,000 population in 2016 vs 15.12 5-year average) The fatal injury rate in 2016 is also higher than the 5-year average (0.19 fatal injuries per 100,000 population vs 0.17).

BICYCLIST INJURIES BY SEVERITY, 2012 - 2016						
	2012	2013	2014	2015	2016	TOTAL
KILLED	14	14	11	18	18	74
TOTAL INJURED	1,469	1,277	1,148	1,372	1,486	6,752
SERIOUS INJURY (A)	49	29	26	33	38	175
MODERATE INJURY (B)	551	483	437	499	554	2,524
MINOR INJURY (C)	869	765	685	840	877	4,036
UNKNOWN	673	638	685	521	492	3,009
FATALITY RATE PER 100,000 POPULATION	0.16	0.16	0.12	0.20	0.19	0.17
NON FATAL INJURY RATE PER 100,000 POPULATION	16.55	14.33	12.84	15.32	16.55	15.12
TOTAL BICYCLE CRASHES	2,211	2,010	1,863	1,959	1,923	9,966

The majority of crashes with bicyclists had one or more factors reported. The most common factor for cyclists involved in crashes from 2012-2016 was "None (Driver/Pedalcyclist)" (3,500 or 33.64%) followed by "Driver Inattention" (1,764 or 16.96%). "Other Driver/Pedalcyclist Action" was cited next most frequently (1,490 or 14.32%), followed by "Failure to Yield the Right of Way to Vehicle/Pedestrian" (711 or 6.83%).

BICYCLIST CONTRIBUTING CIRCUMSTANCES, 2012 - 2012		
CONTRIBUTING CIRCUMSTANCE	BICYCLISTS CITED	% OF BICYCLISTS IN CRASHES
DRIVER INATTENTION (DRIVER/PEDALCYCLE)	1,764	16.96%
FAILED TO YIELD RIGHT OF WAY TO VEHICLE/PEDESTRIAN	711	6.83%
WRONG WAY	600	5.77%
FAILED TO OBEY TRAFFIC CONTROL DEVICE	607	5.83%
FAILURE TO KEEP RIGHT	380	3.65%
IMPROPER USE/NO LIGHTS	103	0.99%
BRAKES	99	0.95%
UNSAFE SPEED	107	1.03%
IMPROPER TURNING	96	0.92%
IMPROPER PASSING	95	0.91%
NONE (DRIVER/PEDALCYCLE)	3,500	33.64%
OTHER DRIVER/PEDALCYCLIST ACTION	1,490	14.32%
TOTAL BICYCLISTS INVOLVED IN CRASHES	10,404	100.00%

There are many other circumstances present in bicyclist involved crashes. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have multiple causation factors. A representation of crashes involving bicyclists and how they combine with other performance areas can be found on the following page. From 2012-2016, 3.8 percent of crashes involved drugs or alcohol impairment. About 14 percent of crashes involving pedestrians also involved older drivers, 5.1 percent involved a younger driver and 35 percent involved a distracted driver.

BICYCLE CRASHES BY PERFORMANCE AREA, 2012 – 2016								
BICYCLES AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	85	72	69	73	67	366	73.2	3.7%
DRUG INVOLVEMENT	1	3	2	3	1	10	2	0.1%
DISTRACTED DRIVING	720	738	641	706	650	3,455	691	35.0%
UNSAFE SPEED	30	8	20	13	22	93	18.6	0.9%
YOUNG DRIVERS	120	114	88	90	90	502	100.4	5.1%
OLDER DRIVERS	285	283	265	273	273	1,379	275.8	14.0%
MOTORCYCLES	13	8	11	9	8	49	9.8	0.5%
TOTAL BICYCLE INVOLVED CRASHES	2,180	1,980	1,843	1,959	1,923	9,885	1,977	100.0%

BICYCLE SAFETY • ANALYSIS OF AGE/GENDER

Crashes involving bicycles continue to be a concern for younger travelers. Riders in the age group 0-15 years of age accounted for 12.6 percent of all bicycle related crashes from 2012-2016, the largest percentage of all age groups. Meanwhile, the 16-20-year-old rider accounted for the second largest age group, at 11.1 percent. A breakdown of age group and gender of bicyclists injured in crashes is depicted below. Male riders heavily outweigh the number of female riders in every age group and accounted for at least 81 percent of all cyclists involved in crashes over the last five years. As seen in the table, younger cyclists experience the highest numbers of crashes with motor vehicles, mostly due to their lack of access to other modes of personal conveyance (i.e. driving), and the fact that younger people are still gaining experience bicycling in and around roadways and developing motor skills.

The younger the cyclist the more prone they are to have a conflict with a motor vehicle. According to the data, as the age of the bicyclist increases, there is a decrease in the number of crashes experienced. Overall, in 2016 bicycle fatalities represented roughly 2.8 percent of annual roadway fatalities in the State.

DHTS will continue to partner with law enforcement and transportation management agencies to promote safe and lawful riding practices, including the use of bicycle helmets (mandatory for all riders under 17 years of age), the importance of being highly visible while riding, and the need to share the road with all users.

% OF BICYCLISTS INVOLVED IN CRASHES BY AGE GROUP AND GENDER, 2012 - 2016				
AGE GROUP	% OF BICYCLISTS IN CRASHES	MALE	FEMALE	UNKNOWN
0-15	12.6%	10.6%	1.9%	3.1%
16-20	11.1%	9.2%	1.8%	3.1%
21-25	8.2%	6.7%	1.3%	3.8%
26-30	5.9%	4.8%	0.9%	2.1%
31-35	5.1%	4.2%	0.8%	1.4%
36-40	4.7%	4.0%	0.6%	1.2%
41-45	5.1%	4.2%	0.7%	2.6%
46-50	6.1%	5.0%	0.9%	2.3%
51-55	6.9%	5.8%	1.0%	2.3%
56-60	4.7%	4.0%	0.7%	1.2%
61-65	2.9%	2.6%	0.3%	0.7%
66+	5.4%	4.5%	0.8%	1.2%
UNKNOWN	21.5%	15.9%	2.6%	3.1%
TOTALS	100.0%	81.5%	14.4%	4.1%

BICYCLE SAFETY • ANALYSIS OF OCCURRENCE

The occurrence of crashes involving bicycles by month and by day of week provides insight as to why crashes between motor vehicles and bicyclists occur. During the period from 2012-2016, the months that experienced the highest volume of bicycle crashes were July and August with 1,383 and 1,433 crashes, respectively. July and August each accounted for 13.9 and 14.4 percent, respectively of all crashes involving bicycles over the past five years. As expected, the warmer months accounted for the highest rates of occurrence, with May through September making up 63 percent of all crashes that occurred. According to the data, the Day of Week occurrence does not vary greatly from day-to-day, although Sundays have higher occurrences.

BICYCLE INVOLVED CRASHES BY MONTH, 2012 - 2016

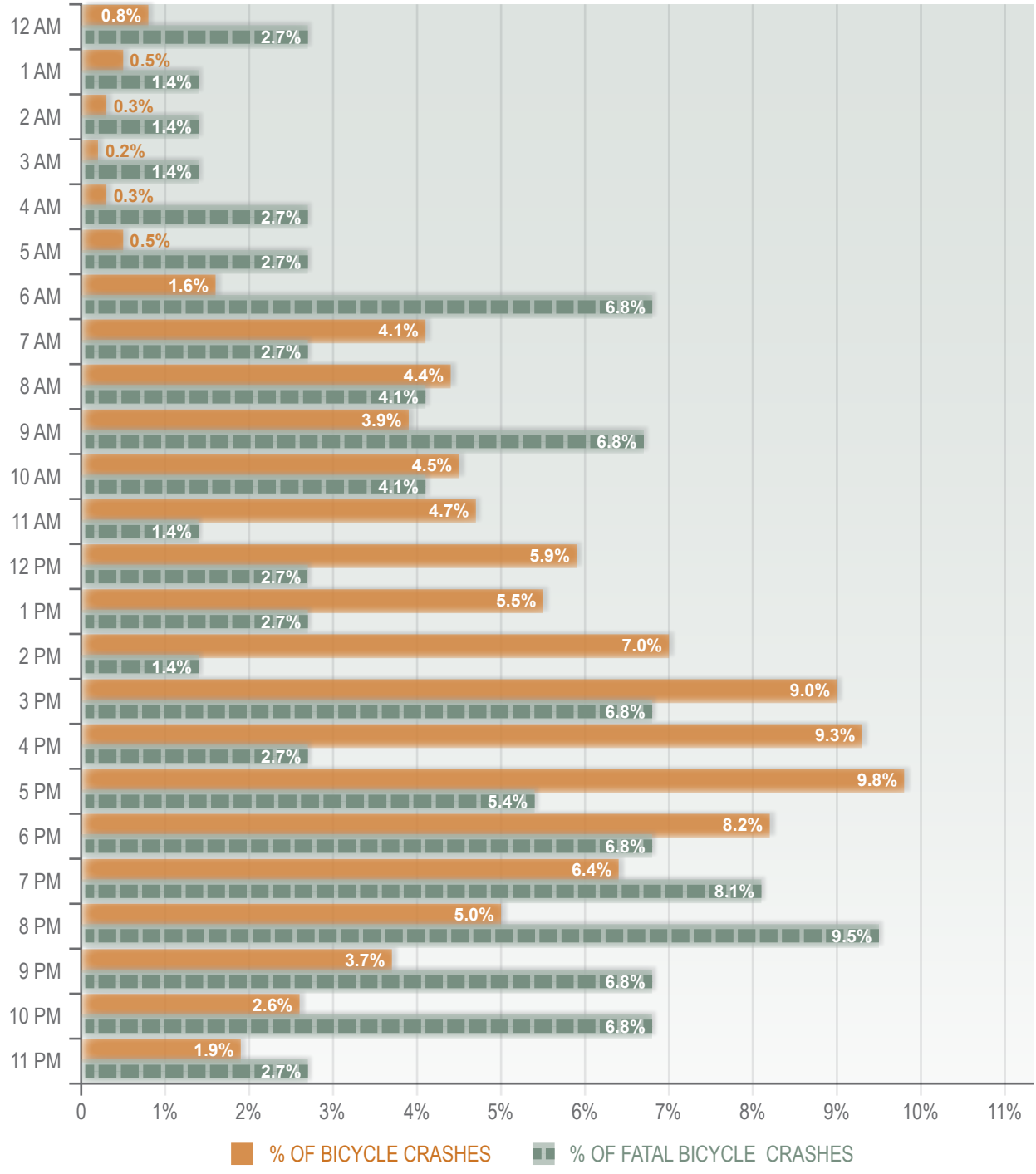
MONTH	FATAL BICYCLE CRASHES		BICYCLE CRASHES	
	CRASHES	PERCENTAGE	CRASHES	PERCENTAGE
JANUARY	4	5.4%	297	3.0%
FEBRUARY	4	5.4%	267	2.7%
MARCH	7	9.5%	457	4.6%
APRIL	3	4.1%	686	6.9%
MAY	6	8.1%	1,014	10.2%
JUNE	10	13.5%	1,235	12.4%
JULY	3	4.1%	1,383	13.9%
AUGUST	8	10.8%	1,433	14.4%
SEPTEMBER	11	14.9%	1,216	12.2%
OCTOBER	8	10.8%	899	9.0%
NOVEMBER	5	6.8%	576	5.8%
DECEMBER	5	6.8%	503	5.0%
TOTALS	74	100.0%	9,966	100.0%

BICYCLE INVOLVED CRASHES BY DAY OF WEEK, 2012 - 2016

DAY	FATAL BICYCLE CRASHES		BICYCLE CRASHES	
	CRASHES	PERCENTAGE	CRASHES	PERCENTAGE
MONDAY	12	16.2%	1,456	14.6%
TUESDAY	10	13.5%	1,453	14.6%
WEDNESDAY	12	16.2%	1,453	14.6%
THURSDAY	7	9.5%	1,431	14.4%
FRIDAY	8	10.8%	1,558	15.6%
SATURDAY	11	14.9%	1,412	14.2%
SUNDAY	14	18.9%	1,203	12.1%
TOTALS	74	100.0%	9,966	100.0%

Similar to the trend seen in overall motor vehicle crashes, the majority of bicycle related crashes occur within the afternoon commuting times of 3pm – 7pm accounting for 36.3 percent of total bicycle related crashes from 2012-2016. This is due to the increased volume of both bicyclists and motor vehicles operating on the same roadways during those hours. Over the past five years, the deadliest times for bicycle riders have been the 6pm hour through the 10pm hour representing only 25 percent of the possible exposure hours, but 37.8 percent of all bicyclist fatalities.

BICYCLE CRASH % VERSUS FATAL BICYCLE CRASH % BY TIME OF DAY, 2012 - 2016



BICYCLE SAFETY • ANALYSIS OF LOCATION

The top ten municipalities have been identified where crashes have occurred over the last five years. Although there is a strong correlation between higher population and a higher number of bicycle crashes occurring in a given municipality, there are some additional towns that make the top ten list, such as Lakewood, Passaic, and Union City, which have higher levels of bicycle crashes than their population alone would dictate. Lakewood Township is the only suburban area that made the top ten list. Over the last five years, 5.67 percent of all crashes involving cyclists in the State occurred in Jersey City, followed by Newark (3.97%) and Camden (2.37%).

BICYCLE INVOLVED CRASHES, TOP 10 MUNICIPALITIES, 2012 - 2016

RANK	MUNICIPALITY	CRASHES	% OF TOTAL
1	JERSEY CITY	565	5.67%
2	NEWARK	396	3.97%
3	CAMDEN	236	2.37%
4	LAKEWOOD	210	2.11%
5	PATERSON	181	1.82%
6	UNION CITY	158	1.59%
7	ATLANTIC CITY	154	1.55%
8	PASSAIC	146	1.46%
9	TRENTON	124	1.24%
10	HOBOKEN	110	1.10%

The number of bicycle crashes that have occurred over the past five years for each county along with the top three municipalities for each county by the highest volume of bicycle crashes can be found on the next page. Hudson County (1,185 crashes) had the highest five-year total of bicycle crashes in the State making up 11.89 percent of all bicycle crashes over the past five years. Forty-eight percent of all bicycle crashes in Hudson County occurred in Jersey City, followed by Union City with 13 percent.

Bergen County had the second highest number of bicycle crashes over the past five years (1,095) accounting for 10.99 percent of all bicycle crashes. Nine percent of all bicycle crashes over the past five years in Bergen County occurred in Hackensack, followed by Fort Lee.

It is important to analyze trends occurring in municipalities throughout the State, not only for the highest volumes of bicycle crashes, but also the changes seen over time. Though a municipality may not have the highest, or even second-to-highest occurrences, it may be experiencing an increase in crashes. For example, Wildwood City in Cape May County had a 26.92 percent increase in bicycle crashes over the last five years, increasing from a five-year cumulative total in 20011-2015 of 55 to 72 in 2012-2016. Further education and bicycle awareness efforts should be enhanced in these types of communities that are experiencing cumulative increases.

BICYCLE CRASHES, TOP 3 MUNICIPALITIES BY COUNTY			
	BICYCLE CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
ATLANTIC COUNTY	440		-5.38%
ATLANTIC CITY	154	35.00%	-10.98%
EGG HARBOR TOWNSHIP	57	12.95%	7.55%
VENTNOR	32	7.27%	-3.03%
BERGEN COUNTY	1,095		-4.03%
HACKENSACK	99	9.04%	-6.60%
FORT LEE	74	6.76%	5.71%
GARFIELD	62	5.66%	-1.59%
BURLINGTON COUNTY	322		-4.45%
WILLINGBORO	31	9.63%	6.90%
EVESHAM	30	9.32%	11.11%
MOUNT LAUREL	28	8.70%	7.69%
CAMDEN COUNTY	645		-3.01%
CAMDEN	236	36.59%	9.77%
CHERRY HILL	71	11.01%	-2.74%
PENNSAUKEN	36	5.58%	-20.00%
CAPE MAY COUNTY	365		-5.93%
OCEAN CITY	72	19.73%	-11.11%
WILDWOOD	72	19.73%	30.91%
LOWER	41	11.23%	-10.87%
CUMBERLAND COUNTY	207		-4.61%
VINELAND	103	49.76%	-8.85%
MILLVILLE	51	24.64%	2.00%
BRIDGETON	32	15.46%	0.00%
ESSEX COUNTY	845		-1.29%
NEWARK	396	46.86%	6.45%
EAST ORANGE	64	7.57%	3.23%
MONTCLAIR	53	6.27%	-19.70%
GLOUCESTER COUNTY	221		-7.14%
GLASSBORO	39	17.65%	0.00%
MONROE	30	13.57%	-3.23%
WOODBURY	29	13.12%	-12.12%
HUDSON COUNTY	1,185		4.59%
JERSEY CITY	565	47.68%	5.21%
UNION CITY	158	13.33%	5.33%
HOBOKEN	110	9.28%	5.77%

	BICYCLE CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
HUNTERDON COUNTY	67		-2.90%
FLEMINGTON	13	19.40%	0.00%
RARITAN	11	16.42%	57.14%
READINGTON	8	11.94%	0.00%
MERCER COUNTY	411		-3.97%
TRENTON	124	30.17%	-3.88%
HAMILTON	71	17.27%	-12.35%
PRINCETON	60	14.60%	15.38%
MIDDLESEX COUNTY	684		-6.94%
NEW BRUNSWICK	105	15.35%	-12.50%
EDISON	90	13.16%	-5.26%
WOODBRIDGE	75	10.96%	-6.25%
MONMOUTH COUNTY	815		-4.23%
NEPTUNE TOWNSHIP	95	11.66%	4.40%
ASBURY PARK	79	9.69%	-3.66%
MIDDLETOWN	58	7.12%	7.41%
MORRIS COUNTY	327		-1.21%
MORRISTOWN	41	12.54%	2.50%
PEQUANNOCK	27	8.26%	-6.90%
MADISON	25	7.65%	38.89%
OCEAN COUNTY	757		-6.08%
LAKEWOOD	210	27.74%	-4.11%
TOMS RIVER	99	13.08%	-9.17%
BRICK	85	11.23%	-9.57%
PASSAIC COUNTY	552		-1.25%
PATERSON	181	32.79%	1.69%
PASSAIC	146	26.45%	-5.19%
CLIFTON	110	19.93%	-6.78%
SALEM COUNTY	38		-9.52%
MANNINGTON	12	31.58%	-14.29%
PENNSVILLE	5	13.16%	-37.50%
WOODSTOWN	5	13.16%	66.67%
SOMERSET COUNTY	295		1.72%
FRANKLIN	75	25.42%	13.64%
BRIDGEWATER	36	12.20%	-5.26%
NORTH PLAINFIELD	27	9.15%	0.00%

	BICYCLE CRASHES 2012 - 2016	PERCENT OF COUNTY TOTAL	% CHANGE FROM 2011 - 2015
SUSSEX COUNTY	42		13.51%
SPARTA	10	23.81%	0.00%
NEWTON	4	9.52%	33.33%
VERNON	4	9.53%	0.00%
UNION COUNTY	590		0.68%
PLAINFIELD	107	18.14%	3.88%
ELIZABETH	99	16.78%	26.92%
UNION	51	8.64%	6.25%
WARREN COUNTY	63		10.53%
HACKETTSTOWN	18	28.57%	5.88%
PHILLIPSBURG	16	25.40%	-15.79%
WASHINGTON	7	11.11%	16.67%

Project Name: **PEDESTRIAN/BICYCLE SAFETY PROGRAM MANAGEMENT**

Sub-Recipient: **DIVISION OF HIGHWAY TRAFFIC SAFETY**

Total Project Amount: **$65,000**

Project Description:

Funds will be provided for program managers to coordinate, monitor and evaluate projects focused on pedestrian and bicycle safety at the local, county and State level. Funds will be used for salaries, fringe benefits, travel and other administrative costs that may arise for program supervisors and their respective staff. Salaries and fringe benefits represent $60,000 of the budgeted amount and another $5,000 is budgeted for travel and other miscellaneous expenditures.

Funding Source: **SECTION 402** Local Benefit: **0**

COUNTERMEASURE STRATEGY: TARGETED ENFORCEMENT/EDUCATION

Effectiveness of Countermeasure

Targeted enforcement can be employed for a wide range of purposes in a wide range of circumstances, so effectiveness is context-dependent. In Queens, New York, enforcement was a key part of a campaign that included minor engineering adjustments and communications and outreach and reduced pedestrian fatalities (CDC, 1989). A before and after study with a comparison group examined the effects of sustained, enhanced high visibility enforcement of motorist yielding to pedestrians, combined with publicity and other community outreach in Gainesville, Florida, such as flyers given to stopped drivers, roadside feedback signs and earned and paid media. (Van Houten, Malenfant, Blomberg, Huitema, & Casella, 2013; Van Houten, Malenfant, Huitema, & Blomberg, 2013). Driver yielding rose throughout the one-year study period. Van Houten and Malenfant (2004) found that driver yielding to pedestrians increased in response to targeted police enforcement at crosswalks on two corridors in Miami Beach, Florida. Warnings and educational flyers were handed out to most violators, while citations were issued for flagrant violations.

The State Highway Safety Office can help ensure correct riding through communications and outreach campaigns and through training law enforcement officers about the laws, the safety benefits of obeying the laws and how to enforce bicycle safety-related laws. Law enforcement can also reinforce active lighting and helmet use laws in effect by stopping and educating offending bicyclists as well as writing citations if appropriate. (Countermeasures That Work, 8th Edition, 2015).

Assessment of Safety Impacts

Reducing pedestrian crashes, fatalities and injuries continues to be a challenge. Efforts to promote safe driving as well as the use and practice of safe walking in and around the State will be continued. Police observations have indicated an increase in general deterrence and a change in driver behavior following the enforcement efforts, however, this is only anecdotal evidence.

Because of the extent of the pedestrian problem in the State, there has been an increase in interagency coordination to address pedestrian safety as a shared problem. Collaborations between State and local governments and State and local law enforcement agencies have been productive.

Linkage between Problem Identification and Performance Targets

The State's pedestrian fatality rate consistently exceeds the national average. Although this number fluctuates, in a typical year approximately 29 percent of fatalities are pedestrian related. Pedestrian crashes represent the second largest category of motor vehicle fatalities and injuries in the State. Pedestrian fatalities increased in 2017 by nearly

12 percent. By working with all the State's safety partners, pedestrian safety measures in the three E's will continue to be implemented at identified problem areas throughout the State in an effort to reduce pedestrian crashes, fatalities and injuries.

Enforcement of laws related to bicycling are not typically engaged in by police departments. There are self-paced interactive training programs available for law enforcement to enhance the safety of bicyclists, however, a customized program tailored for New Jersey law enforcement would be beneficial.

Project Name: **ENFORCEMENT/EDUCATION PROGRAMS**

Sub-Recipients: **MUNICIPAL LAW ENFORCEMENT AGENCIES**

Total Project Amount: **$1,540,000**

Project Description:

Pedestrian crashes occur for a variety of reasons, including errors in judgment by pedestrians and drivers or shortcomings in traffic engineering. Funds will be provided to develop and implement pedestrian safety campaigns in communities that have a high incidence of pedestrian crashes, injuries and fatalities. Emphasis will be placed on citing those motorists who fail to stop for pedestrians in the crosswalk. Funds will be used for overtime enforcement and printing of brochures.

A list of approximately 40-60 municipalities, representing the highest number of pedestrian crashes over a five-year period, will be created and used to strive for decreases in pedestrian crashes and injuries by targeting resources to the most problematic areas in the State. Overtime enforcement efforts will be implemented in geographic areas where significant portions of the pedestrian crash problem exist. The pedestrian grants will be provided to local jurisdictions and conducted throughout the year.

In an effort to supplement the enforcement effort, Street Smart materials will be distributed to raise awareness for both pedestrians and motorists of the major rules for pedestrian safety. Grantees will use earned media through local press releases to promote the program.

The Pedestrian Decoy program will continue to apprehend drivers who fail to stop for pedestrians at intersections and crosswalks. Police officers in plain clothes will again pose as pedestrians in marked crosswalks, while officers watch for violations. Drivers failing to stop will be issued a citation. Officers involved in the enforcement effort will also educate drivers about the new pedestrian law, requiring drivers to stop and remain stopped, and emphasize to pedestrians the need to use due care and not jaywalk or step into traffic outside the required crossing points. The program will be coordinated with municipal prosecutors, the courts and local media.

DHTS will partner with the North Jersey Transportation Planning Authority, NJ Department of Transportation, Federal Highway Administration and the Transportation Management Associations in implementing the Street Smart NJ Pedestrian Safety Campaign in communities that receive funding. In addition, the DHTS will receive assistance in project selection from the New Jersey Bicycle and Pedestrian Advisory Council (BPAC) which is coordinated by the Voorhees Transportation Center, in conjunction with the New Jersey Department of Transportation. The BPAC advises on policies, programs, research, and priorities to advance bicycling and walking as safe and viable forms of transportation and recreation. Members of the Council include bicycle and pedestrian advocates, engineering and planning professionals, and members from local, county and State agencies representing the transportation, health, environmental, and enforcement fields.

Overtime hours will be worked at the top pedestrian crash locations in Hudson County as part of the evidence-based traffic enforcement effort through officer details and multi-officer decoy details. Extra enforcement patrols, both uniform and plain clothes, will be utilized at hotspot locations. The purpose of the extra patrols will be to focus on drivers who fail to yield the right of way to pedestrians within crosswalks and also to pedestrians who do not use proper cross walks when crossing the roadway.

Other resources include the Department of Transportation's Pedestrian Safety Improvement Program that identifies high risk locations. The program provides for the development and implementation of pedestrian

safety elements at locations based on the frequency and severity of crashes. The safety improvements include engineering improvements such as crosswalks, sidewalks, and high-intensity activated crosswalk beacons. The DHTS can piggyback on these efforts by offering assistance to implement enforcement and education countermeasures.

The Department of Transportation also advances the *Complete Streets* policies that promote safety for pedestrians, bicyclists and other users of the roadways. This is accomplished through the planning, design, construction, maintenance and operation of new and rehabilitated transportation facilities.

The enforcement initiative previously discussed will be supplemented by the State Pedestrian Safety, Enforcement and Education Fund which is a repository for monies provided pursuant to subsection c. of N.J.S.A 39:4-36. Under the statute, a motorist must stop for a pedestrian crossing in the roadway in a marked crosswalk. Failure to stop may result in a fine not to exceed $200. A total of $100 of such fine is dedicated to the Fund to be used to award grants to municipalities and counties with pedestrian safety problems. In addition to compensation for law enforcement officers, the monies from the Fund can be used for the following initiatives: engineering and design of traffic signs; purchasing and installing of traffic signs; educational or training materials or media campaigns concerning pedestrian safety; compensation for authorized crossing guards assigned to an intersection, crosswalk, or other roadway; and other commodities.

DHTS will continue to work with its Federal, State, local and non-profit partners as part of the Pedestrian Safety workgroup to develop a standardized training curriculum for law enforcement agencies to assist law enforcement officers in understanding the factors associated with pedestrian crashes, developing countermeasures and enforcement strategies, and recognizing the importance of complete and accurate crash reporting. In addition, the group will review the 2014 Pedestrian Action Plan and provide recommendations for revisions to the Plan.

Funding Source: SECTION 405(h) **Local Benefit: $1,540,000**
Additional Funding Source: $ 550,000 (Pedestrian Safety, Enforcement and Education Fund)

COUNTERMEASURE STRATEGY: ELEMENTARY-AGE CHILD BICYCLIST TRAINING

Effectiveness of Countermeasure

Helmet promotions are successful in getting more helmets into the hands of bicyclists. Rouzier and Alto (1995) describe a comprehensive program of presentations, media coverage, messages from doctors to patients, as well as low-cost helmet availability, which increased helmet purchases and use for all ages. A Cochrane systematic review and meta-analysis of twenty-two studies evaluating non-legislative helmet promotion programs aimed at children under 18 years found the odds of observed helmet wearing were significantly greater among those receiving the interventions (Owen, Kendrick, Mulvaney, Coleman, & Royal, 2011).

A Cochrane review of studies of pedestrian and bicycle conspicuity aids concluded that "fluorescent materials in yellow, red, and orange improved driver detection during the day..." (Kwan & Mapstone, 2004). Even low beam headlights can illuminate figures wearing florescent materials hundreds of feet away, much farther than figures wearing normal clothing (NCHRP, 2004, Strategy B5; NCHRP, 2008, Strategy F2). One study among a cohort of riders who had participated in a large mass bicycle event found results suggesting that consistent use of fluorescent colors provides a protective effect against crashes and injuries (Thornley, Woodward, Langley, Ameratunga, & Rodgers, 2008).

Assessment of Safety Impacts

Properly wearing a helmet significantly reduces the risk of head and brain injury for bicyclists of all ages. This makes helmets the most effective way to reduce head injuries and fatalities resulting from bicycle crashes.

Education is most effective when supported by other interventions such as bicycle rodeos. Bike fairs, rodeos and skills training will make riders more aware of safe cycling behavior.

Improving bicyclist conspicuity is intended to make bicyclists more visible to motorists and to allow motorists more opportunity to see and avoid collisions with bicyclists. A common contributing factor for crashes involving bicyclists in the roadway is the failure of the driver to notice the bicyclist, particularly at night.

Linkage between Problem Identification and Performance Targets

The overall preliminary number of bicycle fatalities reduced by one in 2017 to 17, representing a 5.3 percent decrease since 2016. Bicycle fatalities (9.5 percent) occur most often at 9pm. Twenty-six percent of bicycle crashes occur from 6:00pm through 11:00pm and 37 percent of fatal bicycle crashes occur between those same hours of the day. From 2013-2017, nearly 80 percent of bicyclists killed in crashes were not wearing a helmet at the time of the crash. In 2017 alone, 10 out of 17 fatally injured bicyclists (58%) were not wearing a helmet at the time of the crash.

Project Name: **ENFORCEMENT/EDUCATION LOCAL PROGRAMS**

Sub-Recipients: **MUNICIPAL AND STATE LAW ENFORCEMENT AGENCIES**

Total Project Amount: **$60,000**

Project Description:

Funds will be provided to educate bicyclists about the dangers associated with not wearing a helmet while riding. Basic overall education, particularly to those under the age of 17, in the form of community wide education programs on the benefits of wearing a bicycle/safety helmet will be provided. Education and information will also be provided to bicyclists riding between the hours of sunset and sunrise when they are not conspicuous to motorists.

Community-wide education and enforcement efforts will be implemented in various communities to increase bicycle helmet usage. A media and public information campaign will coincide with several bicycle safety clinics in which properly sized and fitted bicycle helmets will be addressed. Education will also be provided on the importance of increasing the visibility of night-time bicyclists in an effort to increase the safety for this group of high risk cyclists.

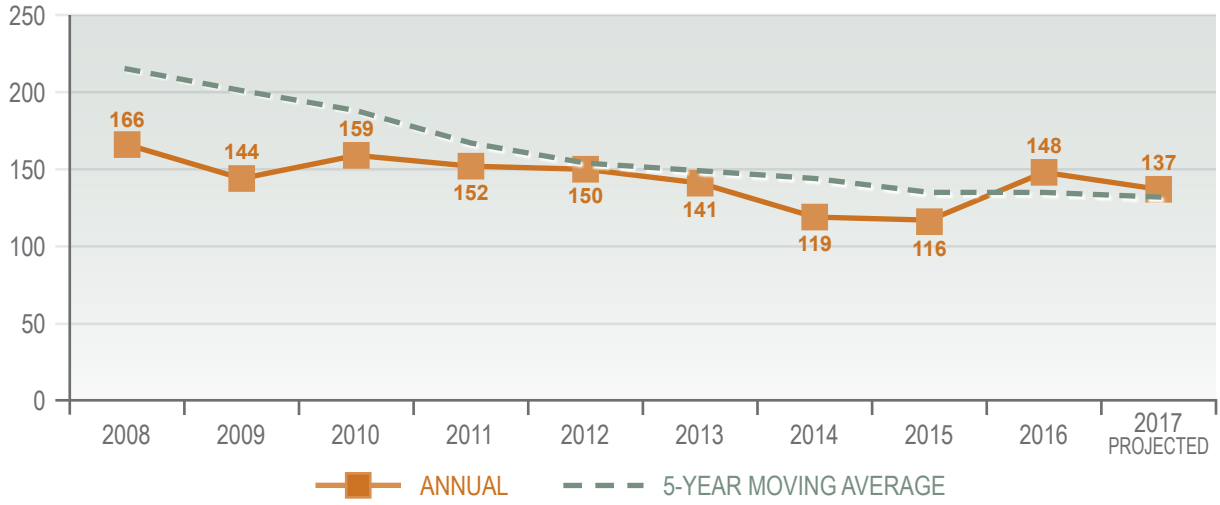
Funds will be used to pay for officer overtime, materials for use at safety talks, and printed material that will be handed out to participants at various training programs.

Funding Source: **SECTION 405(h)** **Local Benefit:** **$60,000**

GENERAL OVERVIEW

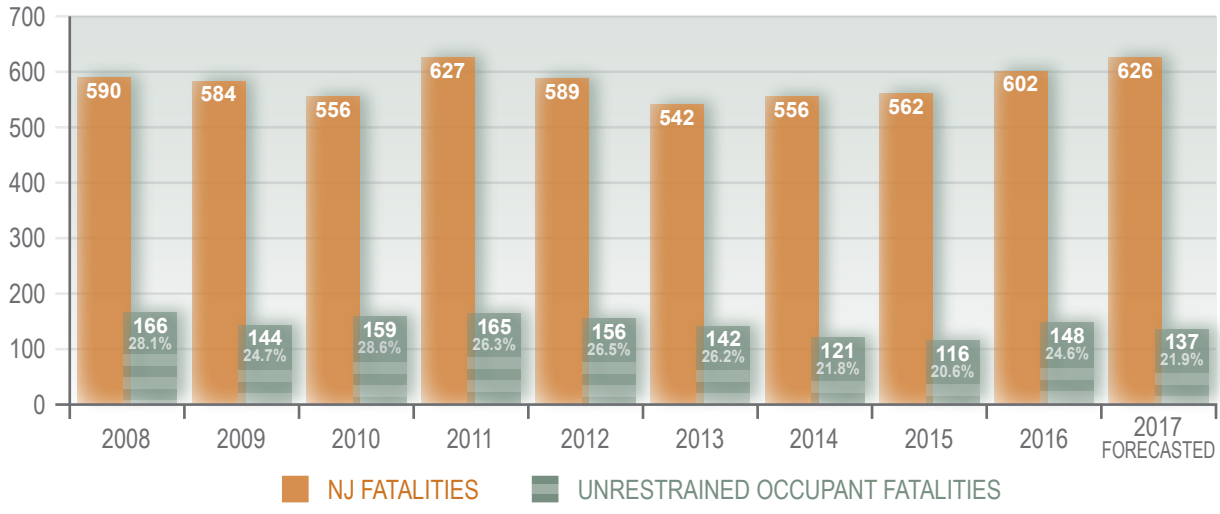
Proper use of seat belts by occupants within motor vehicles is one of the most effective ways of reducing traffic fatalities in motor vehicle crashes. According to NHTSA, approximately 15,000 lives are saved annually in the United States because an occupant was wearing their seatbelt at the time of the crash. Not wearing a seatbelt in motor vehicle crashes not only poses an enormous threat to one's own life, but to all other occupants within the vehicle. In 2016, New Jersey experienced over 3,500 crashes where an occupant was not wearing his or her seat belt, resulting in 148 fatalities.

UNRESTRAINED MOTOR VEHICLE OCCUPANT FATALITIES - ALL SEAT POSITIONS, ANNUAL AND 5–YEAR MOVING AVERAGE



Although final fatal counts are not available at this time, projections estimate 137 people died in motor vehicle crashes that were not wearing their seat belt in 2017, representing 21.9 percent of all motor vehicle fatalities that occurred in the State. This represents a decrease from 2016 when 24.6 percent of fatally injured occupants were unbuckled.

PROPORTION OF UNRESTRAINED OCCUPANT FATALITIES VERSUS TOTAL NEW JERSEY FATALITIES



NHTSA estimates that in 2016, the lives of 214 motor vehicle occupants in New Jersey were saved because of seat belt use at the time of the crash, and an additional two children aged 4 and younger were saved by child restraint use. It is also estimated that if every occupant within a motor vehicle is using belts at the time of the crash, 22 additional lives would have been saved in 2016.

ANALYSIS OF USAGE IN CRASHES

The 2017 usage rate of 94.07 percent of front-seat occupants obtained in the annual seatbelt survey is 0.72 percent higher than the usage rate observed in 2016 and higher than the nationwide seat belt usage rate of 90 percent (2016).

FRONT-SEAT SAFETY BELT USAGE RATE, 1998 - 2017

YEAR	NEW JERSEY			UNITED STATES		
	Front-Seat Usage Rate	Percentage Change	Reduction in Non-Use	Front-Seat Usage Rate	Percentage Change	Reduction in Non-Use
1998	63.0%	-	-	62 – 70%	-	-
1999	63.3%	+ 0.30%	0.8%	67%	-	
2000	74.2%	+10.90%	29.7%	71%	4%	12%
2001	77.6%	+ 3.40%	13.2%	73%	2%	7%
2002	80.5%	+ 2.90%	12.9%	75%	2%	7%
2003	81.2%	+ 0.70%	3.6%	79%	4%	16%
2004	82.0%	+ 0.80%	4.3%	80%	1%	5%
2005	85.5%	+ 3.50%	19.4%	82%	2%	10%
2006	89.97%	+ 4.47%	30.8%	81%	-1%	-6%
2007	91.36%	+ 1.39%	13.9%	82%	1%	5%
2008	91.75%	+ 0.39%	4.5%	83%	1%	6%
2009	92.67%	+ 0.92%	11.2%	84%	1%	6%
2010	93.73%	+ 1.06%	14.4%	85%	1%	6%
2011	94.51%	+ 0.78%	12.5%	84%	-1%	-7%
2012	88.29%	- 6.22%	-113.3%	86%	2%	13%
2013	91.00%	+ 2.71%	23.1%	87%	1%	7%
2014	87.59%	- 3.41%	-37.9%	87%	0%	0%
2015	91.36%	+ 3.77%	30.4%	89%	2%	15%
2016	93.35%	+ 1.99%	23.0%	90%	1%	9%
2017	94.07%	+ 0.72%	10.9%	-	-	-

Seat belt usage for rear-seat passengers in passenger motor vehicles was also observed in the 2017 survey. In total, 4,828 vehicles with a total of 14,190 drivers and occupants were observed in the survey. Of the occupants, 5,485 or 38.7 percent of the occupant observations made were of rear-seat passengers.

Usage rates for rear-seat passengers by seating position and age reveal that 79 percent of surveyed rear-seat passengers use a safety belt, the same as 2016. Children between the age of 0 and 8 years of age had the highest usage rate of 93 percent, compared to a usage rate of 90 percent in 2016. Passengers between the age of 8 and 18 had the next highest usage rate of 70 percent, higher than the observed rate in 2016 of 60 percent. The lowest usage rate occurred for adults greater than 18 years of age, having a usage rate of 48 percent, slightly higher than the observed rate in 2016 of 45 percent.

SURVEY DATA FOR REAR-SEAT PASSENGER SAFETY BELT USAGE, 2017

	Vehicle Type	--------- USING SAFETY BELTS --------			------- NOT USING SAFETY BELTS -------			---------- % USAGE ----------			TOTAL
		Left[1]	Middle[2]	Right[3]	Left	Middle	Right	Left	Middle	Right	
ADULT	PC[4]	64	11	59	105	12	83	38%	48%	42%	40%
	SUV	43	5	32	17	10	15	72%	33%	68%	66%
	VAN	164	37	113	159	61	116	51%	38%	49%	48%
	TOTAL	271	53	204	281	83	214	49%	39%	49%	48%
YOUNG	PC	95	39	86	42	34	43	69%	53%	67%	65%
	SUV	59	16	31	16	10	18	79%	62%	63%	71%
	VAN	211	119	186	72	65	66	75%	65%	74%	72%
	TOTAL	365	174	303	130	109	127	74%	61%	70%	70%
CHILD	PC	313	64	364	35	23	56	90%	74%	87%	87%
	SUV	171	19	192	8	5	14	96%	79%	93%	93%
	VAN	822	158	859	26	8	34	97%	95%	96%	96%
	TOTAL	1,306	241	1,415	69	36	104	95%	87%	93%	93%
TOTALS	PC	472	114	509	182	69	182	72%	62%	74%	72%
	SUV	273	40	255	41	25	47	87%	62%	84%	83%
	VAN	1,197	314	1,158	257	134	216	82%	70%	84%	81%
	TOTAL	1,942	468	1,922	480	228	445	80%	67%	81%	79%

[1]Left — position behind the driver, [2]Middle — position behind front row occupants, [3]Right — position behind front-seat passenger, [4]PC — passenger car

Restraint use was also determined for each vehicle type surveyed (passenger cars, pickup trucks, vans and sport utility vehicles). The table shows usage rates for drivers and passengers for each vehicle type. Sport utility vehicles had the highest overall usage rate of 95.7 percent, followed by passenger cars and vans which shared a usage rate of 94.97 percent. Similar to national trends, pickup trucks had the lowest usage rate of 90.51 percent, although this rate is up from 88.41 percent in 2016.

SURVEY DATA FOR DRIVER AND PASSENGER SAFETY BELT USAGE, 2015 - 2017 CAMPAIGNS

	Vehicle Type	-- USING SAFETY BELTS --		-- NOT USING SAFETY BELTS --		---------- UNKNOWN ----------		---------- % USAGE ----------		TOTAL
		Driver	Passenger	Driver	Passenger	Driver	Passenger	Driver	Passenger	
POST-CAMPAIGN SURVEY (2017)	PC[4]	24,789	4,963	1,146	431	325	111	95.58%	92.01%	94.97%
	PUT[5]	3,682	694	341	118	567	1	91.52%	85.47%	90.51%
	SUV	19,111	4,854	745	333	191	4	96.25%	93.58%	95.70%
	VAN	4,258	1,273	183	110	100	2	95.88%	92.05%	94.97%
	TOTAL	51,840	11,784	2,415	992	1,183	118	95.55%	92.24%	94.92%
POST-CAMPAIGN SURVEY (2016)	PC	36,224	6,663	2,118	452	69	5	94.48%	93.65%	94.35%
	PUT	4,400	832	564	122	20	1	88.64%	87.21%	88.41%
	SUV	26,126	5,959	1,118	320	37	6	95.90%	94.90%	95.71%
	VAN	4,643	1,395	214	90	3	0	95.59%	93.94%	95.21%
	TOTAL	71,393	14,849	4,014	984	129	12	94.68%	93.79%	94.52%
POST-CAMPAIGN SURVEY (2015)	PC	38,756	7,614	2,703	550	453	44	93.48%	93.26%	93.44%
	PUT	4,836	941	730	144	123	11	86.88%	86.73%	86.86%
	SUV	25,046	5,824	1,483	388	310	25	94.41%	93.75%	94.29%
	VAN	7,377	1,981	398	117	43	5	94.88%	94.42%	94.78%
	TOTAL	76,015	16,360	5,314	1,199	929	85	93.47%	93.17%	93.41%

[4]PC — passenger car, [5]PUT — Pick-up Truck

ANALYSIS OF AGE/GENDER

Seat belt use is a good habit that all drivers and occupants should practice. The forming of this habit is important among younger drivers, as ages 0-30 are the populations with the highest rate of non-use, accounting for approximately 50 percent of all individuals not wearing a seatbelt at the time of a crash. As individuals age, their decision to wear a seatbelt increases and the volume of injuries sustained in motor vehicle crashes decreases simultaneously.

Males are the most likely to not wear a seatbelt while driving or riding as a passenger in a motor vehicle. Nearly 61 percent of those unbelted in a motor vehicle crash over the past five years were male and 39.4 percent were female.

UNRESTRAINED CRASH OCCUPANT PERCENTAGE BY AGE GROUP AND GENDER, 2012 - 2016

AGE GROUP	FEMALE	MALE
0-15	6.3%	6.5%
16-20	5.2%	7.0%
21-25	4.9%	8.4%
26-30	3.5%	6.7%
31-35	3.1%	5.9%
36-40	2.5%	4.7%
41-45	2.7%	4.6%
46-50	2.5%	4.2%
51-55	2.5%	4.1%
56-60	1.8%	3.1%
61-65	1.5%	2.1%
66+	2.9%	3.2%
TOTAL	39.4%	60.6%

ANALYSIS OF OCCURRENCE

The percentage of unrestrained motor vehicle crashes is consistently higher during the day than the night. In 2016, 80.3 percent of crashes involving unbuckled motorists occurred during the hours of 5:00am and 8:59pm. Night-time occurrences accounted for 19.7 percent of those not wearing a seat belt during a crash in 2016.

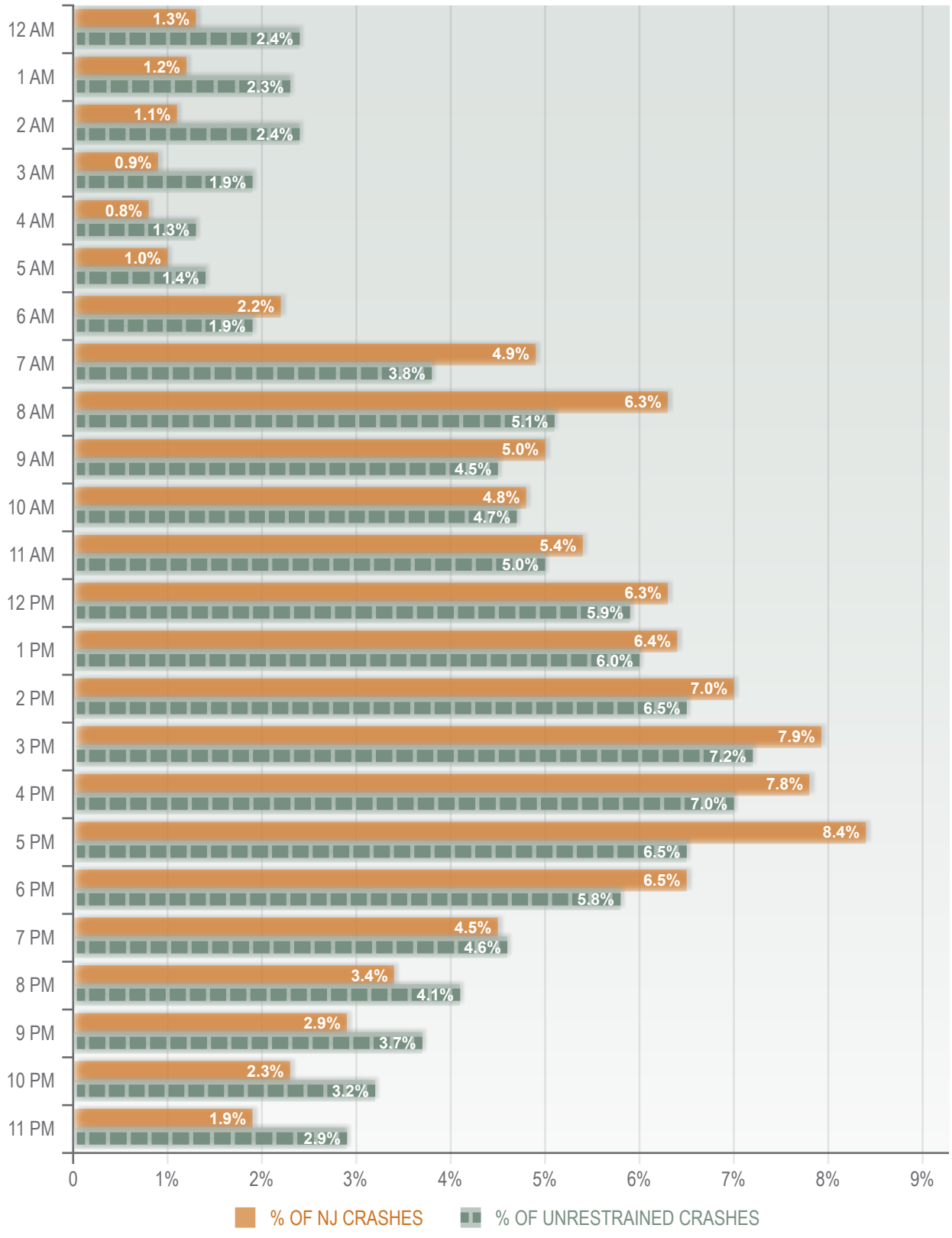
UNRESTRAINED CRASHES BY TIME OF DAY AND YEAR, 2012 - 2016

DAY/NIGHT	2012		2013		2014		2015		2016	
	Unrestrained Crashes	%	Unrestrained Crashes	%	Unrestrained Crashes	%	Unrestrained Crashes	%	Unrestrained Crashes	%
DAY 5AM - 8:59PM	3,734	78.7%	3,520	79.5%	3,504	80.6%	2,980	80.4%	2,924	80.3%
NIGHT 9PM - 4:59AM	1,010	21.3%	909	20.5%	843	19.4%	726	19.6%	718	19.7%

Crashes involving an unrestrained occupant are relatively evenly distributed by weekday. Over the past five years (2012-2016), 15.87 percent of total unrestrained crashes occurred on a Friday, followed by Saturday with 15.27 percent. Over 27 percent of all unrestrained crashes occurred during the months of May, June and July combined.

The following graph shows the comparison of the time of day occurrence of unrestrained crashes and all motor vehicle crashes. It is important to note that unrestrained crashes become overrepresented between the hours of 7pm and 6am.

UNRESTRAINED CRASH % VERSUS NJ CRASH % BY TIME OF DAY, 2012 - 2016



ANALYSIS OF LOCATION

Monmouth County had the most unrestrained fatalities in the State with 21 accounting for 70 percent of the county total of occupant fatalities in 2016. Burlington County and Middlesex Counties had 14 and 12 unrestrained fatalities respectively in 2016, which accounted for 45.2 percent and 34.3 percent of each county's occupant fatalities.

OCCUPANT FATALITIES VERSUS UNRESTRAINED FATALITIES BY COUNTY, 2016

COUNTY	OCCUPANT FATALITIES	UNRESTRAINED FATALITIES	COUNTY TOTAL %	COUNTY	OCCUPANT FATALITIES	UNRESTRAINED FATALITIES	COUNTY TOTAL %
ATLANTIC	19	11	57.9%	MIDDLESEX	35	12	34.3%
BERGEN	14	3	21.4%	MONMOUTH	30	21	70.0%
BURLINGTON	31	14	45.2%	MORRIS	11	5	45.5%
CAMDEN	17	6	35.3%	OCEAN	29	11	37.9%
CAPE MAY	10	4	40.0%	PASSAIC	10	3	30.0%
CUMBERLAND	19	9	47.4%	SALEM	13	4	30.8%
ESSEX	11	9	81.8%	SOMERSET	9	3	33.3%
GLOUCESTER	16	8	50.0%	SUSSEX	8	6	75.0%
HUDSON	8	2	25.0%	UNION	14	7	50.0%
HUNTERDON	8	6	75.0%	WARREN	11	5	45.5%
MERCER	8	2	25.0%				

Data compiled from the 2017 seat belt survey conducted by the New Jersey Institute of Technology revealed an overall usage rate of 94.07 percent. Union County had the highest front seat occupant and driver seatbelt usage rates (98.09%) followed by Camden County with a rate of 96.43 percent. The lowest front seat occupant usage rate occurred in Essex County with a rate of 91.21 percent.

FRONT-SEAT RESTRAINT USE % BY COUNTY, 2016 & 2017

	FRONT SEAT OCCUPANT USAGE RATE			DRIVER USAGE RATE			FRONT SEAT PASSENGER USAGE RATE		
	2016	2017	% Change	2016	2017	% Change	2016	2017	% Change
ATLANTIC	87.14%	94.75%	7.61%	87.62%	95.58%	7.96%	86.03%	90.03%	4.00%
BERGEN	93.55%	95.40%	1.85%	94.11%	96.02%	1.91%	90.71%	91.61%	0.90%
BURLINGTON	92.71%	95.03%	2.32%	93.30%	95.14%	1.84%	89.68%	94.51%	4.83%
CAMDEN	92.75%	96.43%	3.68%	92.84%	96.79%	3.95%	92.43%	94.62%	2.19%
ESSEX	88.30%	91.21%	2.91%	88.44%	91.38%	2.94%	87.72%	90.83%	3.11%
GLOUCESTER	90.98%	94.22%	3.24%	91.39%	94.16%	2.77%	89.03%	94.40%	5.37%
HUDSON	93.44%	95.47%	2.03%	93.01%	95.93%	2.92%	95.74%	93.27%	-2.47%
MERCER	93.29%	91.54%	-1.75%	93.03%	92.10%	-0.93%	95.17%	88.20%	-6.97%
MIDDLESEX	92.36%	92.12%	-0.24%	92.95%	92.94%	-0.01%	89.11%	89.45%	0.34%
MONMOUTH	96.31%	93.50%	-2.81%	96.11%	93.97%	-2.14%	97.29%	91.08%	-6.21%
MORRIS	92.75%	94.23%	1.48%	91.96%	94.61%	2.65%	97.69%	92.24%	-5.45%
OCEAN	91.18%	92.75%	1.57%	91.03%	92.65%	1.62%	91.90%	93.08%	1.18%
PASSAIC	92.90%	95.05%	2.15%	94.06%	94.40%	0.34%	82.04%	96.99%	14.95%
SOMERSET	95.73%	92.43%	-3.30%	95.46%	92.45%	-3.01%	97.29%	92.30%	-4.99%
UNION	91.71%	98.09%	6.38%	92.17%	97.88%	5.71%	84.46%	98.83%	14.37%
STATE USAGE RATE	93.35%	94.07%	0.72%	93.22%	94.25%	1.03%	93.95%	93.35%	-0.60%

Project Name: **OCCUPANT PROTECTION PROGRAM MANAGEMENT**

Sub-Recipient: **DIVISION OF HIGHWAY TRAFFIC SAFETY**

Total Project Amount: **$150,000**

Project Description:

Funds will be provided for program managers to coordinate and monitor projects addressing occupant protection with an emphasis on seat belt and child safety seat projects delivered by law enforcement agencies and other safety partners. Funds will be used for salaries, fringe benefits, travel and other administrative costs that may arise for program supervisors and their respective staff. Salaries and fringe benefits represent $145,000 of the budgeted amount and another $5,000 is budgeted for travel and other miscellaneous expenditures.

Funding Source: **SECTION 402** Local Benefit: **0**

COUNTERMEASURE STRATEGY: OBSERVATIONAL SURVEY

Effectiveness of Countermeasure

Under the Occupant Protection Grant program (Section 405), an eligible State can qualify for grant funds as either a high seat belt use rate State or a lower seat belt use rate State. A high seat belt use rate State is a State that has an observed seat belt use rate of 90 percent or higher; a lower seat belt use rate State is a State that has an observed seat belt use rate lower than 90 percent. (U.S. DOT/NHTSA – Uniform Procedures for State Highway Safety Grant Program).

Assessment of Safety Impacts

In addition to determining how a State will qualify for Section 405 grant funds, the observational survey provides information on seat belt compliance within the State and reveals locations in the State where countermeasures may be required to increase usage rates.

Linkage between Problem Identification and Performance Targets

The State's front-seat belt usage rate in 2017 was observed at 94.07 percent compared to 93.35 percent in 2016. Overall, 79 percent of surveyed rear seat passengers used a safety belt in 2017, same as 2016. Children between the ages of 0 and 8 years old, had the highest usage rate of 93 percent, compared to a usage rate of 90 percent in 2016. Passengers between the age of 8 and 18 had the next highest usage rate of 70 percent, compared to a usage rate of 60 percent in 2016. The lowest usage rate occurred for adults, greater than 18 years of age, with a usage rate of 48 percent, compared to a usage rate of 45 percent in 2016.

Project Name: **SEAT BELT OBSERVATIONAL SURVEY**

Sub-Recipients: **NEW JERSEY INSTITUTE OF TECHNOLOGY**

Total Project Amount: **$175,000**

Project Description:

Funds will be provided to perform the statewide seat belt usage rate observation survey to determine the annual front seat occupant seat belt usage rate for the State as well as belt use by adults and children in the back seat. The survey will be conducted by researchers from the New Jersey Institute of Technology during the spring and summer of calendar year 2019. Section 402 funds will be used to pay salaries and wages to conduct the survey and prepare the report.

Funding Source: **SECTION 402** Local Benefit: **0**

COUNTERMEASURE STRATEGY: ENFORCEMENT AND EDUCATION

Effectiveness of Countermeasure

The Center for Disease Control's systematic review of 15 high-quality studies (Dinh-Zarr et al., 2001; Shults et al., 2004) found that short-term, high-visibility enforcement programs increased belt use by about 16 percentage points, with greater gains when pre-program belt use was lower. Because many of the studies were conducted when belt use rates were considerably lower than at present, new programs likely will not have as large an effect. Following the enforcement program, belt use often dropped by about 6 percentage points demonstrating the ratchet effect typical of these programs (belt use increases during and immediately after the program and then decreases somewhat, but remains at a level higher than the pre-program belt use).

Between 2002 and 2005, NHTSA evaluated the effects of *Click It or Ticket* campaigns on belt use in the United States. In 2002, belt use increased by 8.6 percentage points across 10 States that used paid advertising extensively in their campaigns. Belt use increased by 2.7 percentage points across 4 States that used limited paid advertising and increased by 0.5 percentage points across 4 States that used no paid advertising (Solomon, Ulmer & Preusser, 2002).

Hedlund et al. (2008) compared 16 States with high seat belt rates and 15 States with low seat belt rates. The single most important difference between the two groups was the level of enforcement, rather than demographic characteristics or the amount spent on media. High-belt use States issued twice as many citations per capita during their *Click It or Ticket* campaigns as low-belt-use States.

Nichols and Ledingham (2008) conducted a review of the impact of enforcement, as well as legislation and sanctions, on seat belt use over the past two decades and concluded that sustained enforcement is as effective as "blitz" enforcement (short-term, high-visibility enforcement) and unlike blitz campaigns, is not usually associated with abrupt drops in belt use after program completion.

California, Oregon, and Washington State, States that are reported to use sustained enforcement, have recorded statewide belt use well above national belt use rates since 2002 (California: 91 to 97 percent; Oregon: 88 to 98 percent; Washington: 93 to 98 percent) (Chen, 2014).

Assessment of Safety Impacts

The seat belt is an effective safety tool that not only saves lives, but also significantly reduces the severity of the injury that a vehicle occupant may have sustained if they were not wearing the device. Although the State's seat belt usage rate (94.07% in 2017) was above the national average of 90 percent in 2016, more public enlightenment is needed to increase the awareness and compliance of seat belt use.

Linkage between Problem Identification and Performance Targets

The number of unrestrained fatalities decreased in 2017 to approximately 22 percent of all motor vehicle fatalities based on preliminary data from 24.6 percent in 2016. At least 50 percent of occupant fatalities in the counties of Atlantic, Essex, Gloucester, Hunterdon, Monmouth, Sussex and Union were to occupants not wearing seat belts at the time of the crash. Observational surveys also reveal that less than 50 percent of adults are wearing seat belts in the rear seat of vehicles.

Project Name: **SEAT BELT ENFORCEMENT/EDUCATION**

Sub-Recipients: **STATE AND MUNICIPAL LAW ENFORCEMENT AGENCIES**

Total Project Amount: **$1,000,000**

Project Description:

The *Click It or Ticket* campaign will be conducted from May 20 – June 2, 2019 to increase seat belt use and educate the public about the impact belt use has on reducing injuries and fatalities in

motor vehicle crashes. Funds will be provided to state and municipal law enforcement agencies to implement seat belt saturation and/or tactical overtime patrols. Approximately 130 state, county and municipal police departments will receive funds to participate in the enforcement efforts. All education-related occupant protection initiatives conducted at the local level will utilize DHTS' *Buckle Up — Everyone, Every Ride* materials. Emphasis will be placed on enforcing the recently enacted secondary seat belt law requiring all adult passengers in the back seat to buckle up.

New Jersey will also join peers in other States in a coordinated border-to-border seat belt enforcement campaign that will kick off the annual *Click It or Ticket* campaign. Law enforcement officers in New Jersey will join with colleagues from other States to set up checkpoints and roving patrols near border crossings to enforce seat belt usage.

A list of locations throughout the State that have a high percentage of unrestrained motor vehicle crashes will be identified and used for selecting grant participants during the *Click It or Ticket* mobilization. The results of the annual seat belt survey are also used to target those counties that have the lowest occupant usage rates. Based on this information, municipal police agencies are invited to participate in the annual mobilization.

In an effort to employ strategies of "sustained seat belt enforcement" throughout the year, the Division of State Police will schedule personnel on an overtime basis to patrol service areas and toll plazas along the length of the toll roads. The purpose of these patrols will be to place an emphasis on the enforcement of the primary seat belt law, the secondary rear passenger law and the child passenger safety law as well as supplementing the seat belt checks that will be conducted at service areas.

Awareness and the importance of wearing a seat belt will be further enhanced by the distribution of education materials, earned media efforts, paid media conducted by NHTSA, *Click It or Ticket* banners and displays on dynamic message signs on major highways. Visibility is further heightened when law enforcement agencies join forces with police departments from states participating in the border-to-border initiative.

Funding Source: **SECTION 405(b)** **Local Benefit:** **$800,000**

COUNTERMEASURE STRATEGY: CHILD PASSENGER SAFETY EDUCATION AND ENFORCEMENT

Effectiveness of Countermeasure

One study evaluated Safe Kids child restraint inspection events held at car dealerships, hospitals, retail outlets and other community locations (to provide as much local exposure as possible). The objective of the study was to measure parent confidence levels, skill development and safe behavior over a 6-week interval using checklists and a matching behavioral survey. Results showed that within the 6-week time period, the child passenger safety checkup events successfully and positively changed parents' behavior and increased their knowledge: children arriving at the second event were restrained more safely and more appropriately than they were at the first (Dukehart, Walker, Lococo, Decina, & Staplin, 2007).

Another study evaluated whether a "hands-on" educational intervention makes a difference in whether or not parents correctly use their child restraints. All study participants received a free child restraint and education, but the experimental group also received a hands-on demonstration of correct installation and use of the child restraint in their own vehicles. Parents who received this demonstration were also required to demonstrate in return that they could correctly install the restraint. Follow-up observations found that the intervention group was four times more likely to correctly use their child restraints than was the control group (Tessier, 2010).

An evaluation of the child restraint fitting station network in New South Wales, Australia found that children whose parents attended a fitting station were significantly more likely to be properly restrained than children whose parents had not visited a fitting station. While specific to Australia, these results suggest similar benefits are possible in the United States (Brown, Finch, Hatfield, & Bilston, 2011).

Assessment of Safety Impacts

Children from 0-15 years of age account for approximately 13 percent of unrestrained occupants involved in a crash. The correct use of child safety restraints can have a positive effect on reducing injuries and fatalities in children. The challenge is to ensure that these restraints, whether a car seat or booster seat, are installed in a proper manner.

Linkage between Problem Identification and Performance Targets

Car crashes are the leading cause of death for children from 1-15 years of age. The estimated rate of car seat misuse observed at fitting stations in the State is 80 percent. Occupants required to be secured in car or booster seats have a non-compliance rate of approximately 10 percent based on observational surveys.

Project Name: **CHILD PASSENGER SEAT BELT ENFORCEMENT/EDUCATION/TRAINING**

Sub-Recipients: **STATE AND MUNICIPAL LAW ENFORCEMENT AGENCIES, STATE AGENCIES AND NON-PROFIT ORGANIZATIONS**

Total Project Amount: **$600,000**

Project Description:

The Child Passenger Safety (CPS) program, funded through the Division of Highway Traffic Safety (DHTS), will continue its efforts at reducing traffic injury and fatality rates through coordinated enforcement and education programs regarding the proper use of child restraints in motor vehicles. Child safety seat check events have been at the core of the CPS program. This effort will continue to be supported and will include work with the New Jersey Department of Children and Families (DCF) in an effort to reach a greater portion of the urban and disadvantaged population. The combined efforts are focused on several strategies and are designed to meet the National Highway Traffic Safety Administration (NHTSA) goal of reaching at least 70 percent of the state's population of children under age 15.

During Fiscal Year 2018, grants were provided directly to agencies for CPS programs, technician training, re-training and program development. These grantees have directly worked one-on-one with over 27,000 parents and children and reached another several hundred children with the booster seat education program. Grants will continue to be awarded in 2019 to conduct child passenger safety programs and to conduct technician training and re-training classes.

The grant programs are focused on two major areas, Education programs (parent and student) and quality of technician base. Parent (or caregiver) education programs are typically conducted at a community event, where a parent or caregiver works in a one-on-one situation with a trained technician and is instructed on how to properly install child safety seats. These events are usually attended by individuals with children age 4 and under with either rear facing (infant) or forward facing (toddler) seats. There are also various educational seminars provided at the municipal and county level.

Building the quality of the technician base includes offering more continuing education units (CEU) for recertification as well as LATCH manual updates (Lower Anchors and Tethers for Children) and opportunities for Instructors to evaluate the skills of the technicians.

Public Information

The DHTS assists in providing safety messages and information to the motoring public. The *100%, Everyone, Every Ride* message is publicized at child passenger safety programs around the State. The DHTS also promotes National Child Passenger Safety Week each September by calling attention to the importance of safely transporting children and promoting NHTSA's "4 Steps for Kids" campaign. The most up to date standards, issued by NHTSA and based on the American Academy of Pediatrics Child Passenger Safety Technical Report and Policy Statement, are incorporated into all of the support materials. Program support and print materials generated from the DHTS utilize the NHTSA Safercar.gov graphics to provide for a uniform look to program materials, whether they are obtained from the State office or from the NHTSA website, www.nhtsa.gov.

The DHTS website, which can be found at www.njsaferoads.com, educates New Jersey motorists about numerous highway traffic safety priority areas. The following child passenger safety information is available:

- New Jersey's Child Passenger Safety Law
- Child Passenger Safety County Contacts
- Regularly Scheduled CPS Inspection and Education Stations
- Child Restraint Product Recalls
- Child Passenger Safety Training and Technical Resources

Child Passenger Safety County Contacts

Child Passenger Safety Coordinators can be found in each county in New Jersey. Coordinators help the public locate technicians, assist technicians with re-certification needs and provide information on child passenger safety programs in their respective counties. The public may contact these county coordinators directly and arrange for child safety seat program presentations or receive information and guidance on proper installation techniques. In addition, these contacts are tasked to keep DHTS advised of the trends and needs for services within their respective areas.

Child Safety Seat Check Schedule

The DHTS website provides a list of regularly scheduled Child Safety Seat Inspection and Education activities listed by region and county. In addition to County based programs, there are three regional Child Passenger Safety Stations which are operated by the New Jersey State Police in conjunction with local public safety and injury prevention programs. The sites are located in Passaic (North Region), Neptune (Central Region), and Camden (South Region). Each operates at least once per month. CPS providers report activity conducted directly to NHTSA. This information is included on a searchable map of all CPS permanent stations and is located on the national NHTSA website at NHTSA.gov. The public is able to search by zip code or by state to find the nearest provider.

Permanent Child Safety Seat Inspection and Education Stations

There are permanent Child Passenger Safety Inspection and Education programs operating throughout the state covering all 21 counties. This includes the three Regional State Police stations. All are tasked with expanding their CPS educational outreach to include community education programs for all children age 15 and under in their respective areas. The current safety seat inspection and education stations are listed below:

Atlantic County

- Atlantic County Sheriff's Office operates two fixed sites each month.
- Egg Harbor Township – Second Saturday of each month
- Hammonton – Third Saturday of each month
- Atlantic City Healthy Mothers/Healthy Babies Coalition – checks scheduled by appointment in Atlantic City

Bergen County

- Programs provided by the Bergen County Sheriff's Department on a monthly basis. There is also a Division of State Police station in Hackensack, the County seat for Bergen.

Burlington County

- Burlington County Sheriff's Office in Mount Holly. Wednesdays from 10:00 am to 2:00 pm, every week of the year. The Burlington County Sheriff's Office also conducts off site projects at community locations by advance schedule and notice. Southern New Jersey Safe Kids is also an available resource in Burlington County.

Camden County

- Cooper Health System in Camden – Available at one monthly fixed site, by appointment, in conjunction with the Camden County Office of Highway Safety. The Division of State Police also provides checks at the Cherry Hill Fire Department. Cooper Health, in conjunction with Southern New Jersey Safe Kids, operates a community education program related to children's health and safety in Camden and Gloucester Counties. Weisman Children's Hospital has two locations where they offer CPS services once per month.

Cape May County

- Cape May County Sheriff's Office operates a bi-monthly inspection and education event at Cape May Court House – First and third Monday of each month

Cumberland County

- Cumberland County Sheriff's Office - Community events scheduled by request.

Essex County

- Program conducted by Northern New Jersey Safe Communities.
- Essex-Morris Child Safety Seat Station in Livingston – Every Wednesday, program runs year round.

Gloucester County

- Gloucester County Sheriff's Office – regularly scheduled CPS events once per month at the Gloucester County Store.
- Deptford car seat check – First Saturday of each month. Southern New Jersey Safe Kids is also an available resource in Gloucester County.

Hudson County

- Jersey City Medical Center and Hudson County SafeKids in partnership with the Jersey City Police Department.
- Jersey City – Every Thursday of each month during spring through fall. Reduced winter hours.

Hunterdon County

- Hunterdon County Prosecutor's Office – Traffic Safety Unit – Every Tuesday each month spring through fall, with reduced winter hours.

Mercer County

- Mercer County Sheriff's Office, CPS programs by appointment. Colonial Fire Company in Hamilton - last Tuesday of each month. Hamilton Twp. Police are also available on a limited basis to conduct checks.
- Princeton Healthcare System offers seat inspections on an appointment basis.

Middlesex County

- Rutgers University Police/Middlesex County CPS Program.
- Rutgers University Campus, Piscataway – Every Thursday of each week, year round.
- Middlesex County SafeKids, Robert Wood Johnson University Hospital – Community CPS education and outreach program, by appointment. Both operate year round.

Monmouth County

- The New Jersey State Police Regional site in Neptune provides year round programming and checks in Monmouth County.
- Monmouth County Sheriff's Department, third Wednesday of each month.

Morris County

- Programs are organized by Northern New Jersey Safe Communities -
- Morris-Essex Child Safety Seat Station, Livingston – Every Wednesday of the month, year round.
- Chester First Aid Squad, Chester – First Tuesday and third Thursday of the month, year round.

Ocean County

- Ocean County partnership includes Ocean County Sheriff's Office, Toms River Township Police and Manchester Township Police Departments, which operates three open events each month, year round.
- Programs operate from Ridgeway Fire Department, Manchester – First Wednesday of each month, and Silverton Fire Company, Toms River – Second and fourth Wednesday of each month.

Passaic County

- New Jersey State Police/Totowa Station, Totowa – Every Thursday. Program operates year round.

Salem County

- United Way and Salem County Sheriff's Department, has trained staff and operates on no fixed schedule, but can provide community directed services at varying locations.

Somerset County

- Five municipal Police departments, Bridgewater Twp., Franklin Twp., Hillsborough Twp., Manville Borough, and Montgomery Twp., and the Somerset County community traffic safety program and Somerset County Sheriff's Office cooperatively work to provide services at various locations within the county on a published schedule.

Sussex County

- Northern New Jersey Safe Communities - provides CPS services through its nearby affiliates.
- New Jersey State Police operate a year round Regional site in Newton.

Union County

- Union County Police Department offers regular fitting station 7:30 – 11:00am in Garwood on Wednesdays and Thursdays. No appointment necessary.

Warren County

- Northern New Jersey Safe Communities – Available by appointment at Warren Hospital.
- New Jersey State Police operate a year round regional site in nearby Newton.

A list of the active CPS Inspection Stations (fitting stations) is listed as follows:

New Jersey Active Network of CPS Inspection Stations (called fitting stations). Each location is staffed with certified technicians. (*) locations serve urban areas and primarily low-income and minority populations.

Location	Number of scheduled events in 2019
*Atlantic City Healthy Mothers/Healthy Babies	5
*Atlantic County Child Seat Check – Egg Harbor Twp.	10
Atlantic County Child Seat Check – Hammonton	6
*Community Training Associates	5
Bergen County Sheriff – Paramus	10

Location	Number of scheduled events in 2019
New Jersey State Police – Hackensack	12
*Burlington County Sheriff's Dept. – Mt. Holly	45
Burlington County Sheriff's Dept – mobile details	12
Lakeside Collision – Mt. Laurel	6
Weisman Children's Hospital - Marlton	10
Cherry Hill Fire Department	13
*Cooper Hospital – Camden	11
*Weisman Children's Hospital – Pennsauken	10
*Cape May County Sheriff - Burke Motors	16
Cape May County Sheriff – CMCH	28
*Cumberland County Sheriff	3
Essex-Morris Child Safety Seat Station	10
Gloucester County Sheriff's Dept. – Deptford	20
*Mantua Fire Department	10
*Jersey City Medical Center	18
*Hunterdon County Child Safety Seat Check	22
*Mercer County Sheriff – Hamilton	9
Princeton Healthcare System	5
Rutgers University	28
*Middlesex County Safe Kids	15
*New Jersey State Police – Neptune	10
Morris-Essex Child Safety – Livingston	9
Morris-Essex Child Safety – Florham Park	16
Morris-Essex Child Safety – Chester	19
Shade Tree Garage – Morristown	27
*Community Training Associates	8
Ocean County Sheriff and Manchester PD	10
*Silverton Firehouse – Toms River	20
*Ocean County Sheriff – Toms River	3
NJ State Police – Totowa	69
Somerset County Child Safety Seat Station	17
Newton First Aid Squad	9
Union County Child Safety Seat Station	27

NHTSA Standardized Child Passenger Safety Training Program

DHTS is the state training contact for CPS training and information and also supports the national child passenger safety certification program which provides a national certification to those that are successfully trained. There are now 1,057 individuals trained as certified technicians in the State working in public safety, health and injury prevention programs that remain certified. Thirty-seven of the technicians are certified as CPS instructors. In 2019, ten CPS training courses are expected to be held.

The CPS Certification Training Classes will be conducted at various locations in the counties and municipalities listed below.

Location	# of Candidates	Location	# of Candidates
Gloucester County	20	New Brunswick	25
Mercer County	20	Ocean County	35
NJ State Police	25	Somerset County	25
Camden	20	Burlington County	35
Hackettstown (Warren Co.)	20	Division of Children and Families	20

Child Passenger Safety Coalition

The DHTS will assemble representatives from SafeKids, NJ State Police, county fitting stations, AAA hospital based programs and the Department of Children and Families to create a NJ CPS Coalition. This group will develop an action plan for CPS training and oversight.

The DHTS occupant protection message *Buckle Up — Everyone, Every Ride* will continue to be publicized at permanent fitting stations around the state to ensure that children as well as their older siblings and parents are properly restrained.

Funds for personal services will be used to conduct child safety seat checks at county and municipal jurisdictions. Child safety seat technicians will perform safety seat checks and conduct educational seminars to reduce the misuse and/or non-use of child safety seats and dispel incorrect information regarding child passenger safety. Funds will also be used to purchase a small number of child safety seats for distribution at seat check events and fitting stations.

The 32-hour Standardized Child Passenger Safety (CPS) Training course will be offered at sites across the state with an emphasis on training technicians who will assist under-served populations. In addition, at least three recertification classes will be conducted during the year to ensure that the state has an adequate cadre of technicians to serve the public.

The Department of Children and Families (DCF) and its Division of Youth and Family Services (DYFS) will conduct CPS training for staff whose assigned duties include the transportation of children. Staff will be instructed on how to select the correct car seat and provide hands-on practice on installing child restraints into vehicles utilized within the DCF fleet so that children under the Department's supervision, custody or guardianship are safely secured. An added benefit of this program is that the local offices of the DCF/DYFS guardianship are safely secured. An additional benefit of this program is that the local offices of the DCF/DYFS will be open and available to provide CPS education and awareness programs to the residents within those respective communities, thereby, enhancing efforts to reach underserved and urban communities.

Funds will be used to conduct child passenger safety programs that will pay to conduct child safety seat checks and educational presentations at schools, day care centers and social meetings. In addition, funds will be used to purchase a limited number of car seats and pay for overtime enforcement.

Funding Source: SECTION 405(b) **Local Benefit: $400,000**

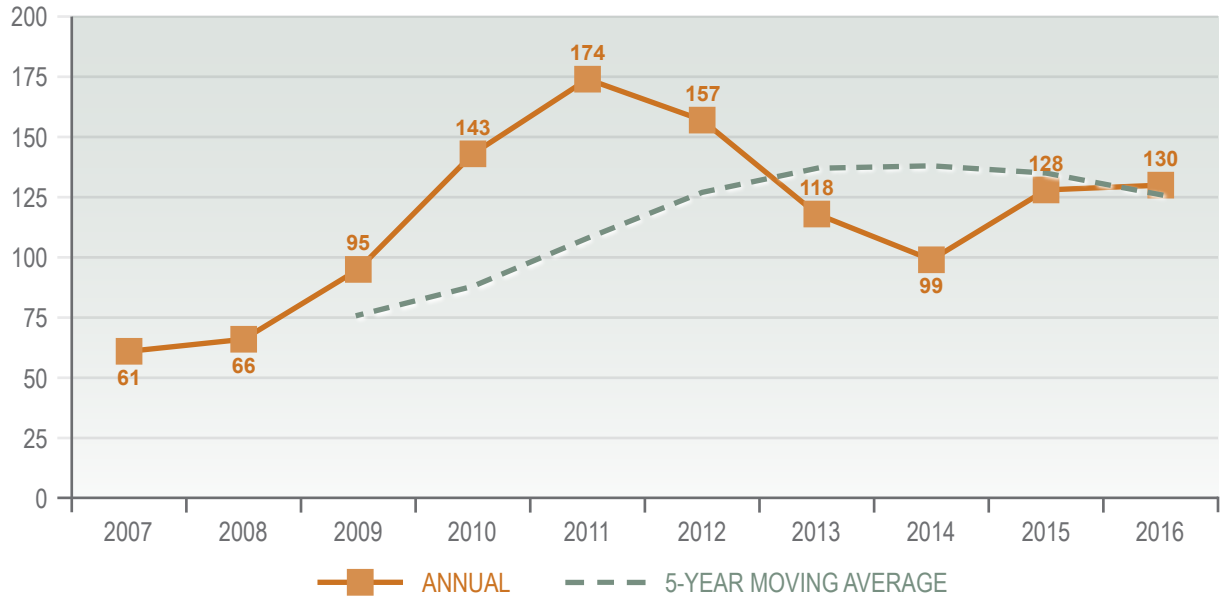
GENERAL OVERVIEW

Traffic law enforcement plays a critical role in deterring impaired driving, increasing seat belt usage, encouraging compliance with speed laws and reducing unsafe driving actions. Law enforcement agencies have been compelled to be selective in traffic enforcement efforts by providing maximum enforcement effort at selected times and in selected areas.

Traffic crashes occur for a variety of reasons. While some traffic laws are mainly supportive to the traffic system, several are directly and specifically tailored to prevent unsafe acts or to reduce conditions which may cause crashes. These are generally referred to as hazardous moving violations. Hazardous moving violations are identified as a contributing factor in fatal as well as non-fatal crashes. Two of the moving violations that contribute significantly to both fatal and non-fatal crashes and therefore require increased attention are speed and distracted driving infractions.

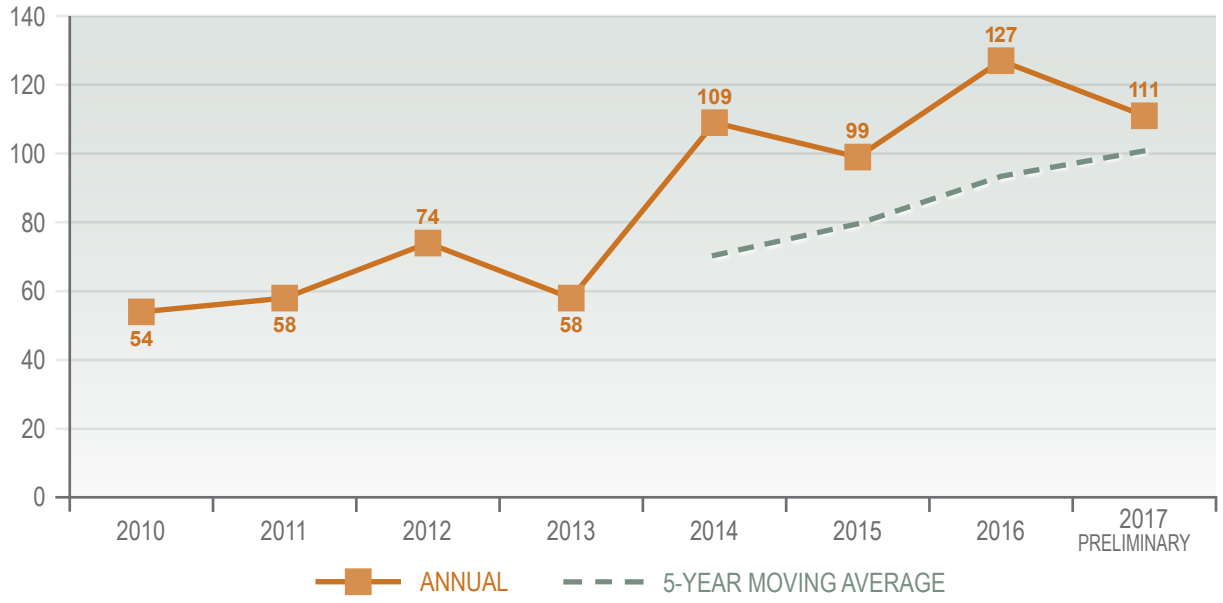
Speed is a major factor in fatal crashes regardless of road type or functional class. New Jersey experienced a significant increase in speed related fatalities from 2008-2011 followed by a decline from 2012-2014. However, the past two years New Jersey has seen increases in speed-related fatalities.

SPEED RELATED FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



Although speed is a primary contributing factor in fatal and incapacitating crashes every year, there are several other major contributing factors. Driver inattention has remained the most frequently cited cause of fatal and incapacitating crashes, over nine times higher than the total crashes cited for unsafe speed over the past five years (2012-2016). Unsafe speed was the contributing circumstance in 5.7 percent of all crashes in 2016, down from 6.5 percent in 2015. Driver inattention was a contributing circumstance in 53 percent of crashes in 2016, up from 52 percent in 2015.

DISTRACTED DRIVING RELATED FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



Note: Distracted driving fatalities not reported in FARS prior to 2010; five year moving averages not available prior to 2014.

There are many other circumstances present in distracted driving and unsafe speed involved crashes. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have multiple causation factors. Distracted driving and unsafe speed crashes and how they combine with other performance areas are represented in the next two tables.

From 2012-2016, 3.9 percent of distracted driving crashes and 8.5 percent of unsafe speed crashes involved drugs or alcohol impairment. About 14 percent of distracted driving and 18.7 percent of unsafe speed involved crashes also involved young drivers. Almost 18 percent of distracted driving and 7.7 percent of unsafe speed crashes involved older drivers. Approximately 3.4 percent of distracted driving crashes also involved speed, but 29 percent of unsafe speed crashes involved distracted driving.

DISTRACTED DRIVING CRASHES BY PERFORMANCE AREA, 2012 – 2016

DISTRACTED DRIVING AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	5,409	5,208	5,004	4,741	4,732	25,094	5,018.8	3.4%
DRUG INVOLVEMENT	746	677	674	744	761	3,602	720.4	0.5%
PEDESTRIANS	2,486	2,523	2,378	2,018	2,107	11,512	2,302.4	1.6%
UNSAFE SPEED	5,036	5,278	4,904	4,892	5,145	25,255	5051	3.4%
YOUNG DRIVERS	21,963	21,126	20,405	20,313	20,818	104,625	20,925	14.1%
OLDER DRIVERS	25,620	27,031	27,323	24,811	26,141	130,926	26,185.2	17.7%
MOTORCYCLES	1,087	1,016	940	985	945	4,973	994.6	0.7%
TOTAL DISTRACTED INVOLVED CRASHES	149,192	151,779	151,034	142,107	147,572	741,684	148,337	100.0%

UNSAFE SPEED CRASHES BY PERFORMANCE AREA, 2012 – 2016								
UNSAFE SPEED AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	1,499	1,443	1,330	1,263	1,117	6,652	1,330.4	7.7%
DRUG INVOLVEMENT	162	139	97	144	132	674	134.8	0.8%
DISTRACTED DRIVING	5,036	5,278	4,904	4,892	5,145	25,255	5,051	29.1%
PEDESTRIANS	170	153	149	141	122	735	147	0.8%
YOUNG DRIVERS	3,597	3,547	3,034	3,137	2,911	16,226	3,245.2	18.7%
OLDER DRIVERS	1,275	1,374	1,410	1,322	1,314	6,695	1,339	7.7%
MOTORCYCLES	352	325	281	320	330	1,608	321.6	1.9%
TOTAL UNSAFE SPEED CRASHES	17,470	18,140	17,549	17,610	15,884	86,653	17,331	100.0%

ANALYSIS OF AGE/GENDER

The most prominent age group that operated a vehicle at unsafe speed is 16-25 years of age, with male drivers comprising 61.7 percent of the total drivers of vehicles cited with unsafe speed as a contributing circumstance over the past five years. Nearly 50 percent of all drivers cited for unsafe speed during a crash were between the ages of 16-30.

SPEED RELATED CRASHES BY AGE GROUP AND GENDER, 2012 - 2016				
AGE GROUP	MALE	FEMALE	UNKNOWN	TOTAL
0-15	65	11	0	76
16-20	9,841	4,739	31	14,611
21-25	11,500	5,895	66	17,461
26-30	7,468	3,651	41	11,160
31-35	5,311	2,432	32	7,775
36-40	4,028	1,902	13	5,943
41-45	3,485	1,724	14	5,223
46-50	3,133	1,639	14	4,786
51-55	2,795	1,380	16	4,191
56-60	2,088	1,064	12	3,164
61-65	1,366	679	10	2,055
66+	1,998	1,144	6	3,148
UNKNOWN	844	255	6,759	7,858
TOTAL	53,922	26,515	7,014	87,451

The age group most likely to be cited with distracted driving as a contributing circumstance to their involvement in a crash was 21-25 years of age, with male drivers comprising 54 percent of all distracted drivers over the past five years. Nearly 34 percent of all drivers cited for distracted driving during the time of a crash were between the ages of 16-30.

DISTRACTED DRIVERS BY AGE GROUP AND GENDER, 2012 - 2016				
AGE GROUP	MALE	FEMALE	UNKNOWN	TOTAL
0-15	143	51	2	196
16-20	44,556	36,479	308	81,343
21-25	58,302	42,761	475	101,538
26-30	45,381	31,378	385	77,144
31-35	37,150	25,325	364	62,839
36-40	32,643	22,534	286	55,463
41-45	32,714	22,202	244	55,160
46-50	33,649	22,069	254	55,972
51-55	33,105	20,157	245	53,507
56-60	27,708	17,198	175	45,081
61-65	20,734	13,471	151	34,356
66+	43,790	34,534	310	78,634
UNKNOWN	5,897	3,134	57,186	66,217
TOTAL	415,772	291,293	60,385	767,450

ANALYSIS OF OCCURRENCE

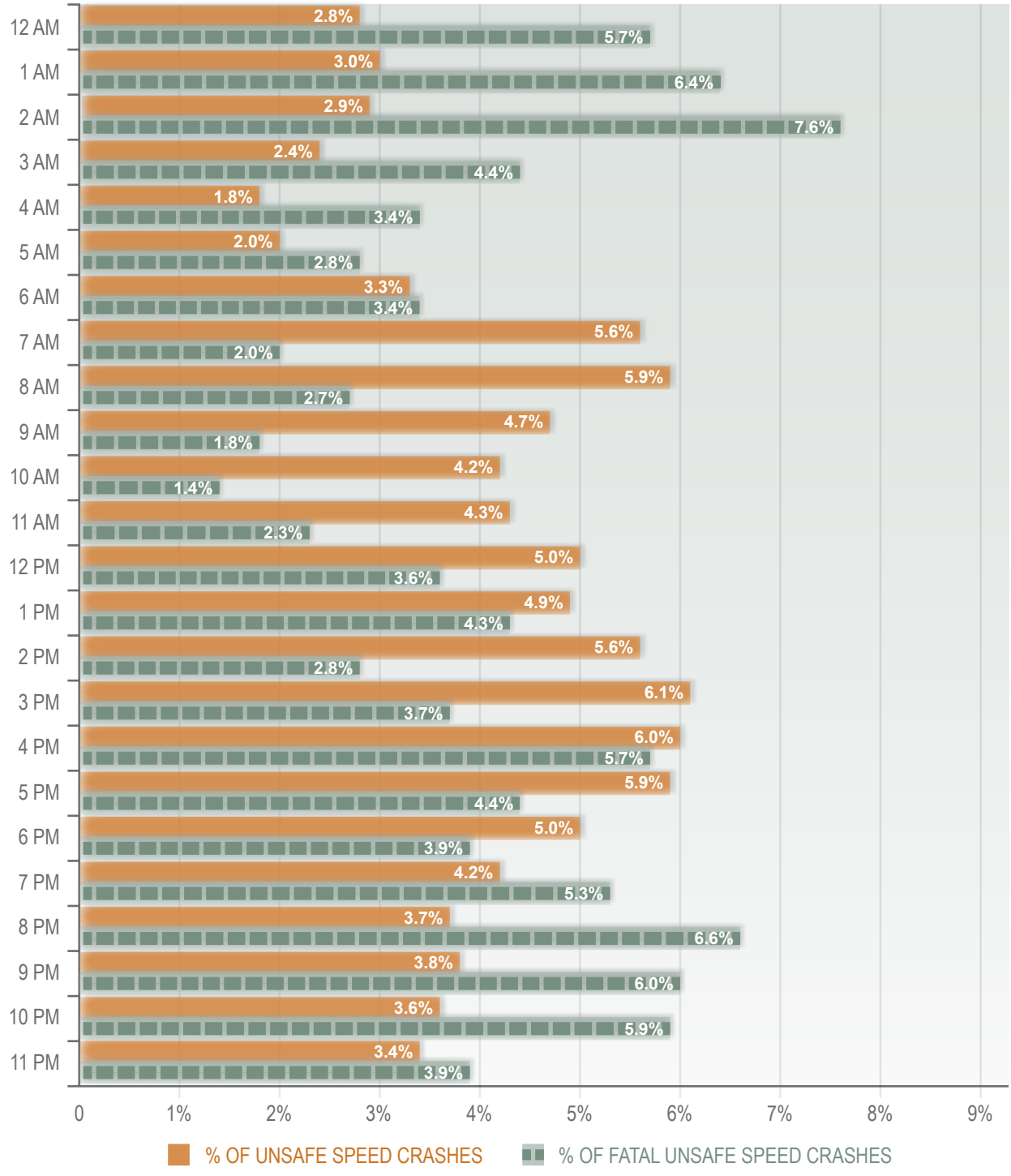
The occurrence of crashes involving unsafe speed and distracted driving aids decision makers in addressing the specific patterns that may be taking place on New Jersey's roadways. Being able to identify the time-of-day, day-of-week and month of the year occurrences helps narrow the window where enforcement efforts would become the most effective. The five-year cumulative total of fatal crashes and total crashes for unsafe speed and distracted driving occurrences is provided below.

UNSAFE SPEED AND DISTRACTED DRIVING CRASHES BY DAY OF WEEK AND MONTH OF YEAR, 2012 - 2016								
DAY / MONTH	UNSAFE SPEED				DISTRACTED DRIVING			
	Fatal Crashes	% of Total	Crashes	% of Total	Fatal Crashes	% of Total	Crashes	% of Total
MONDAY	52	9.2%	11,709	13.5%	84	11.8%	108,761	14.7%
TUESDAY	56	9.9%	12,482	14.4%	88	12.4%	112,597	15.2%
WEDNESDAY	68	12.1%	11,113	12.8%	95	13.4%	111,782	15.1%
THURSDAY	66	11.7%	11,411	13.2%	105	14.8%	111,781	15.1%
FRIDAY	85	15.1%	13,191	15.2%	114	16.0%	124,050	16.7%
SATURDAY	125	22.2%	14,012	16.2%	121	17.0%	96,999	13.1%
SUNDAY	111	19.7%	12,735	14.7%	104	14.6%	75,714	10.2%
JANUARY	35	6.2%	10,090	11.6%	39	5.5%	55,800	7.5%
FEBRUARY	24	4.3%	8,974	10.4%	46	6.5%	53,465	7.2%
MARCH	49	8.7%	7,664	8.8%	67	9.4%	57,891	7.8%
APRIL	41	7.3%	5,461	6.3%	36	5.1%	58,938	7.9%
MAY	59	10.5%	6,767	7.8%	62	8.7%	66,721	9.0%
JUNE	56	9.9%	6,441	7.4%	71	10.0%	67,109	9.0%
JULY	53	9.4%	6,328	7.3%	67	9.4%	65,208	8.8%
AUGUST	57	10.1%	5,877	6.8%	83	11.7%	62,635	8.4%
SEPTEMBER	62	11.0%	6,074	7.0%	63	8.9%	61,691	8.3%
OCTOBER	41	7.3%	6,696	7.7%	56	7.9%	64,951	8.8%
NOVEMBER	42	7.5%	6,885	7.9%	58	8.2%	62,561	8.4%
DECEMBER	44	7.8%	9,396	10.8%	63	8.9%	64,714	8.7%

Over the last 5 years, most of the fatal crashes where unsafe speed was a contributing circumstance occurred on the weekend. Saturday accounted for 22.2 percent and Sunday 19.7 percent of all fatal unsafe speed related crashes. Similar, trends are seen in distracted driving crashes: Fridays and Saturdays represent the highest occurrences of fatal crashes due to distracted driving (16.0% and 17.0%).

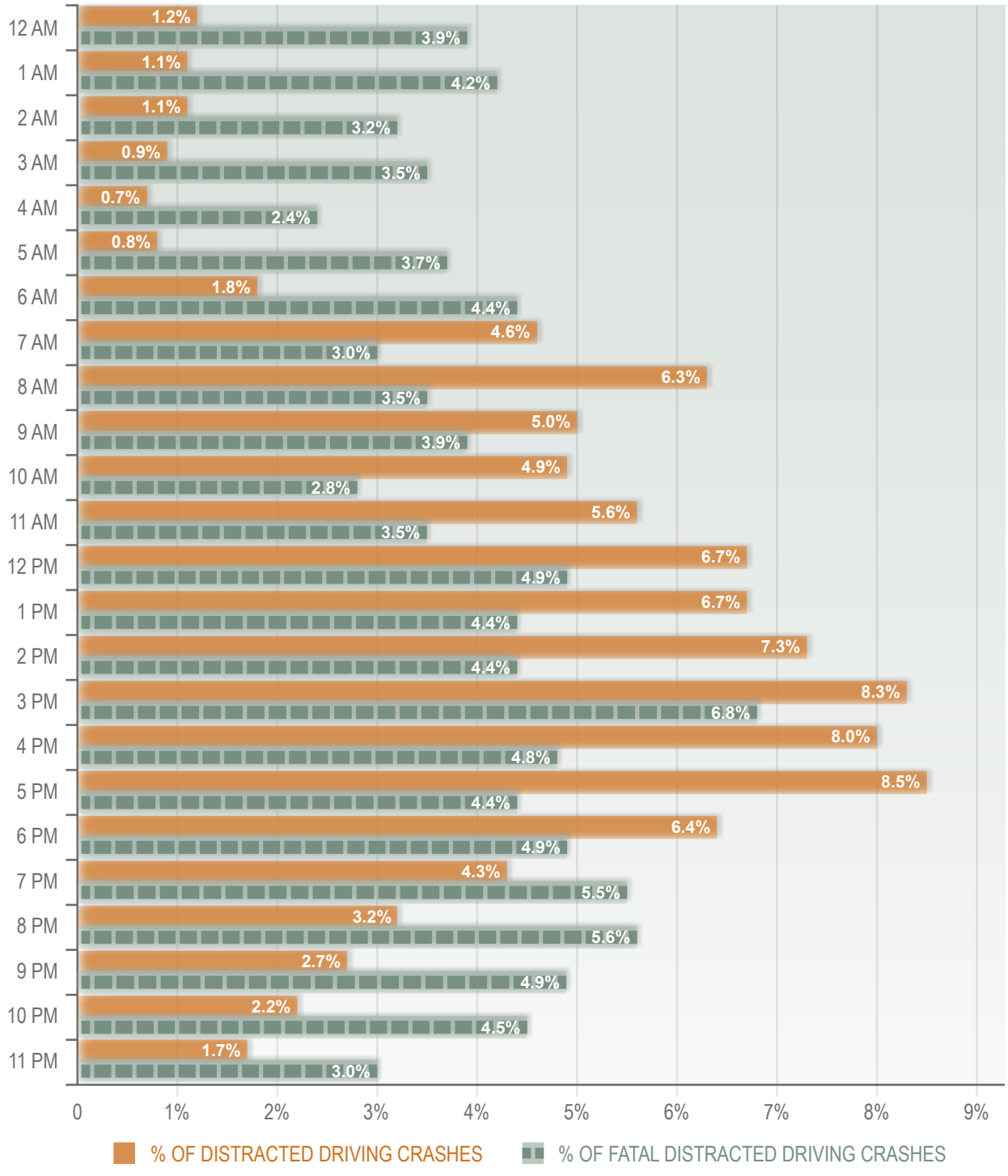
Fatal crashes caused by unsafe speed are overrepresented from 7pm-5am. During these hours the percentage of fatal crashes outnumbers the percentage of all crashes caused by unsafe speed.

UNSAFE SPEED CRASH % VERSUS FATAL UNSAFE SPEED CRASH % BY TIME OF DAY, 2012 - 2016



Fatal crashes caused by distracted driving are overrepresented from 7pm to 6am. Almost half of all fatal crashes due to distracted driving occur during those hours (48.8%).

DISTRACTED DRIVING CRASH %VERSUS FATAL DISTRACTED DRIVING CRASH % BY TIME OF DAY, 2012 - 2016



ANALYSIS OF LOCATION

Driver distractions or inattentive driving habits are perpetuated by the advancements in technology and hand-held devices. Studies have shown that using a cell phone while driving increases the chance of an individual being involved in a crash. Other distractions such as eating, drinking, attending to children, personal grooming, reading, and use of other electronic devices can also be distracting and contribute to crashes.

Bergen County experienced the highest number of distracted driving crashes by county, with 82,993. This represents 11.2 percent of statewide distracted driving crashes. Middlesex County (79,719, 10.8%) and Essex County (64,761, 8.7%) had the next highest frequency of distracted driving crashes by county over the past five years. As a percentage of all crashes in a given county, distracted driving made up the highest percentage of crashes in Passaic County, where 63.1 percent of all crashes had distracted driving involved.

DRIVER INATTENTION RELATED CRASHES BY COUNTY, 2012 - 2016

	COUNTY	2012	2013	2014	2015	2016	TOTAL
REGION I	ATLANTIC	5,677	5,145	4,980	4,614	4,632	25,048
	BURLINGTON	6,284	6,616	7,137	6,635	6,842	33,514
	CAMDEN	6,347	7,163	7,353	6,478	6,823	34,164
	CAPE MAY	1,704	1,944	1,733	1,575	1,572	8,528
	CUMBERLAND	2,036	2,296	2,265	2,077	2,025	10,699
	GLOUCESTER	3,330	3,268	3,214	3,463	3,999	17,274
	SALEM	693	611	651	682	698	3,335
REGION II	HUNTERDON	1,623	1,546	1,817	1,731	1,767	8,484
	MERCER	6,906	7,341	6,184	5,975	6,317	32,723
	MIDDLESEX	16,772	16,022	16,447	14,901	15,577	79,719
	MONMOUTH	11,278	11,527	10,711	9,780	10,623	53,919
	OCEAN	9,007	9,336	8,371	7,413	7,988	42,115
	SOMERSET	5,128	5,122	4,824	4,693	4,699	24,466
	UNION	9,907	10,008	10,564	10,215	10,512	51,206
REGION III	BERGEN	16,099	16,611	17,930	16,366	15,987	82,993
	ESSEX	12,004	12,648	13,870	13,028	13,211	64,761
	HUDSON	10,916	10,791	10,483	10,484	11,881	54,555
	MORRIS	8,206	8,473	8,065	7,587	7,603	39,934
	PASSAIC	11,803	11,758	11,195	11,089	11,619	57,464
	SUSSEX	1,804	1,836	1,584	1,629	1,582	8,435
	WARREN	1,668	1,717	1,656	1,692	1,615	8,348
TOTAL		149,192	151,779	151,034	142,107	147,572	741,684

Over the past five years, Essex County (9,360 or 10.8% of statewide crashes) experienced the highest number of speed related crashes, followed by Middlesex County (8,206 or 9.5% of statewide crashes) and Monmouth County (6,988 or 8.1% of statewide crashes). Salem County had the highest percentage of county-wide crashes due to speed, with 839 crashes, or 10.2 percent due to speed, followed by Gloucester County, with 9.6 percent of countywide crashes having unsafe speed as a contributing circumstance.

SPEED RELATED CRASHES BY COUNTY, 2012 - 2016

	COUNTY	2012	2013	2014	2015	2016	TOTAL
REGION I	ATLANTIC	644	717	663	921	732	3,677
	BURLINGTON	1,024	1,104	1,189	1,302	1,048	5,667
	CAMDEN	1,555	1,485	1,294	1,206	1,034	6,574
	CAPE MAY	143	154	170	166	147	780
	CUMBERLAND	320	383	400	479	309	1,891
	GLOUCESTER	663	709	687	665	628	3,352
	SALEM	99	143	178	240	179	839
REGION II	HUNTERDON	264	258	233	280	225	1,260
	MERCER	798	1,031	990	1,104	1,097	5,020
	MIDDLESEX	1,578	1,699	1,734	1,715	1,480	8,206
	MONMOUTH	1,404	1,476	1,406	1,435	1,267	6,988
	OCEAN	886	1,046	1,180	951	829	4,892
	SOMERSET	601	643	603	623	483	2,953
	UNION	824	848	906	892	883	4,353
REGION III	BERGEN	1,353	1,264	1,069	895	1,094	5,675
	ESSEX	1,936	1,890	1,893	1,822	1,819	9,360
	HUDSON	651	667	619	624	565	3,126
	MORRIS	958	972	937	807	724	4,398
	PASSAIC	1,129	1,055	868	918	852	4,822
	SUSSEX	358	311	297	283	255	1,504
	WARREN	282	285	233	282	234	1,316
TOTAL		17,470	18,140	17,549	17,610	15,884	86,653

Project Name: **POLICE TRAFFIC SERVICES PROGRAM MANAGEMENT**

Sub-Recipient: **DIVISION OF HIGHWAY TRAFFIC SAFETY**

Total Project Amount: **$360,000**

Project Description:

Funds will be provided for program manager expenses related to planning, developing, coordinating, monitoring and evaluating projects within the police traffic services program area. Funds will be used for salaries, fringe benefits, travel and other administrative costs that may arise for program supervisors and their respective staff. Salaries and fringe benefits represent $355,000 of the budgeted amount and another $5,000 is budgeted for travel and other miscellaneous expenditures.

Funding Source: **SECTION 402** Local Benefit: **0**

COUNTERMEASURE STRATEGY: SPEEDING AND DISTRACTED DRIVING ENFORCEMENT

Effectiveness of Countermeasure

Several studies have reported reductions in crashes or reductions in speeding or other violations attributed to both general and targeted high-visibility enforcement campaigns. Although the evidence is not conclusive, the trends are promising. These efforts have included a substantial increase in general traffic enforcement in Fresno, California (Davis et al., 2006), and a neighborhood high-visibility speed enforcement campaign in Phoenix and Peoria, Arizona (Blomberg & Cleven, 2006).

A 2008 test of a 4-week, high-visibility enforcement campaign along a 6-mile corridor in London, U.K. with a significant crash history found significant reductions in driver speeding in the enforced area. There was also a halo effect up to two weeks following the end of the campaign (Walter, Broughton, & Knowles, 2011). The campaign was covered by print media as well as by billboards and active messaging along the enforced corridor.

Results from the NHTSA high visibility enforcement program suggest hand-held cell phone use among drivers dropped 57 percent in Hartford and 32 percent in Syracuse (Cosgrove, Chaudhary, & Reagan, 2011). The percentage of drivers observed manipulating a phone (e.g., texting or dialing) also declined.

Many traffic enforcement operations help to deter speeding and aggressive driving as well as other traffic offenses. In addition to high visibility enforcement campaigns and automated enforcement, a number of technologies have been recommended to address speeding and aggressive driving (NHTSA, 2001). Laser speed measuring equipment can provide more accurate and reliable evidence of speeding (NHTSA, 2001a) (Countermeasures That Work, 8th Edition, 2015).

Assessment of Safety Impacts

Many crashes are caused or aggravated by drivers' noncompliance with traffic laws pertaining to speed and distracted driving. The effectiveness of enforcement can be increased if drivers perceive there is a significant chance they may be cited for the violation and given a ticket. Visible enforcement programs can increase drivers' perceptions of the enforcement-related risks of speeding and distracted driving and can be effective in deterring drivers from speeding and driving distracted.

Traffic law enforcement personnel need accurate and reliable equipment to monitor traffic speeds and provide evidence that meets the standards of proof needed to uphold a speed limit citation. The use of speed detection equipment provides a means of increasing enforcement effectiveness and permits police administration to make better use of scarce personnel.

Linkage between Problem Identification and Performance Targets

Both speed and distracted driving related fatalities have generally trended upward over the past five years. Speed and distracted driving crashes account for nearly 7 percent and 52 percent of all crashes respectively. There is an over-representation of speed and distracted driving crashes in Bergen, Essex and Middlesex Counties. Particular emphasis will be placed on implementing programs in high crash locations identified in these counties.

Speed is a contributing factor in 15 percent of all fatal and injury crashes in Division of State Police patrolled areas. The use of radar equipment assists law enforcement in both the detection and apprehension of motorists driving at excessive and unlawful speeds. The identification of high speed related crashes on State Police patrolled roadways will dictate the allocation of resources in those areas.

Project Name: **ENFORCEMENT PROGRAMS**

Sub-Recipients: **STATE AND MUNICIPAL LAW ENFORCEMENT AGENCIES**

Total Project Amount: **SECTION 405(e) – $4,250,000 • SECTION 402 – $400,000**

Project Description:

Funds will be provided to allow municipal and State law enforcement agencies to participate in high visibility enforcement efforts designed to deter speeding and driving. Saturation patrols will concentrate on a multitude of problem areas, including main arteries into and out of towns, where speed is a major problem and roadways that have historically experienced high crash rates.

Speed detection is the backbone of traffic enforcement programs aimed at reducing crashes and injuries. Radar speed detection remains one of the most cost effective means of speed enforcement. Supplemental speed enforcement details will be targeted to enforce speeding violations exclusively through the use of radar speed detection devices. These details will be scheduled at targeted times in pre-determined areas where crashes involving unsafe speed as a contributing factor have been documented.

Funds will be used to deploy Division of State Police supplemental radar and laser team details dedicated to speeding violator enforcement.

On an overtime basis, funds will also be provided to police agencies to conduct special enforcement patrols targeting distracted drivers not complying with the cell phone/texting law. The initiative will also continue to promote the #77 alert system that will not only be used for reporting aggressive driving but also will be used to report drivers identified on cell phones while driving.

An analysis of crashes will be performed to identify which regions, counties and towns are overrepresented in distracted driving crashes. The most overrepresented will be contacted and offered grants to address the problems in their respective jurisdictions. The grant program will consist of offering funds to towns during National Distracted Driving Awareness Month in April. These grants will be implemented for approximately three weeks. In addition, county prosecutor offices will coordinate the distribution of funds to local towns on a year-round basis in those areas and regions of the State that have been identified with high distracted driving crash rates.

A list producing the occurrence of crashes involving distracted driving by region will be developed to determine grantee participation in the annual *U Drive. U Text. U Pay* campaign. Those towns that are overrepresented in distracted driving crashes will be asked to participate in high visibility enforcement efforts to reduce cell phone use among drivers. Law enforcement officers will actively seek out phone users through special roving patrols or through spotter techniques.

Funding Source: **SECTION 405(e), 402** **Local Benefit:** **$4,250,000 (SECTION 405(e)), $400,000 (SECTION 402)**

COUNTERMEASURE STRATEGY: SPEED DETECTION

Effectiveness of Countermeasure

Many traffic enforcement operations help to deter speeding and aggressive driving as well as other traffic offenses. In addition to high visibility enforcement campaigns and automated enforcement, a number of technologies have been recommended to address speeding and aggressive driving (NHTSA, 2001). Laser speed measuring equipment can provide more accurate and reliable evidence of speeding (NHTSA, 2001a) (Countermeasures That Work, 8th Edition, 2015).

Assessment of Safety Impacts

Traffic law enforcement personnel need accurate and reliable equipment to monitor traffic speeds and provide evidence that meets the standards of proof needed to uphold a speed limit citation. The use of speed detection equipment provides a means of increasing enforcement effectiveness and permits police administration to make better use of scarce personnel.

Linkage between Problem Identification and Performance Targets

Speed is a contributing factor in 15 percent of all fatal and injury crashes in Division of State Police patrolled areas. The use of radar equipment assists law enforcement in both the detection and apprehension of motorists driving at excessive and unlawful speeds. The identification of high speed related crashes on State Police patrolled roadways will dictate the allocation of resources in those areas.

Project Name: **SPEED DETECTION PROGRAMS**

Sub-Recipients: **DIVISION OF STATE POLICE**

Total Project Amount: **$150,000**

Project Description:

Speed detection is the backbone of traffic enforcement programs aimed at reducing crashes and injuries. Radar speed detection remains one of the most cost effective means of speed enforcement. Supplemental speed enforcement details will be targeted to enforce speeding violations exclusively through the use of radar speed detection devices. These details will be scheduled at targeted times in pre-determined areas where crashes involving unsafe speed as a contributing factor have been documented.

Funds will be used to deploy Division of State Police supplemental radar and laser team details dedicated to speeding violator enforcement

Funding Source: **SECTION 402** **Local Benefit:** **0**

COUNTERMEASURE STRATEGY: EQUIPMENT

Effectiveness of Countermeasure

The investigation of traffic crashes using advanced technology equipment provides a substantial improvement over traditional procedures. The number of measurements obtained at a crash scene increases when equipment is used while the time required to collect the measurements decrease the number of man-hours. The increase in the number of measurements results in a more accurate and detailed investigation and crash diagram. The use of computer plotting results in a significant time savings when a detailed crash diagram is needed. (Evaluation of Advanced Surveying Technology for Crash Investigation, Kentucky Transportation Center).

Assessment of Safety Impacts

Technology today is constantly changing. Technology in regards to crash investigation and crime scene processing is routinely updating to reflect the latest investigative techniques. Updated equipment provides the necessary tools to conduct thorough and proper investigations to ensure a successful prosecution of traffic crashes.

Linkage between Problem Identification and Performance Targets

The Fatal Accident Investigation Unit (FAIU) of the Division of State Police performs many functions related to the investigation of fatal and serious injury motor vehicle crashes and the collection of statistical data related to fatal crashes. FAIU personnel investigate serious and fatal crashes that occur in the patrol areas of the State Police and respond to requests for technical assistance with on scene investigations and/or post collision investigation from county prosecutors' offices and municipal police departments. Proper documentation of crash scenes is a vital part of any investigation and is critical to the successful prosecution of any charges that result. FAIU personnel rely on their advanced training and technical expertise as well as their specialized equipment in order to effectively and efficiently perform these vital functions.

Technology in regards to crash investigation and crime scene processing is routinely updating to reflect the latest investigative techniques. Keeping the FAIU equipment current will allow personnel to effectively process crash scenes in a timely manner.

Project Name: **CRASH INVESTIGATION**

Sub-Recipients: **DIVISION OF STATE POLICE**

Total Project Amount: **$65,000**

Project Description:

The Division of State Police and its Fatal Accident Unit performs many functions relating to fatal crash investigation. The unit not only investigates serious and fatal crashes that occur in the areas patrolled by the State Police but also responds to requests by county prosecutors and municipal police departments for on-scene investigation and post-crash technical assistance.

Funds will be used to purchase equipment that will allow detectives to ensure a complete investigation and assist detectives in accessing available resources when completing reconstructions of serious and fatal motor vehicle crashes.

Funding Source: **SECTION 402** **Local Benefit:** **0**

COUNTERMEASURE STRATEGY: TRAFFIC SAFETY RESOURCE PROSECUTOR

Effectiveness of Countermeasure

Traffic Safety Resource Prosecutor's (TSRPs) fill a critical void as the in-State expert on traffic related offenses, including impaired driving and vehicular homicides. TSRPs understand the nuances of their State statutes and case law, build relationships with each of their State prosecutor's offices and forge solid interactions with State highway safety offices. TSRPs are essential to effective traffic safety adjudications. (American Prosecutors Research Institute's National Traffic Law Center).

Assessment of Safety Impacts

The TSRP provides training, education and technical support to prosecutors and law enforcement agencies throughout the State. These issues include but are not limited to: alcohol and/or drug impaired driving, vehicular homicide, occupant restraint and other highway safety issues.

Linkage between Problem Identification and Performance Targets

The TSRP is important to the law enforcement community in all traffic safety issues, but is most needed and valuable in the field of the enforcement and prosecution of drunk driving offenses. Nearly every municipality in the State has its own Municipal Court, consisting of at least one Municipal Court Judge, a Municipal Prosecutor, a Municipal Public Defender, and associated court staff and personnel. In small jurisdictions and areas with smaller populations, joint or central Municipal Courts are utilized. There has evolved a great need for coordination, training, and support for these diverse entities. Additionally, there is a need for interaction between the courts, law enforcement and other traffic safety agencies. Furthermore, the State will be selecting a new breath test instrument that could very well see challenges in the courts that could potentially affect the State's DWI conviction rates.

Project Name: **TRAFFIC SAFETY RESOURCE PROSECUTOR**

Sub-Recipients: **DIVISION OF CRIMINAL JUSTICE**

Total Project Amount: **$375,000**

Project Description:

The need for Deputy Attorneys General specializing in the area of prosecution and law enforcement has been underscored through experience developed within the Prosecutors Supervision and Coordination Bureau of the Division of Criminal Justice and in its statutory role over the county prosecutors and municipal prosecutors in the State. In performing this function, the Division of Criminal Justice has recognized the importance of having Deputy Attorneys General who are well versed in both the legal and technical issues associated with the enforcement and prosecution of traffic and motor vehicle violations and the statewide implications of those issues.

The areas of impaired driving, distracted driving, youthful drivers and speed management require coordination and training in the judicial, prosecutorial, and law enforcement fields. There have also been significant legal challenges in the area of chemical breath testing in the State and the need to be aware of the many legal challenges being brought statewide to ensure that a uniform response is taken by the many prosecutors throughout the State and to coordinate a uniform response when needed.

Funds will be used to pay the salary as well as travel expenses of the Traffic Safety Resource Prosecutor.

Funding Source: **SECTION 402** **Local Benefit:** **$375,000**

COUNTERMEASURE STRATEGY: LAW ENFORCEMENT TRAINING

Effectiveness of Countermeasure

The International Association of Chiefs of Police encourages specialized training for law enforcement officers in its publication, Traffic Safety Strategies for Law Enforcement, to include traffic safety and related subjects in the battery of courses offered. Such courses should cover crash investigation and other courses with a focus on traffic safety.

Assessment of Safety Impacts

Local police officers are required to conduct investigations immediately after a roadway crash occurs to preserve physical evidence before it is altered or disappears. Fatal crash investigations become more complex and require the scientific processing of data and documentation to contribute to the successful prosecution of criminal charges. Training can assist in helping both local and State police to become proficient in the handling of crash scene evidence.

Linkage between Problem Identification and Performance Targets

Traffic crashes can be extremely confusing events. How they occur, who or what caused them, and why they occurred are facts that police must determine. Law enforcement officers may get some degree of training in crash investigation while attending initial training at the police academy, however, it is not really adequate for tackling complex crash scenes requiring detailed analysis, especially if the information is needed for court presentations. A longer and more thorough crash investigation course allows for the much needed hands on training.

Project Name: **CRASH INVESTIGATION AND SPECIALIZED TRAINING PROGRAMS**

Sub-Recipients: **KEAN UNIVERSITY AND THE DIVISION OF STATE POLICE**

Total Project Amount: **$1,300,000**

Project Description:

This task provides training to members of the Division of State Police in specific areas of highway traffic safety that will provide information useful in implementing and promoting new highway traffic safety programs in the State. Funds will be used to pay for travel and training expenses.

Basic crash investigation courses and crash data retrieval technician training will be held for local and State law enforcement officers. Specialized training programs from the Institute of Police Technology and Management will also be made available. Classes are anticipated to be held in Traffic Crash Reconstruction, Pedestrian/Bicycle Crash Investigation and Motorcycle Crash Investigation and Event Data Recorder Use in Crash Reconstruction. This task also funds State Police liaisons whose responsibilities include administering crash training programs and interfacing with DHTS along with the various units in the Division of State Police to develop new programs. Funds will be used for salaries of State Police liaisons and to pay instructors that teach the various crash investigation and special training courses to law enforcement officers. Funds will also be used for the purchase and printing of training materials.

Funding Source: **SECTION 402** **Local Benefit:** **$1,300,000**

COUNTERMEASURE STRATEGY: DATA-DRIVEN APPROACHES TO CRIME AND TRAFFIC SAFETY (DDACTS)

Effectiveness of Countermeasure

DDACTS is a law enforcement operational model supported by a partnership among the NHTSA and two agencies of the Department of Justice, the Bureau of Justice Assistance and the National Institute of Justice. The model affords communities the dual benefit of reducing traffic crashes and crime. Drawing on the deterrent value of highly visible traffic enforcement and the knowledge that crimes often involve the use of motor vehicles, the goal of DDACTS is to reduce the incidence of crashes, crime and social harm in communities. (DDACTS Operational Guidelines, March 2014).

Assessment of Safety Impacts

Implementation of the DDACTS model is a starting point for achieving long-term change, where law enforcement professionals take a more evidence-based approach to the deployment of personnel and resources.

Linkage between Problem Identification and Performance Targets

Many police departments have experienced a reduction in funding and sworn officers. Reduced resources diminish departments' abilities to meet rising crime and crash rates. Furthermore, police departments that have not analyzed relevant data do not know if they are deploying available resources efficiently and effectively. Because a shortage of law enforcement resources is likely to continue, other means of improving traffic safety in communities need to be pursued.

Project Name: **DDACTS**

Sub-Recipients: **COUNTY AND MUNICIPAL POLICE AGENCIES**

Total Project Amount: **$125,000**

Project Description:

Funds will be used to implement the DDACTS business model. In an effort to more appropriately and accurately deploy resources to combat the ongoing traffic and criminal related problems in a community, funds will be used for personnel to compile and analyze the data collected. It is anticipated that 2-3 local law enforcement agencies will participate in the DDACTS initiative. Analysts will be compensated and tasked with generating reports that support directed policing initiatives.

Funding Source: **SECTION 402** Local Benefit: **$125,000**

COUNTERMEASURE STRATEGY: LAW ENFORCEMENT LIAISON (LEL)

Effectiveness of Countermeasure

Law enforcement is a key partner in highway safety. As the "boots on the ground" of traffic safety, law enforcement officers are crucial to reducing fatalities on the roadways. The National Law Enforcement Liaison Program was created by the NHTSA and the Governors Highway Safety Association to help law enforcement by working with LELs in the States.

Assessment of Safety Impacts

A LEL serves as a vital link and conduit between DHTS and the State's law enforcement community. LELs help promote and enhance state and national highway safety programs, initiatives and campaigns and perform a myriad of functions, including planning, organizing, networking, promoting, recruiting, implementing, reporting and evaluating law enforcement's role in traffic safety projects, activities, and achievements.

Linkage between Problem Identification and Performance Targets

The LEL assists the DHTS staff in recruiting and encouraging State and local law enforcement participation in the national and state traffic safety mobilizations and works toward a culture of sustained and effective traffic enforcement programs. The involvement of the LEL will be used to increase the number of law enforcement agencies participating in traffic safety activities, and this contributes to crash reductions. This is particularly important as a result of manpower issues at the DHTS.

Project Name: **LEL**

Sub-Recipients: **NEW JERSEY STATE ASSOCIATION OF CHIEFS OF POLICE**

Total Project Amount: **$90,000**

Project Description:

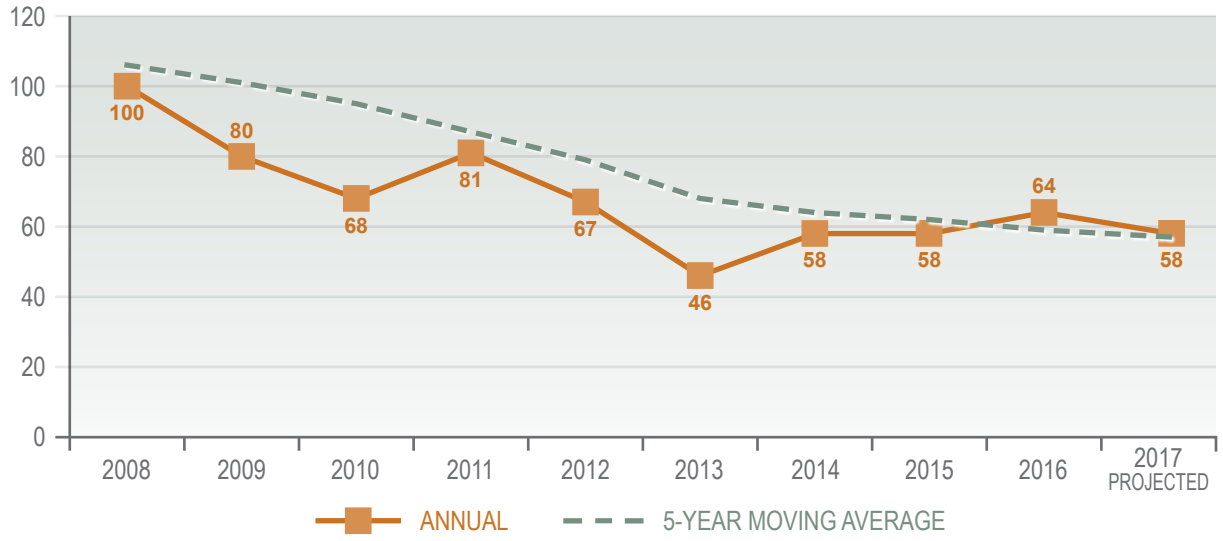
The LEL Program is designed to enhance the relationship between the highway safety office, law enforcement community and other pertinent partners. The LEL position is funded from a grant to the New Jersey State Association of Chiefs of Police. The LEL will be called upon to solicit and support law enforcement participation in the drunk driving, distracted driving and seat belt mobilizations, training programs and many other traffic safety initiatives. The LEL will also provide information and expertise to the law enforcement community concerning traffic safety issues and will work in close cooperation with the NHTSA Region II Law Enforcement Liaison regarding training issues, enforcement campaigns and programs sponsored by NHTSA. Funds will be used to pay the salary of the LEL and other expenses relating to the responsibilities and duties of the position.

Funding Source: **SECTION 402** Local Benefit: **$90,000**

YOUNGER DRIVERS • GENERAL OVERVIEW

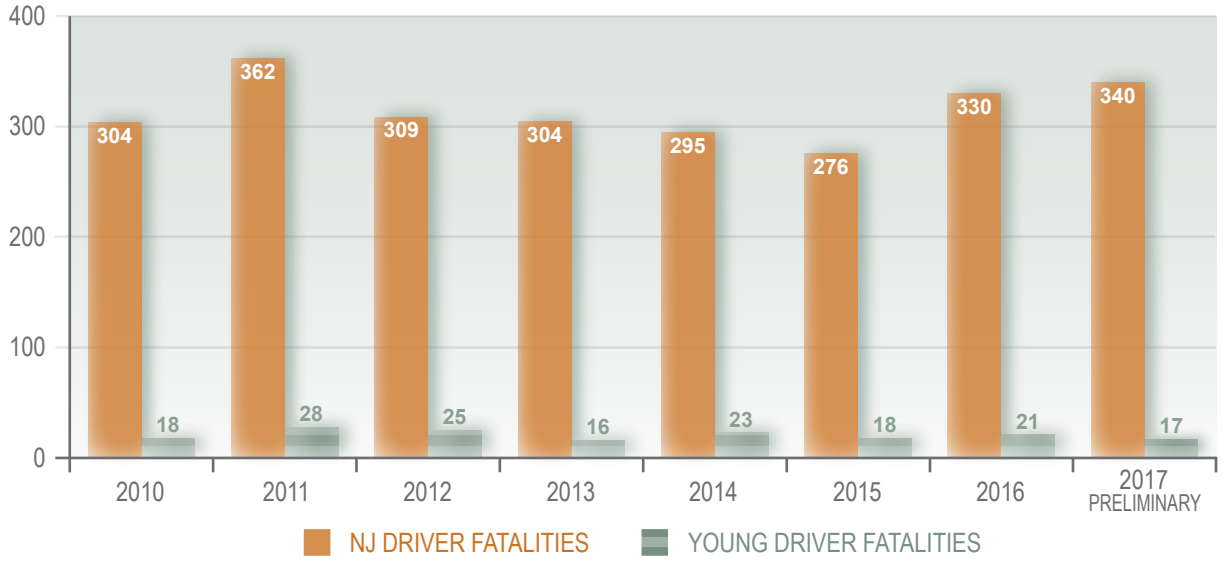
A younger driver is defined as an operator of a motor vehicle or motorcycle between 16-20 years of age. During the last ten years (2008-2017), there were 680 total fatalities in crashes with a younger driver behind the wheel. In 2017, younger drivers are projected to have been involved in 9.3 percent of total motor vehicle fatalities (58 out of 625), down from 10.6 percent in 2016.

TOTAL FATALITIES IN CRASHES INVOLVING YOUNGER DRIVERS, ANNUAL AND 5–YEAR MOVING AVERAGE



A total of 17 drivers between the ages of 16-20 died on the State's roadways in 2017. Younger driver fatalities in 2017 accounted for 5 percent of total drivers killed, down from 6.4 percent in 2016. A comparison of the number of younger driver fatalities in relation to the total number of drivers killed is depicted in the table below.

PROPORTION OF YOUNGER DRIVER FATALITIES VERSUS TOTAL NEW JERSEY DRIVER FATALITIES



Although younger driver involvement accounted for 9.3 percent of all fatalities, they were involved in 13 percent of all crashes statewide, down from 13.2 percent in 2015. Compared to all drivers involved in crashes, younger drivers represented 7.2 percent of all drivers involved.

YOUNG DRIVER CRASHES VERSUS ALL CRASHES BY YEAR, 2010 - 2016

	2010	2011	2012	2013	2014	2015	2016
ALL CRASHES	301,544	295,094	284,064	289,304	289,873	271,445	279,874
16-20 YO DRIVER INVOLVED CRASHES	44,848	41,468	38,951	37,959	36,040	35,942	36,352
YOUNG DRIVER CRASHES VS ALL CRASHES*	14.9%	14.1%	13.7%	13.1%	12.4%	13.2%	13.0%
DRIVERS INVOLVED IN ALL CRASHES	566,904	554,892	535,626	545,659	546,459	512,773	532,054
16-20 YO DRIVERS INVOLVED IN CRASHES	47,899	44,142	41,316	40,173	38,019	37,986	38,353
YOUNG DRIVERS VS ALL DRIVERS IN CRASHES*	8.4%	8.0%	7.7%	7.4%	7.0%	7.4%	7.2%

* Excludes undefined driver age.

The majority of younger drivers involved in crashes had one or more factors reported at the time of the crash. Over the past 5 years in which there were a total of 775,686 contributing circumstances cited, the most common factor for crashes involving younger drivers was "Driver Inattention" (118,615 or 15.3%), followed by "Following Too Closely" (30,131 or 3.88%).

TOP 10 CONTRIBUTING CIRCUMSTANCES IN CRASHES INVOLVING YOUNG DRIVERS, 2012 - 2016

CONTRIBUTING CIRCUMSTANCE	2012	2013	2014	2015	2016	TOTAL
DRIVER INATTENTION	24,907	24,119	23,154	23,044	23,391	118,615
FOLLOWING TOO CLOSELY	5,629	5,903	5,704	6,037	6,858	30,131
FAILED TO YIELD RIGHT OF WAY TO VEHICLE / PEDESTRIAN	4,993	4,897	4,544	4,716	5,012	24,162
UNSAFE SPEED	3,842	3,753	3,217	3,349	3,065	17,226
BACKING UNSAFELY	2,598	2,575	2,252	1,180	1,225	9,830
IMPROPER LANE CHANGE	1,694	1,802	1,766	1,955	2,022	9,239
ROAD SURFACE CONDITION	1,585	2,070	2,129	1,815	1,481	9,080
FAILED TO OBEY TRAFFIC CONTROL DEVICE (DRIVER)	1,790	1,693	1,559	1,715	1,900	8,657
IMPROPER TURNING	1,587	1,518	1,486	1,415	1,607	7,613
IMPROPER PASSING	871	867	807	828	797	4,170

There are many other circumstances present in crashes, not only with young drivers but all users of the roadway. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have many causation factors. Below is a representation of crashes involving young drivers and how they relate to other performance areas. From 2012-2016, 8.8 percent of crashes involving a young driver also involved one or more drivers being cited for unsafe speed, 9.1 percent also involved an older driver and over 50 percent involved driver inattention.

YOUNGER DRIVER INVOLVEMENT IN CRASHES BY PERFORMANCE AREA, 2012 – 2016

YOUNG DRIVERS AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	654	540	526	504	467	2,691	538.2	1.45%
DRUG INVOLVEMENT	91	69	87	91	94	432	86.4	0.23%
DISTRACTED DRIVING	21,963	21,126	20,405	20,313	20,818	104,625	2,0925	56.48%
UNSAFE SPEED	3,597	3,547	3,034	3,137	2,911	16,226	3,245.2	8.76%
OLDER DRIVERS	3,271	3,476	3,307	3,401	3,441	16,896	3,379.2	9.12%
PEDESTRIANS	285	261	257	201	186	1,190	238	0.64%
TOTAL YOUNG DRIVER CRASHES	38,951	37,959	36,040	35,942	36,352	185,244	37,048.8	100.00%

YOUNGER DRIVERS • ANALYSIS OF GENDER

Males between the ages of 16-20 accounted for 54 percent of younger drivers involved in crashes over the past five years, with females representing roughly 46 percent. Drivers between the ages of 16 and 20 accounted for 7.2 percent of all drivers involved in crashes in 2016. Over the last five years (2012-2016), only 1.45 percent of all crashes involving younger drivers involved alcohol, an area that is trending downward.

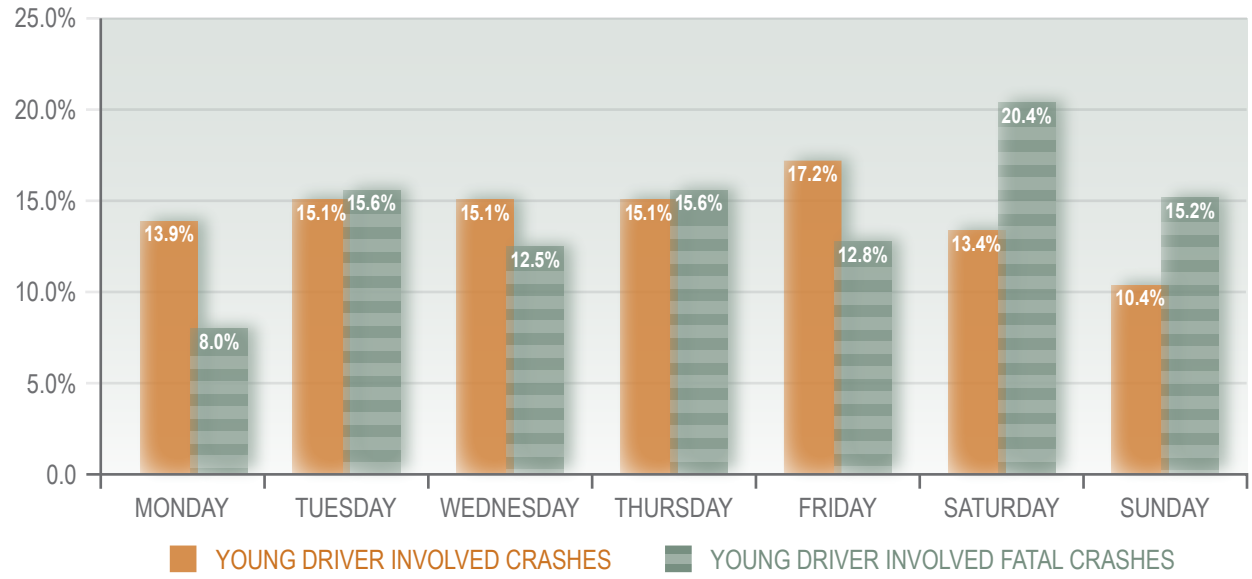
% OF YOUNG DRIVERS INVOLVED IN CRASHES BY AGE AND GENDER, 2012 - 2016

AGE	% OF 16-20 AGE GROUP	MALE	FEMALE	UNKNOWN	TOTAL
16 YEARS OLD	0.8%	0.4%	0.4%	0.0%	1,561
17 YEARS OLD	14.4%	7.4%	7.0%	0.0%	28,288
18 YEARS OLD	28.3%	15.1%	13.0%	0.1%	55,342
19 YEARS OLD	28.3%	15.6%	12.6%	0.1%	55,357
20 YEARS OLD	28.2%	15.5%	12.6%	0.1%	55,320
TOTAL	100.0%	54.1%	45.6%	0.3%	195,868

YOUNGER DRIVERS • ANALYSIS OF OCCURRENCE

The occurrence of crashes involving a younger driver helps decision makers in addressing the specific concerns that are facing inexperienced users of the roadways. Day-of-week representation does not vary greatly for younger driver involved crashes, Friday being the most dangerous day for younger drivers (17.2% of all crashes). Younger driver crashes where one or more person was killed mostly occurred on Saturday (20.4%).

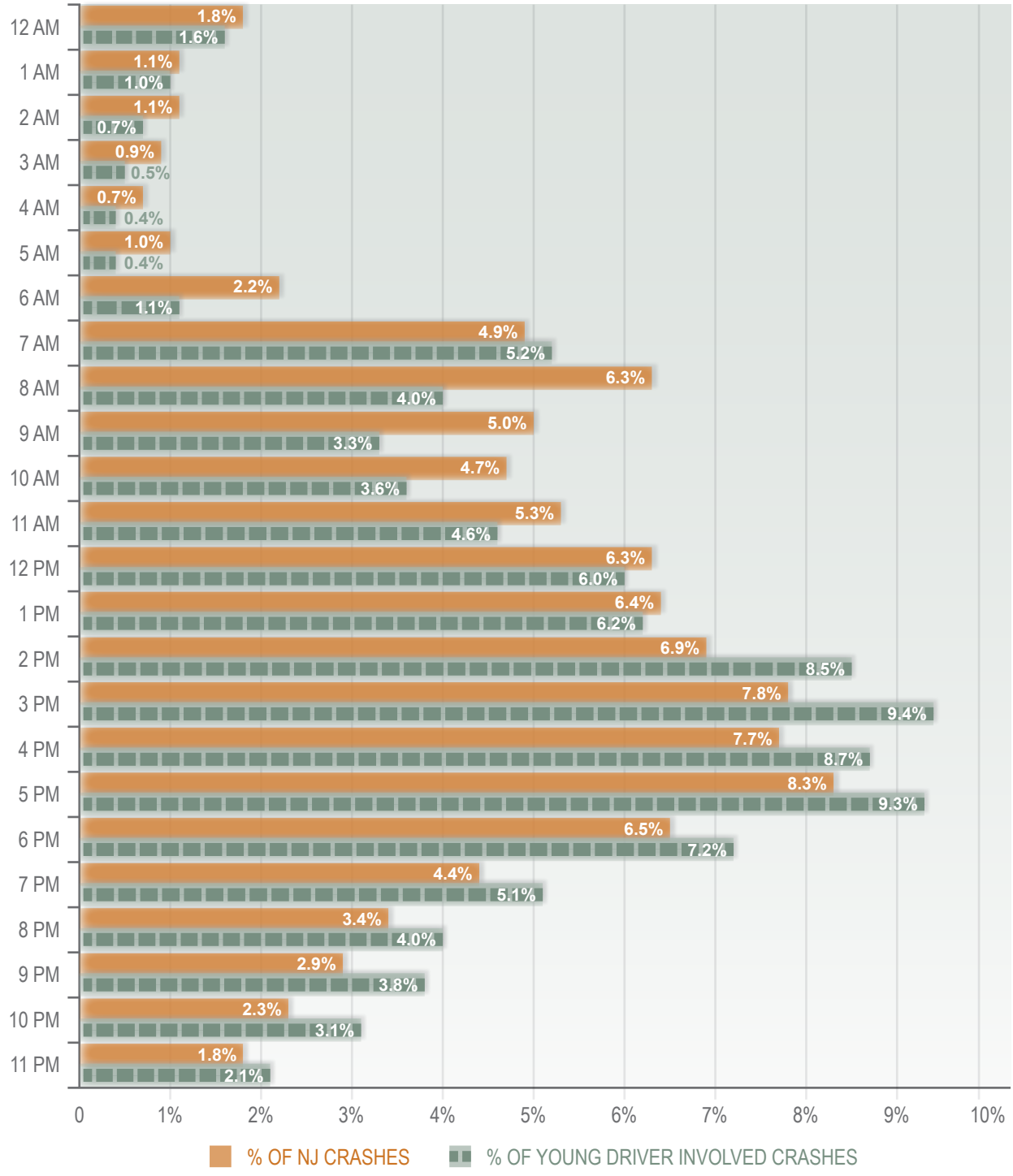
YOUNG DRIVER INVOLVED CRASH % VS YOUNG DRIVER INVOLVED FATAL CRASH % BY DAY OF WEEK, 2012 - 2016



The State has made great advances in creating laws to protect the inexperienced users of the roadways, younger drivers between 16 and 20 years of age. The law governing the rules for new drivers, known as Kyleigh's Law, became effective on May 1, 2010. The law limits the number of passengers allowed in the vehicle for new drivers, as well as limiting the hours in which they can operate a motor vehicle.

Crashes involving younger drivers from 2012-2016 reveal an overrepresentation of younger drivers involved in crashes starting at 2pm with the majority of crashes occurring during the 3pm interval, accounting for 9.4 percent of all crashes during the 24-hour period. Twenty seven percent (27.5%) of younger driver crashes occur between the hours of 3pm and 5pm, and 20.7 percent between 12pm and 2pm.

YOUNG DRIVER INVOLVED CRASH % VS NJ CRASH % BY TIME OF DAY, 2012 - 2016



There has been a 6.67 percent reduction in crashes involving younger drivers from 2012 (38,951) to 2016 (36,352). In 2012, younger drivers were involved in 13.7 percent of all crashes statewide compared to a 13.0 percent involvement in 2016. Crashes during the permissible driving hours for a young driver possessing a probationary driver license (5am – 11pm) declined 5.64 percent from 2012 to 2016. More importantly, crashes during the restricted driving hours for a young driver possessing a probationary driver license (11:01pm – 4:59am) fell 20.52 percent over the same time period. The limitation of the hours in which a younger driver is permitted to drive under Kyleigh's Law has had a positive effect on the total number of crashes experienced.

---------- KYLEIGH'S LAW EFFECTS ----------
YOUNG DRIVER CRASHES BY YEAR AND TIME PERIOD, 2012 - 2016

YEAR	11:01PM - 4:59AM	5AM - 11PM	TOTAL
2012	2,705	36,246	38,951
2013	2,463	35,496	37,959
2014	2,146	33,894	36,040
2015	2,118	33,824	35,942
2016	2,150	34,202	36,352
2012 - 2016 DIFFERENCE	-20.52%	-5.64%	-6.67%

YOUNGER DRIVERS • ANALYSIS OF LOCATION

Over the past 5 years, Middletown had the largest decrease of crashes involving younger drivers with a 28.8 percent reduction. Bridgewater and Toms River had the second and third largest reductions with 28.2 percent and 24 percent reductions respectively. Elizabeth stands out as having the largest increase in the number of younger driver involved crashes with a 26.9 percent increase from 2012 to 2016.

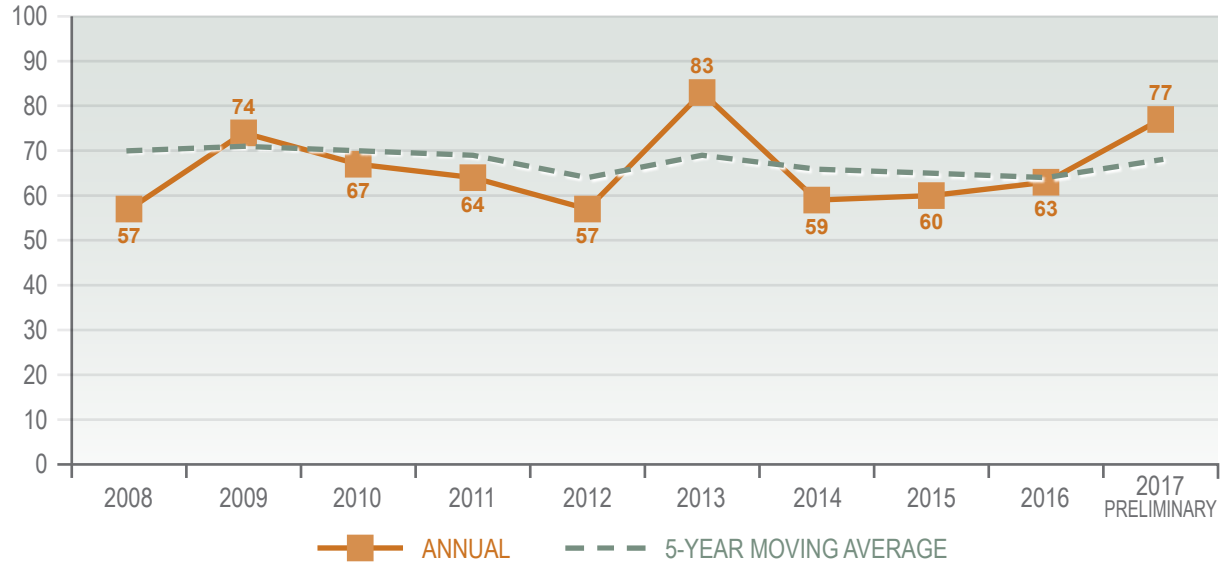
TOP 20 MUNICIPALITIES WITH CRASHES INVOLVING YOUNG DRIVERS, 2012 - 2016

MUNICIPALITY	2012	2013	2014	2015	2016	TOTAL	2012 - 2016 % CHANGE
TOMS RIVER	890	902	849	765	676	4,082	-24.0%
EDISON	782	705	637	658	596	3,378	-23.8%
WOODBRIDGE	656	663	661	651	642	3,273	-2.1%
PATERSON	617	582	535	572	654	2,960	6.0%
NEWARK	581	585	572	556	585	2,879	0.7%
PARAMUS	566	550	557	533	534	2,740	-5.7%
CLIFTON	546	563	533	493	504	2,639	-7.7%
HAMILTON (MERCER)	523	533	507	470	466	2,499	-10.9%
WAYNE	511	482	411	385	423	2,212	-17.2%
JERSEY CITY	427	444	364	439	494	2,168	15.7%
CHERRY HILL	415	439	440	381	462	2,137	11.3%
UNION (UNION)	406	413	381	397	417	2,014	2.7%
LAKEWOOD	393	389	405	376	426	1,989	8.4%
BRIDGEWATER	475	421	397	348	341	1,982	-28.2%
ELIZABETH	360	353	385	405	457	1,960	26.9%
BRICK	387	449	380	294	385	1,895	-0.5%
EAST BRUNSWICK	363	378	358	356	296	1,751	-18.5%
MIDDLETOWN	430	366	342	275	306	1,719	-28.8%
OLD BRIDGE	366	330	341	299	339	1,675	-7.4%
VINELAND	314	312	338	338	331	1,633	5.4%

OLDER DRIVERS • GENERAL OVERVIEW

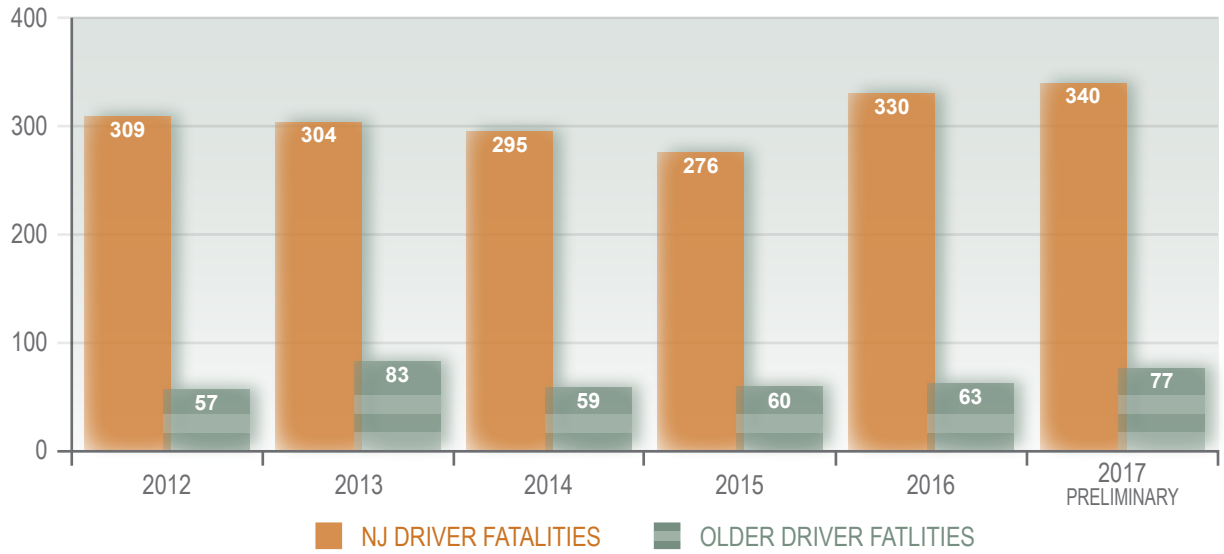
An older driver is defined as an operator of a motor vehicle or motorcycle who is 65 years of age and older. During the last ten years (2008–2017), there were 662 older driver (65+) fatalities. In 2017, 77 drivers age 65 or older were killed compared to 63 in 2016.

OLDER DRIVER FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



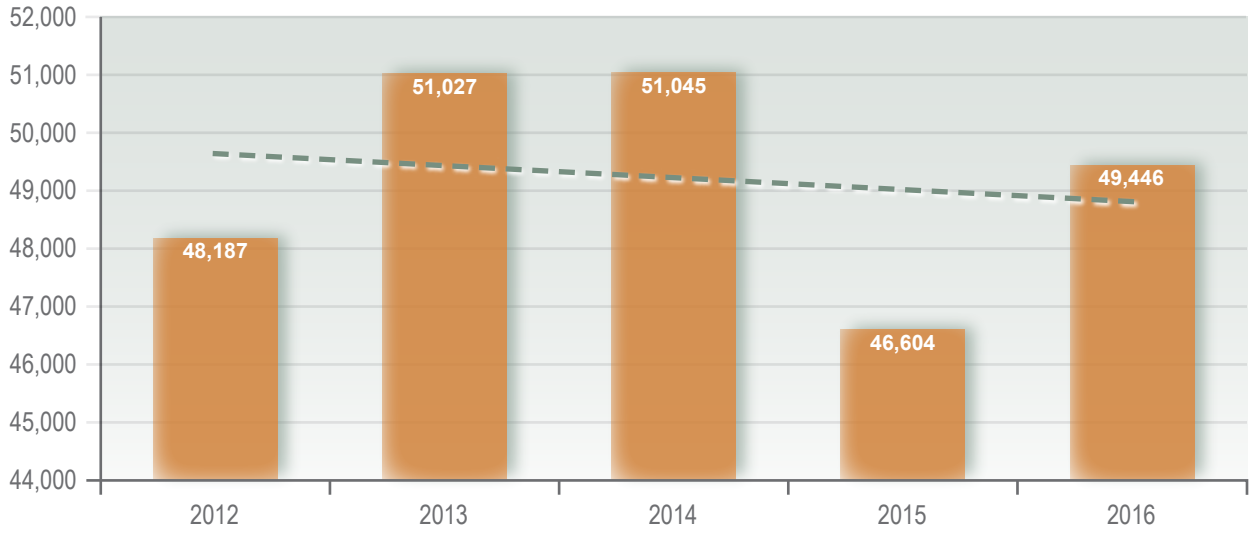
Similar to younger drivers, older drivers are considered a higher-risk population on the roadways. The amount of crashes involving older drivers has experienced an upward trend in the total number of motor vehicle crashes since 2006. In 2016 alone, there were 46,265 crashes involving 49,446 older drivers. In 2017, older drivers accounted for 22.6 percent of all driver fatalities in the State and were involved in 16.5 percent of all crashes, both being an increase from 2016. The increasing population of older drivers in the State and involvement in crashes creates an important case for increased education, enforcement and outreach to this group.

PROPORTION OF OLDER DRIVER FATALITIES VERSUS TOTAL NEW JERSEY DRIVER FATALITIES



After a decline in older drivers involved in crashes from 2014 to 2015, New Jersey saw an increase in 2016 with 49,446 drivers. There was a 6.1 percent increase in crashes involving older drivers from 2015 (46,604) to 2016. Older drivers once involved in 14.8 percent of all crashes in 2010 now account for 16.5 percent in 2016.

OLDER DRIVERS INVOLVED IN CRASHES, 2012 - 2016



The majority of crashes involving older drivers had one or more contributing factors reported at the time of the crash. From 2012-2016 the most common factor for crashes involving older drivers was "Driver Inattention" (141,712 or 26.65%), followed by "Failure to Yield Right of Way to Another Vehicle or Pedestrian" (31,605 or 5.94%), both increases from the 2011-2015 totals.

TOP 10 CONTRIBUTING CIRCUMSTANCES IN CRASHES INVOLVING OLDER DRIVERS, 2012 - 2016

CONTRIBUTING CIRCUMSTANCE	2012	2013	2014	2015	2016	TOTAL
DRIVER INATTENTION	26,464	28,210	28,470	28,424	30,144	141,712
FAILED TO YIELD RIGHT OF WAY TO VEHICLE / PEDESTRIAN	5,849	6,179	5,873	6,438	7,266	31,605
FOLLOWING TOO CLOSELY	4,286	4,743	5,003	5,879	6,689	26,600
BACKING UNSAFELY	4,290	4,769	4,225	2,006	2,155	17,445
IMPROPER LANE CHANGE	2,060	2,331	2,390	3,084	3,416	13,281
FAILED TO OBEY TRAFFIC CONTROL DEVICE	2,130	2,237	2,200	2,570	2,835	11,972
IMPROPER TURNING	1,839	1,892	2,059	2,059	2,427	10,276
UNSAFE SPEED	1,289	1,393	1,429	1,432	1,396	6,939
IMPROPER PASSING	1,080	1,084	1,100	1,139	1,433	5,836
ROAD SURFACE CONDITION	591	850	1,176	1,166	712	4,495

There are many other circumstances present in crashes, not only with older drivers but all users of the roadway. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have many causation factors. On the following page is a representation of crashes involving older drivers and how they relate to other performance areas. From 2012-2016, 2.9 percent of crashes involving an older driver also involved one or more drivers being cited for unsafe speed, 7.3 percent also involved a young driver (16-20) and over 50 percent involved driver inattention.

OLDER DRIVER INVOLVEMENT IN CRASHES BY PERFORMANCE AREA, 2012 – 2016								
OLDER DRIVERS AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	518	517	518	505	480	2,538	507.6	1.1%
DRUG INVOLVEMENT	112	110	98	107	87	514	103	0.2%
DISTRACTED DRIVING	25,620	27,031	27,323	24,811	26,141	130,926	26,185.2	56.7%
UNSAFE SPEED	1,275	1,374	1,410	1,322	1,314	6,695	1,339	2.9%
YOUNG DRIVERS	3,271	3,476	3,307	3,401	3,441	16,896	3,379.2	7.3%
PEDESTRIANS	784	776	756	643	705	3,664	732.8	1.6%
TOTAL OLDER DRIVER CRASHES	45,294	47,757	47,779	43,729	46,265	230,824	46,164.8	100.0%

OLDER DRIVERS • ANALYSIS OF GENDER

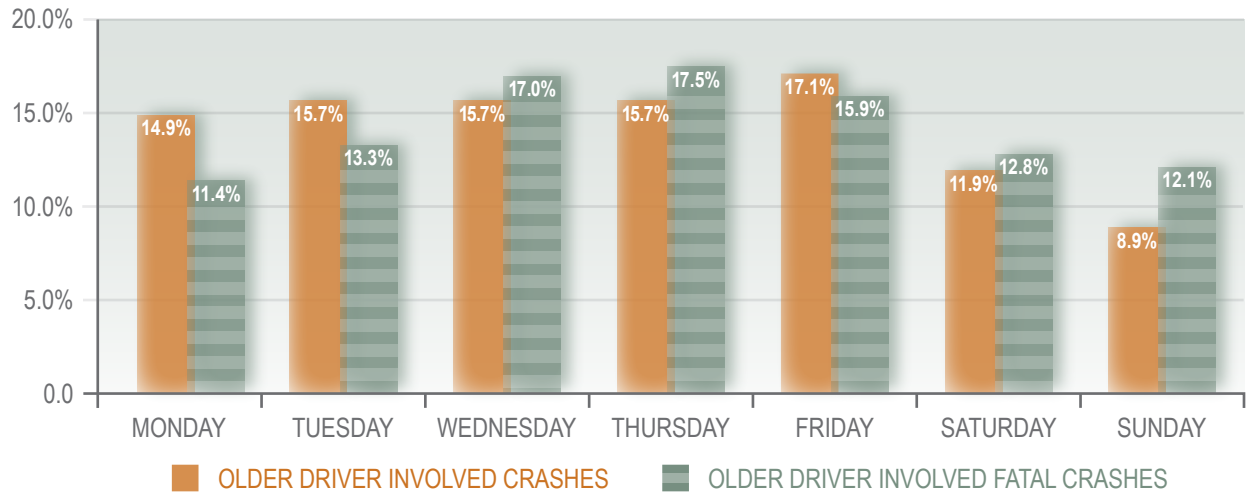
The gender make-up of older drivers involved in crashes shows that males age 65 and older accounted for 57 percent of older drivers involved in crashes while females represented 43 percent during the past five years. These percentages are nearly identical to the gender breakdown found among all New Jersey motorists. Drivers between the ages of 65-69 accounted for 37.6 percent of total older drivers involved, a slight increase from the previous 5-years (2011-2015 total).

% OF OLDER DRIVERS INVOLVED IN CRASHES BY AGE AND GENDER, 2012 - 2016					
AGE	% OF 65 - 85+ AGE GROUP	MALE	FEMALE	UNKNOWN	TOTAL
65 - 69 YEARS OLD	37.6%	22.1%	15.4%	0.1%	92,681
70 - 74 YEARS OLD	25.1%	14.4%	10.6%	0.1%	61,796
75 - 79 YEARS OLD	16.5%	9.4%	7.1%	0.0%	40,684
80 - 84 YEARS OLD	11.4%	6.2%	5.2%	0.0%	28,045
85+ YEARS OLD	9.4%	5.2%	4.2%	0.0%	23,116
TOTAL	100.0%	57.3%	42.4%	0.3%	246,322

OLDER DRIVERS • ANALYSIS OF OCCURRENCE

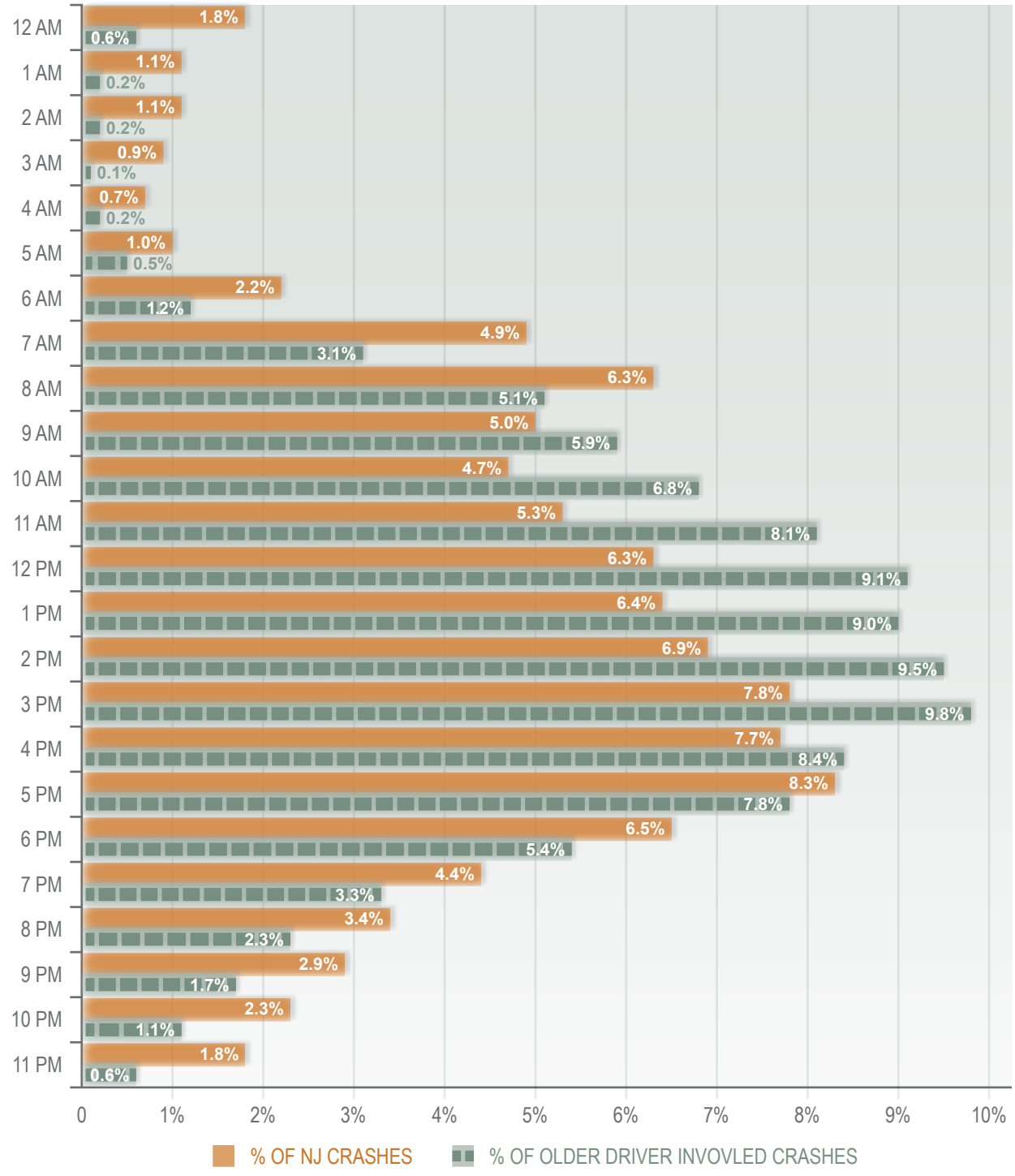
Day of week representation does not vary greatly. Sunday experienced the least volume of all crashes, with 8.9 percent occurring. Monday experienced the least volume of fatal crashes with 11.4 percent occurring that day. The day of the week that experienced the highest volume of all crashes involving older drivers was Friday which accounted for 17.1 percent of the total crashes. 17.5 percent of older driver involved fatal crashes occurred on Thursdays.

OLDER DRIVER INVOLVED CRASH % VS OLDER DRIVER INVOLVED FATAL CRASH % BY DAY OF WEEK, 2012 - 2016



Older drivers become overrepresented in motor vehicle crashes from 9am to 4pm, accounting for 66.5 percent of all older crashes over the past 5 years (2012-2016) down from 67.6 percent from 2011-2015. Thirty seven percent occurred between 12pm and 3pm.

OLDER DRIVER INVOLVED CRASH % VS NJ CRASH % BY TIME OF DAY, 2012 - 2016



OLDER DRIVERS • ANALYSIS OF LOCATION

New Jersey experienced an increase in overall older driver involved crashes from 2015 to 2016, and progress can be seen in the Top 20 towns that experience older driver crashes. Parsippany-Troy Hills experienced the largest decline in older driver crashes with a 19.8 percent decrease from 2012 to 2016, followed by Toms River with a 19.2 percent decrease. Elizabeth has seen the largest increase in older driver involved crashes, increasing 35.5 percent from 2012 to 2016.

TOP 20 MUNICIPALITIES WITH CRASHES INVOLVING OLDER DRIVERS, 2012 - 2016								
MUNICIPALITY	2012	2013	2014	2015	2016	TOTAL	5-YEAR AVG.	2012 - 2016 % CHANGE
TOMS RIVER	1,058	1,136	1,141	848	855	5,038	1,008	-19.2%
NEWARK	741	788	856	875	937	4,197	839	26.5%
JERSEY CITY	767	760	807	768	907	4,009	802	18.3%
WOODBRIDGE	681	743	744	665	814	3,647	729	19.5%
EDISON	669	684	679	587	643	3,262	652	-3.9%
CLIFTON	639	679	645	595	563	3,121	624	-11.9%
CHERRY HILL	571	679	656	583	615	3,104	621	7.7%
PATERSON	609	569	550	610	706	3,044	609	15.9%
PARAMUS	518	613	636	527	600	2,894	579	15.8%
BRICK	570	627	616	406	521	2,740	548	-8.6%
HAMILTON (MERCER)	560	566	556	509	511	2,702	540	-8.8%
ELIZABETH	459	455	527	508	622	2,571	514	35.5%
UNION (UNION)	471	517	453	455	494	2,390	478	4.9%
HACKENSACK	465	468	504	392	456	2,285	457	-1.9%
LAKEWOOD	390	483	431	401	450	2,155	431	15.4%
WAYNE	426	460	478	368	418	2,150	430	-1.9%
VINELAND	402	391	414	358	382	1,947	389	-5.0%
TEANECK	375	330	412	344	410	1,871	374	9.3%
PARSIPPANY-TROY HILLS	354	388	445	364	284	1,835	367	-19.8%
FORT LEE	342	386	384	295	379	1,786	357	10.8%

COUNTERMEASURE STRATEGY: ENFORCEMENT AND EDUCATION OF GRADUATED DRIVER LICENSING (GDL) LAW

Effectiveness of Countermeasure

High visibility enforcement of GDL provisions should encourage compliance. One study investigated whether well publicized enforcement, including checkpoints near high schools, could increase compliance with seat belt laws and GDL provisions. The study found modest increases in seat belt use and compliance with the GDL passenger restriction, although levels of compliance prior to the enforcement efforts were already high (Goodwin, Wells, Foss & Williams, 2006).

Although evaluations of programs to assist parents have not yet shown reductions in younger driver crashes, there is still reason to be optimistic. Some programs have increased parent limit setting, and several studies show that teenagers whose parents impose more strict driving limits report fewer risky driving behaviors, traffic violations and crashes (Simons-Morton, 2007). Educational programs alone are unlikely to produce changes in behavior. However, education in combination with other strategies may deliver stronger results.

Assessment of Safety Impacts

Teen driving laws are most effective when law enforcement officers are armed with the tools and information necessary to enforce them. The police play a key role in enforcing GDL laws by sending a strong message that the GDL is taken seriously by the law enforcement community. Parents also play a key role in their teenagers' driving and are in the best position to enforce GDL restrictions and impose additional driving restrictions on their teenagers.

Linkage between Problem Identification and Performance Targets

Motor vehicle crashes are the leading cause of death for teenagers. In 2017, drivers 16-20 years of age were involved in over 9 percent of motor vehicle fatalities while accounting for 5 percent of licensed drivers in the State. Inexperience makes certain circumstances more dangerous for younger drivers. In addition, immaturity increases the likelihood of young drivers putting themselves in risky circumstances. Areas of concern in relation to young drivers include passenger interaction, belt use, cell phone use, drinking and driving and nighttime driving.

Project Name: GDL ENFORCEMENT AND EDUCATION

Sub-Recipients: DIVISION OF STATE POLICE AND KEAN UNIVERSITY

Total Project Amount: $35,000

Project Description:

The Division of State Police will conduct patrols in high young driver crash areas pertaining to the enforcement of GDL laws and other related traffic violations. In addition, troopers will also take part in GDL checks at various high schools throughout the State ensuring that the GDL driver decal is affixed to motor vehicles. Literature will also be distributed to younger drivers on the GDL statute. Funds will be used to compensate troopers for overtime worked on traffic details.

The New Jersey Parent/Teen Driver orientation program will continue to be offered in FY 2019. While the State's GDL is considered one of the most progressive and stringent in the country, it must be clearly understood and supported by parents. To that end, ensuring that parents and teens fully understand the risks and responsibilities associated with driving is essential to teen driver safety. The orientation is designed for parents and their teens in the pre-permit/permit stage of licensing and includes a resource guide full of materials that support parental involvement and safe driving behaviors. The DHTS will work in cooperation with both Kean University and New Jersey Manufacturers Insurance Company to deliver the program. Funds will be used to compensate instructors for delivering the training program.

Funding Source: SECTION 402 **Local Benefit:** $35,000

COUNTERMEASURE STRATEGY: COMMUNICATIONS AND OUTREACH

Effectiveness of Countermeasure

Many organizations offer educational material for older drivers to inform them of driving risks, help them assess their driving knowledge and capabilities, suggest methods to adapt to and compensate for changing capabilities, and guide them in restricting their driving in more risky situations (National Cooperative Highway Research Program, 2004, Strategy D2). The limited information available suggests that some material may increase driver's knowledge.

Assessment of Safety Impacts

There are a number of advantages that can be gained by older drivers attending and completing training programs. In addition to becoming aware of new laws and learning about the latest in car technology, defensive driving techniques are reviewed and the effects of medication while driving as well as other safety issues are discussed. In addition, older drivers show a need for self-assessment for age related concerns that limit driving ability. Self-assessment tools and programs assist in reducing the risk for crashes and crash related deaths for older drivers.

Linkage between Problem Identification and Performance Targets

Older drivers represent approximately 17 percent of licensed drivers in the State, but accounted for nearly 23 percent of all driver fatalities, up from 19 percent in 2016. Older drivers were involved in 16 percent of all crashes in the State in 2016. As drivers age, their physical and mental abilities, driving behaviors, and crash risks all change. Driving is a complex activity that requires a variety of high-level cognitive skills that can diminish through changes that occur with normal aging and/or as a result of other age related factors.

Project Name: EDUCATION FOR OLDER DRIVERS

Sub-Recipients: AAA

Total Project Amount: $30,000

Project Description:

Educating older drivers to assess their driving capabilities and limitations will be provided through a series of *CarFit* training programs that will be offered to senior adults. *CarFit*, a program aimed at helping mature drivers ensure that their vehicle "fits" them properly (i.e., mirror placement, distance seated from the steering wheel and gas and brake pedals, etc.), will be offered at AAA offices, senior housing units and community centers. Programs will be targeted for those areas of the State overrepresented in older driver crashes.

Funding Source: SECTION 402 **Local Benefit:** $30,000

COUNTERMEASURE STRATEGY: COMMUNITY PROGRAMS AND OUTREACH

In 2017, pedestrian fatalities were the most prevalent in Essex County (22) accounting for 12 percent of all pedestrians killed in the State. The County with the highest number of motor vehicle fatalities (53) was Ocean County and comprised mostly driver fatalities followed by pedestrians. The most bicycle fatalities (4) occurred in Ocean County followed by Hudson County with 3 bicycle fatalities. Burlington County had the highest number of motorcycle fatalities in 2017 (10).

2017 VICTIM CLASSIFICATION BY COUNTY

	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLIST	TOTAL
ATLANTIC	18	5	10	0	3	36
BERGEN	10	5	8	1	3	27
BURLINGTON	21	5	12	0	10	48
CAMDEN	15	6	15	1	7	44
CAPE MAY	4	5	2	0	5	16
CUMBERLAND	15	4	5	1	1	26
ESSEX	9	3	22	1	5	40
GLOUCESTER	21	9	9	1	4	44
HUDSON	2	2	15	3	4	26
HUNTERDON	7	0	1	0	0	8
MERCER	11	2	11	0	2	26
MIDDLESEX	22	7	12	2	4	47
MONMOUTH	21	6	11	1	4	43
MORRIS	11	5	7	1	5	29
OCEAN	23	8	13	4	5	53
PASSAIC	8	4	5	0	2	19
SALEM	12	1	0	0	4	17
SOMERSET	9	2	8	1	4	24
SUSSEX	5	0	1	0	0	7
UNION	10	3	14	0	7	34
WARREN	5	3	2	0	1	11
NJ STATE TOTALS	259	85	183	17	81	625

For Driver Actions, *Driver Inattention* is cited as the State's largest contributing circumstance in crashes annually and was a cited reason in 29.8 percent of all vehicles involved in 2016, up from 29.7 percent in 2015. *Driver Inattention* can consist of a number of different factors, such as cell phone use, applying make-up, talking, eating, and attending to children. It remains a serious contributing factor of crashes on New Jersey's roadways and efforts are in place to provide education and outreach to motorists on the importance of reducing distractions while operating their vehicle. *Following Too Closely* was the second-most common circumstance in crashes. *Following Too Closely* can also be a factor in aggressive driving behavior as well as *Unsafe Speed* (4th). *Failure to Yield Right-of-Way to Another Vehicle or Pedestrian* was the third-most common circumstance in crashes.

TOP CONTRIBUTING DRIVER ACTIONS IN CRASHES, 2012 - 2016

CONTRIBUTING DRIVER ACTION	2012	2013	2014	2015	2016	TOTAL
DRIVER INATTENTION	160,660	164,433	163,956	152,433	158,416	799,898
FOLLOWING TOO CLOSELY	28,964	30,972	32,422	33,497	38,500	164,355
FAILED TO YIELD RIGHT OF WAY TO VEHICLE/PEDESTRIAN	22,707	23,041	21,856	22,297	24,541	114,442
UNSAFE SPEED	17,878	18,556	18,430	18,018	16,252	89,134
BACKING UNSAFELY	22,236	23,099	20,908	10,750	11,277	88,270
IMPROPER LANE CHANGE	11,684	12,671	13,501	14,438	16,078	68,372
FAILED TO OBEY TRAFFIC CONTROL DEVICE	9,264	9,170	9,004	9,461	25,541	62,440
IMPROPER TURNING	8,818	8,896	9,321	8,605	9,552	45,192
IMPROPER PASSING	5,934	5,939	6,055	6,123	6,764	30,815
IMPROPER PARKING	3,461	3,734	3,599	2,105	2,291	15,190
FAILURE TO KEEP RIGHT	2,639	2,564	2,439	2,265	2,425	12,332
WRONG WAY	659	611	604	608	621	3,103
IMPROPER USE/FAILED TO USE TURN SIGNAL	486	514	450	433	450	2,333
IMPROPER USE/NO LIGHTS	135	128	161	124	141	689
OTHER DRIVER ACTION	13,703	12,835	12,783	11,619	11,714	62,654
NONE	253,556	260,648	259,635	247,811	258,461	1,280,111

New Jersey monitors motor vehicle crash trends in several program areas to make assessments on overall crash circumstances on the roadways. Below is a list of areas that DHTS monitors from year-to-year to determine fluctuations within the program areas, which aids in targeting safety programing needed to make New Jersey's roads safer.

MOTOR VEHICLE CRASH TRENDS, 2012 - 2016

CRASH RECORD TOTALS	2012	2013	2014	2015	2016	TOTAL
TOTAL CRASH RECORDS	284,065	289,460	289,873	271,445	279,874	1,414,717
TOTAL VEHICLES INVOLVED IN CRASHES	535,628	546,015	546,459	512,773	532,054	2,672,929
TOTAL DRIVERS INVOLVED IN CRASHES	535,628	546,015	546,459	512,773	532,054	2,672,929
TOTAL OCCUPANTS INVOLVED IN CRASHES	648,010	652,909	643,233	624,252	642,800	3,211,204
TOTAL PEDESTRIANS INVOLVED IN CRASHES	8,706	8,358	7,775	7,303	7,334	39,476

MOTOR VEHICLE CRASH TRENDS, 2012 - 2016 *(continued)*						
PROGRAM AREA	2012	2013	2014	2015	2016	TOTAL
DISTRACTED DRIVING CRASHES	149,192	151,779	151,034	142,107	147,572	741,684
UNSAFE SPEED INVOLVED CRASHES	17,470	18,140	17,549	17,610	15,884	86,653
PEDESTRIAN INVOLVED CRASHES	5,732	5,649	5,214	4,709	4,840	26,144
BICYCLIST INVOLVED CRASHES	2,211	2,010	1,863	1,959	1,923	9,966
YOUNG DRIVER INVOLVED CRASHES	38,951	37,959	36,040	35,942	36,352	185,244
OLDER DRIVER INVOLVED CRASHES	45,294	47,770	47,779	43,729	46,265	230,837
MOTORCYCLE INVOLVED CRASHES	2,632	2,414	2,193	2,300	2,188	11,727
UNRESTRAINED OCCUPANT CRASHES	4,768	4,476	4,376	3,741	3,661	21,022
WORK ZONE RELATED CRASHES	5,969	6,561	6,594	5,221	4,454	28,799
LIVE ANIMAL CRASHES	9,645	10,061	10,274	10,114	11,270	51,364
ALCOHOL INVOLVED CRASHES	8,342	7,849	7,595	7,101	7,007	37,894
DRUGGED DRIVING CRASHES	1,126	1,016	988	1,119	1,129	5,378
SINGLE VEHICLE CRASHES	53,768	54,564	54,246	51,844	50,588	265,010
DROWSY DRIVING CRASHES	2,642	2,754	2,740	2,753	2,834	13,723
HEAD-ON COLLISION CRASHES	6,473	6,861	7,475	6,976	6,984	34,769
CURVE RELATED CRASHES	27,077	27,468	26,703	26,004	25,542	132,794
RUN OFF ROAD CRASHES	22,391	23,420	22,468	23,465	21,837	113,581

Effectiveness of Countermeasure

The effectiveness of the Seminole County Community Traffic Safety Team (Best Practices) effort is demonstrated by the commitment and participation of the various groups and individuals working together to solve traffic safety related problems and issues. By using a team approach, utilizing task forces and combining law enforcement, emergency medical services, public education and engineering efforts, the agencies involved in traffic safety address road improvements, driver education and enhanced response times. The task force brings a variety of perspectives into play when solving mutual traffic safety problems.

Assessment of Safety Impacts

When a community takes ownership of their traffic safety problems, its members are in the best position to make a difference. Community Traffic Safety Program members share a vision of saving lives and preventing injuries caused by traffic related issues and their associated costs to the community. Their make-up is as various and unique as the community they represent, but at a minimum include injury prevention professionals, educational institutions, businesses, hospital and emergency medical systems, law enforcement agencies, engineers, and other community stakeholders working together and in partnership with the DHTS.

Linkage between Problem Identification and Performance Targets

An analysis identifying those counties with high crash and fatality rates will be targeted for implementation of community traffic safety programs. Also included in the analysis are factors such as crashes and fatalities related to impaired driving. These include the likes of Atlantic, Burlington, Bergen, Middlesex, Essex, Camden, Cumberland, Gloucester, Hudson, Morris, Ocean and Monmouth counties. Other factors including impaired driving, pedestrian and bicycle, unrestrained occupant, and distracted driving crashes and fatalities are reviewed when determining county participation.

Project Name: **COMMUNITY TRAFFIC SAFETY PROGRAMS AND OTHER STATEWIDE INITIATIVES**

Sub-Recipients: **DHTS, COUNTY AGENCIES AND NON-PROFIT ORGANIZATIONS**

Total Project Amount: **$2,000,000**

Project Description:

Funds will be provided to continue the Community Traffic Safety Programs (CTSPs), which address priority traffic safety concerns in the following counties: Atlantic, Bergen, Burlington, Camden, Essex, Gloucester, Hudson, Middlesex, Morris, Ocean and Monmouth. The South Jersey Transportation Planning Organization will work with representatives from Cumberland, Cape May and Salem to develop and implement traffic safety initiatives in each of those counties. Each CTSP establishes a management system which includes a coordinator and advisory group responsible for planning, directing and implementing its programs. Traffic safety professionals from law enforcement agencies, educational institutions, community and emergency service organizations, and planning and engineering are brought together to develop county-wide traffic safety education programs based on their crash data. The CTSPs also share best practices, and provide information and training throughout their counties. CTSPs are encouraged to expand their partnerships to ensure diversity in membership and communities served. Funds will be used for training program related expenses, printing of training and educational materials, program coordinator expenses, and public outreach initiatives.

The Brain Injury Alliance will continue to advance its transportation safety message with the most current information and technology available and expand its network of participants through the use of outreach, websites, and social media. In addition, the transportation safety websites created in prior years, including *ugotbrains.com, njteendriving.com, njdrivereducation.com, njsmartrider.org* and *brainybunch.info* will continue to be updated with the most current information on a regular basis. This approach will build upon the foundation that the Alliance has laid during previous years, with an emphasis on teen drivers, motorcycle riders, wheeled sport and pedestrian safety. In an effort to continue their transportation safety message, the project will reach out to high schools across the State to participate in the Champion Schools program. This aspect of the project will include 30-50 high schools. In addition, the project will continue to provide transportation safety related traveling workshops (50) for school-aged children, focused on helmet, pedestrian, motor vehicle and passenger safety issues. Traveling workshops will be promoted through continuous outreach to community and school-based systems. The Alliance will also work with Children's Hospital of Philadelphia to develop New Jersey's Annual Report on teen drivers. The scope of the work will include the ascertainment of required data, management and analysis of licensing and crash databases and creation and formatting of the report. Funds will be used for expenses related to the teen driver study, hosting, updating and maintenance of the websites, and staff salary. Program implementation will target those areas of the State that have been identified as problem areas in pedestrian, bicycle, motorcyclist and teen driving and have high crash and fatality rates.

The State's eight Transportation Management Associations or TMAs (EZRide, TransOptions, goHunterdon, Greater Mercer, Cross County Connections, Ridewise, Keep Middlesex Moving, and Hudson), which serve all 21 counties in the State, will partner with local agencies, schools and businesses to conduct traffic safety outreach and education programs. Pedestrian safety will be addressed for all ages while bicycle safety for recreational riders as well as bicycle commuters will be covered with an emphasis on techniques for safely sharing the road. Funds will also be used to raise awareness of the rules of the road. In particular, laws pertaining to occupant protection, ice and snow removal, pedestrian safety, and the use of handheld devices will be addressed.

Funds will be provided to the AAA Clubs of New Jersey to conduct a variety of traffic safety initiatives focusing on child passenger safety, teen driving and motorcycle safety. AAA will partner with child passenger safety technicians and hospitals to disseminate child passenger safety toolkits to local pediatricians to foster a greater awareness of proper restraint and free child safety seat checks. *Dare to Prepare* teen driving seminars will be offered for parents and teens at high schools, PTA/PTO meetings, community gatherings, and health fairs. Low conspicuity can increase the risk of motorcycle crash related injuries. Conspicuity is very important to riders of motorcycles and increasing the use of reflective clothing could considerably reduce motorcycle crash related injury and death. In cooperation with existing public and private motorcycle safety organizations, education seminars will be conducted and reflective safety vests will be made available to a select number of riders.

Safe Kids New Jersey will work with its network of local coalitions to reach parents, grandparents, healthcare providers, children and communities to promote motor vehicle, bicycle and pedestrian safety. The *Children In and Around Cars* program, designed to teach not only kids about occupant protection and vehicle safety, but parents and other adults as well, will be conducted. Safe Kids New Jersey will also support the child passenger safety certification process including recertification and senior checkers. Bicycle safety events will be held to promote the correct use of helmets. Pedestrian safety programs will strive to teach safe behavior to motorists and child pedestrians. Due to increased distracted driving and walking related incidences, Safe Kids New Jersey will incorporate this topic in all of the information sessions, publications and outreach activities.

The New Jersey Prevention Network coordinates an annual addiction conference that is attended by 800 to 1,000 professionals. These professionals include individuals working predominantly in substance abuse prevention agencies, schools, law enforcement and health care. Funds will be used to create a highway traffic safety track for the annual conference that will focus on reducing traffic fatalities by reducing drug and alcohol use. Providing this specialized track will allow professionals from a wide range of professions to gain new information on alcohol and drugs and how they relate to and impact driver safety.

Funds will be used for printing educational materials, training expenses, staff salaries and website updates.

Funding Source: **SECTION 402** **Local Benefit:** **$2,000,000**

COUNTERMEASURE STRATEGY: OUTREACH

Effectiveness of Countermeasure

Public information and education projects are designed and executed to support specific enforcement activities. Both the enforcement and public information and education portions of a project are planned and coordinated at the same time so they are mutually supportive. By conducting enforcement and public information and education in a coordinated, concerted effort, the motoring public is made aware of the police enforcement activities and the perceived risk of being apprehended is increased. Either activity conducted in isolation does not create this effect.

Assessment of Safety Impacts

Experience has shown that enforcement conducted in concert with well-planned public information and education is much more effective than when either activity is conducted in isolation. It is generally essential that public information and education be provided specifically for traffic law enforcement programs.

Linkage between Problem Identification and Performance Targets

Paid media efforts in conjunction with national enforcement mobilizations will provide outreach to the general public about impaired driving and seat belt use as well as other traffic safety related areas. Outreach efforts will also include an additional emphasis on including the Hispanic community. According to U.S. Census Bureau population estimates as of July 1, 2017, approximately 1.8 million Hispanics reside in the State which represents 20 percent of the population in New Jersey. In 2016, 106 Hispanics were killed in motor vehicle crashes which represented 17.6 percent of all fatalities in the State. Further analysis indicates that Hispanics account for 21 percent of alcohol related driver fatalities and pedestrian fatalities. In addition, individuals from Hispanic origin represent nearly a third of all bicycle fatalities and 25 percent of unrestrained occupant fatalities.

Everyone in New Jersey needs further education regarding traffic safety issues, however, the Hispanic community is at a distinct disadvantage with the language barrier. Concentrated in dense urban environments, immigrants to this State have learned to walk, drive and ride bicycles in other countries with notable changes to their native country's laws. Therefore, the Hispanic population in New Jersey greatly benefits from the Division's targeted Spanish language education and work with the media. This is accomplished through statewide paid and earned media.

TRAFFIC RELATED FATALITIES BY CULTURE, 2016

	HISPANIC	NON-HISPANIC	UNKNOWN	TOTAL
WHITE	78	343	1	422
BLACK	16	104	0	120
CHINESE	0	10	0	10
FILIPINO	0	8	0	8
ASIAN INDIAN	0	3	0	3
OTHER INDIAN	0	2	0	2
KOREAN	0	1	0	1
ASIAN OR PACIFIC ISLANDER	0	1	0	1
MULTIPLE RACES	3	8	0	11
ALL OTHER RACES	7	0	0	7
UNKNOWN	2	1	13	14
TOTAL	106	481	14	601

Project Name: **PUBLIC INFORMATION**

Sub-Recipients: DHTS

Total Project Amount: $490,000

Project Description:

Public information is the cornerstone of the work in highway safety. The primary function is to educate the public about traffic safety and to induce the public to change their attitudes and behaviors in a way that leads to greater safety on the roads. Funds from this task will be used to support the division's priority programs with printed materials, educational items, media campaigns and special events. Priority areas to be supported include: seat belt usage, child passenger safety, pedestrian safety, bicycle safety, distracted driving, aggressive driving, and impaired driving and motorcycle safety. Funds will be used to print the various publications provided by the DHTS to the public. Brochures and banners will also be purchased and used by law enforcement agencies to supplement the enforcement efforts of the national mobilization campaigns.

DHTS will continue to work with an online marketing firm (Webimax) with expertise in social media optimization to produce and promote content that furthers the division's mission. The campaign will continue to increase awareness of the State's traffic safety initiatives. Twitter, Facebook and Instagram pages will be created that engage and inform the public about the division's campaigns and programs.

Funds will be used to place paid advertisements that address various traffic safety messages in an effort to reach the Latino community. This initiative will allow DHTS to continue its efforts to provide information that educates the community about traffic safety issues that will potentially decrease motor vehicle related crashes, injuries and fatalities. The newspaper advertisements are a component in the strategy to combine education and enforcement during the *U Drive. U Text. U Pay* campaign in April, *Click It or Ticket* campaign in May and the *Drive Sober or Get Pulled Over* campaign during Labor Day and between Thanksgiving and New Year's Day. Provided below are the highway safety messages that will be included in the weekly publications of Reporte Hispano and Hechos Positivo.

October 2018

- Teen Driving message in support of National Teen Driver Safety Week from October 21-27.
- Impaired Driving message informing of the hazards of drinking and driving during Halloween.

November 2018

- Impaired Driving message informing of the dangers of drinking and driving during the Thanksgiving holiday period.

December 2018

- Holiday impaired driving message during the national *Driver Sober or Get Pulled Over* campaign.

January 2018 — March 2019

- Continuation of the impaired driving message during the New Year's holiday period in January and an emphasis on curtailing drinking and driving during Super Bowl Sunday is advertised in February along with promoting the impaired driving message in March during St. Patrick' Day.

April 2018

- Distracted driving cell phone message in support of *U Drive. U Text. U Pay* national enforcement campaign.

May 2018

- Seat belt message in support of the *Click It or Ticket* campaign and *Share the Road with Bicycles.*

June 2018

- Impaired driving messages are produced to support Driver Sober messages after the *Click It or Ticket* campaign.

July 2019 — August 2019

- Impaired driving messages are produced to support *Driver Sober or Get Pulled Over* programs during Fourth of July and the Impaired Driving National Campaign in August.

September 2019

- Child passenger safety messages are produced in support of *Child Passenger Safety Week* and National *Seat Check Saturday*.

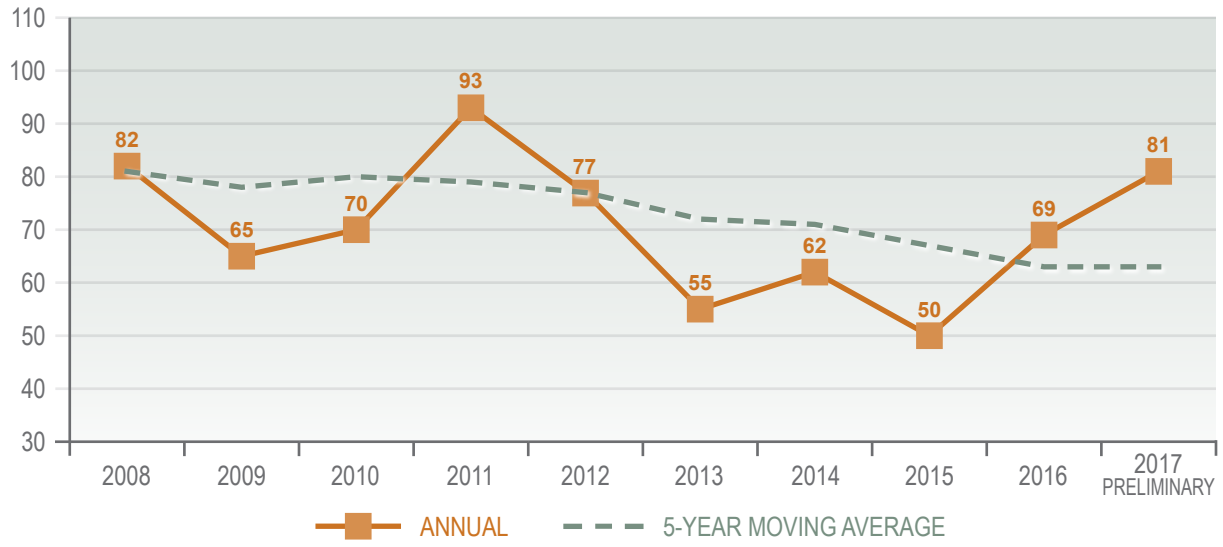
Additional efforts to promote the impaired driving and seat belt messages will be pursued with the NY Jets and include public service messages during the football season. Funds will be used for media advertising costs including print, radio and message board announcements.

Funding Source: **SECTION 402** **Local Benefit:** **$340,000**

GENERAL OVERVIEW

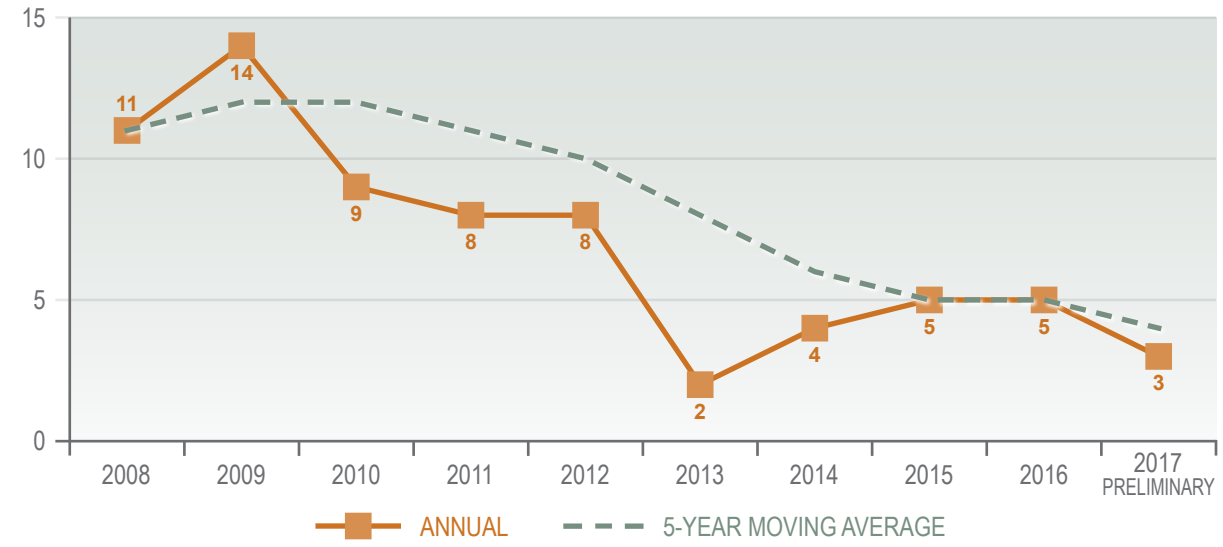
Motorcycle fatalities have varied over the ten-year period from 2008-2017. The highest number of fatalities (93) occurred in 2011 while the lowest number (50) occurred in 2015. The ten-year average (2008-2017) of motorcycle fatalities is 70 fatalities per year, down from the 2007-2016 average of 71.

MOTORCYCLE FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



The decision to not wear a helmet when riding a motorcycle can mean life or death. Preliminary figures are showing 3 motorcyclists died on the roadways in 2017 without wearing a helmet at the time of the crash, accounting for 3.7 percent of motorcyclist fatalities.

UNHELMETED MOTORCYCLE FATALITIES, ANNUAL AND 5–YEAR MOVING AVERAGE



NHTSA estimates that in 2016, 40 motorcycle riders lives were saved because they were wearing a helmet at the time of the crash. It is also estimated that if every rider involved was wearing a helmet at the time of the crash, it could have saved one additional life because of non-helmet use.

HELMET USE IN FATAL MOTORCYCLE CRASHES, 2014 - 2016						
	2014		2015		2016	
	FATALITIES	% OF TOTAL	FATALITIES	% OF TOTAL	FATALITIES	% OF TOTAL
DOT-COMPLIANT HELMET	42	67.7%	39	78.0%	55	80.9%
OTHER HELMET	11	17.7%	1	1.5%	5	7.4%
NO HELMET	4	6.5%	5	10.0%	1	1.5%
UNKNOWN	5	8.1%	5	10.0%	7	10.3%

Alcohol was involved in under 4 percent of all motorcycle crashes over the past five years and was a contributing circumstance in 2.5 percent of all crashes in 2016.

ALCOHOL INVOLVEMENT IN MOTORCYCLE CRASHES, 2012 - 2016						
INVOLVEMENT	2012	2013	2014	2015	2016	TOTAL
NO INVOLVEMENT	2,529	2,313	2,114	2,217	2,115	11,288
INVOLVEMENT	103	101	79	83	73	439
TOTAL	2,632	2,414	2,193	2,300	2,188	11,727
INVOLVEMENT PERCENT OF TOTAL	3.91%	4.18%	3.60%	3.61%	3.34%	3.74%

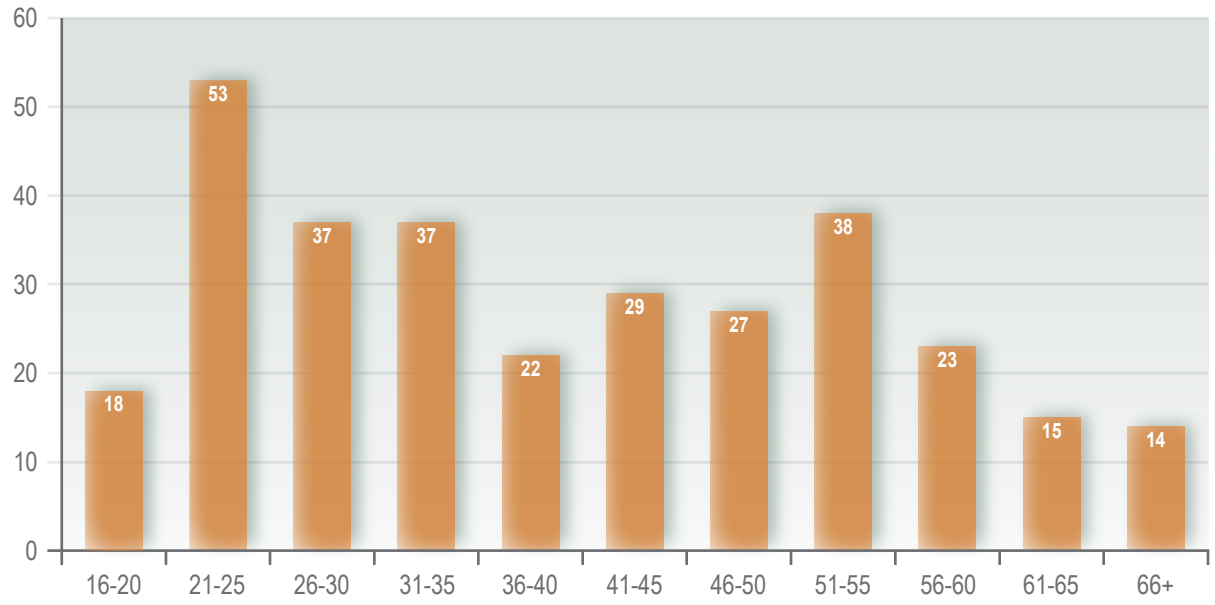
There are many other circumstances present in crashes, not only with motorcyclists but all users of the roadway. Many of these circumstances are overlapping and aid in New Jersey's understanding of crash occurrences that have many causation factors. Below is a representation of crashes involving motorcyclists and how they relate to other performance areas. From 2012-2016, 13.7 percent of crashes involving a motorcyclist also involved one or more drivers being cited for unsafe speed, 11 percent also involved an older driver, 8.3 percent involved a younger driver and 42 percent involved driver inattention.

MOTORCYCLE INVOLVEMENT IN CRASHES BY PERFORMANCE AREA, 2012 – 2016								
MOTORCYCLE AND...	2012	2013	2014	2015	2016	TOTAL	5 YR AVG	% OF 5 YR TOT
ALCOHOL INVOLVEMENT	103	101	79	83	73	439	87.8	3.7%
DRUG INVOLVEMENT	7	3	8	8	6	32	6.4	0.3%
DISTRACTED DRIVING	1,087	1,016	940	985	945	4,973	994.6	42.4%
UNSAFE SPEED	352	325	281	320	330	1,608	321.6	13.7%
YOUNG DRIVERS	222	194	166	204	193	979	195.8	8.3%
OLDER DRIVERS	245	267	252	272	250	1,286	257.2	11.0%
TOTAL MOTORCYCLE INVOLVED CRASHES	2,632	2,414	2,193	2,300	2,188	11,727	2,345.4	100.0%

ANALYSIS OF AGE/GENDER

The difference in age and gender was a factor in the likelihood of an individual being involved in motorcycle crashes. The 21-35 year old rider accounted for 40.6 percent of all riders involved in motorcycle crashes and the majority of motorcycle riders involved in crashes were male riders, accounting for over 90 percent of total riders involved in crashes that occurred from 2012-2016.

MOTORCYCLE FATALITIES (DRIVER AND PASSENGER) BY AGE, 2012 - 2016



Riders that operate a motorcycle without proper licensure are also at risk not only to other motorists on the road but also to themselves. Twenty-one percent of motorcyclists killed on the roadways in 2016 did not have the proper license endorsement to operate that class of vehicle. Six percent of motorcycle operators who lost their lives did not possess a valid driver license.

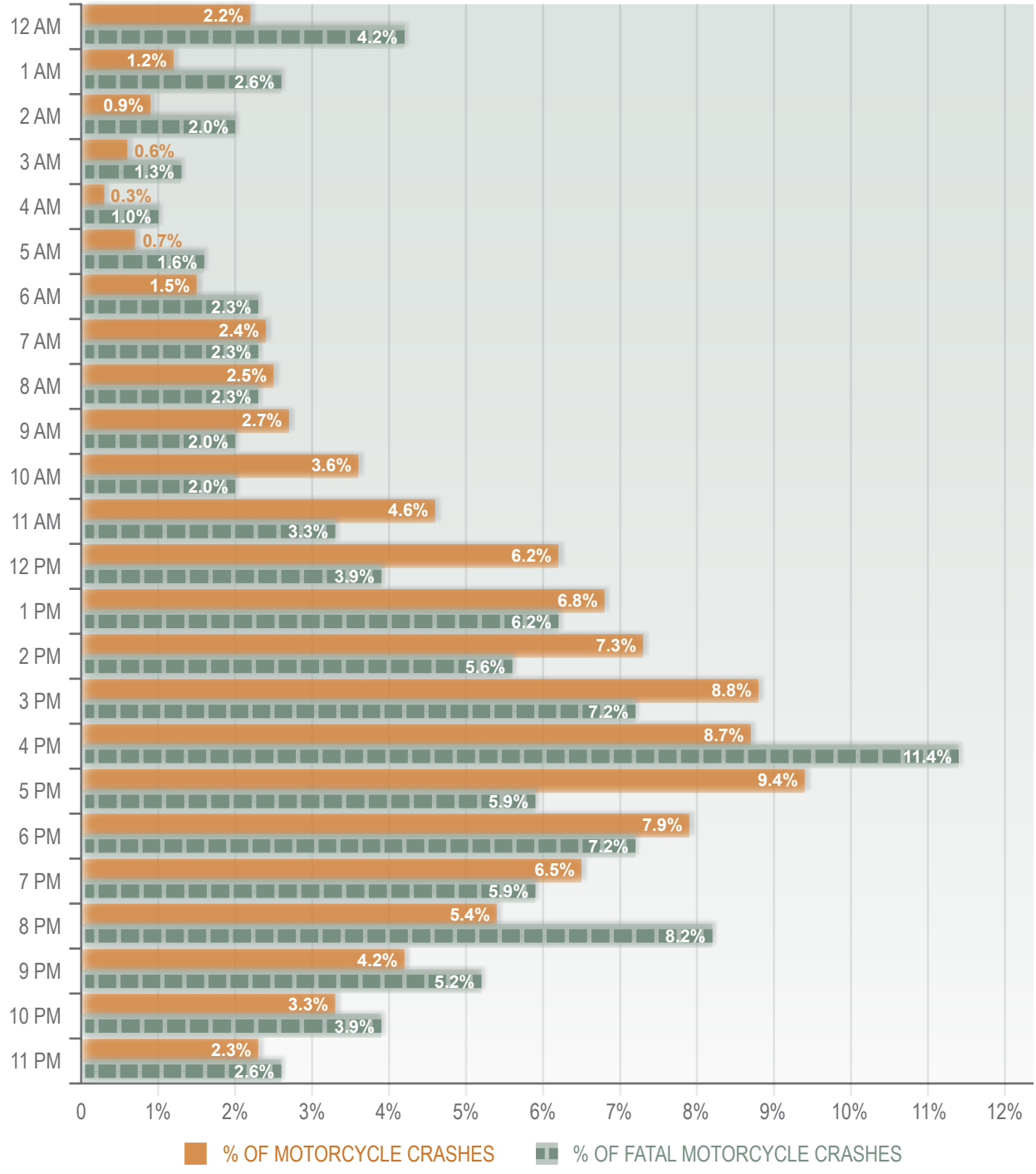
LICENSE COMPLIANCE IN FATAL CRASHES FOR MOTORCYCLE DRIVERS, 2014 - 2016

	2014		2015		2016	
	FATALITIES	% OF TOTAL	FATALITIES	% OF TOTAL	FATALITIES	% OF TOTAL
NOT LICENSED	4	6%	0	0%	4	6%
NO VALID M ENDORSEMENT	10	16%	10	20%	14	21%
VALID ENDORSEMENT	49	78%	41	80%	48	71%
UNKNOWN	0	0%	0	0%	2	3%

ANALYSIS OF OCCURRENCE

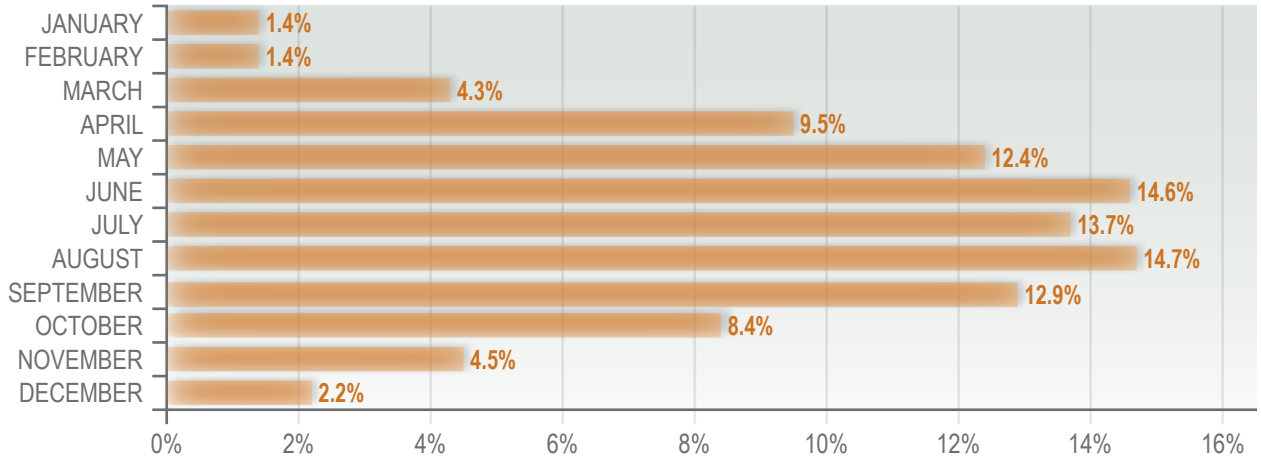
Motorcycle crashes are typically aligned with overall motor vehicle crash patterns, with the most dangerous hour of the day being the 5pm (9.4%) time period. Crashes that occur from 8pm–4am (night-time) account for approximately 20 percent of total motorcycle crashes during the past five years.

MOTORCYCLE CRASH % VERSUS FATAL MOTORCYCLE CRASH % BY TIME OF DAY, 2012 - 2016



The majority of crashes occur during the warmer months of the year. The most active month for crashes over the past five years is August, accounting for 14.7 percent of all motorcycle crashes. Sixty-eight percent of motorcycle crashes take place between the months of May and September.

PERCENTAGE OF MOTORCYCLE CRASHES BY MONTH, 2012 - 2016



ANALYSIS OF LOCATION

There has been a reduction of crashes in the majority of counties since 2012, and a 20 percent reduction overall. Camden County experienced a 53 percent reduction in the number of crashes taking place in 2016 compared to 2012.

MOTORCYCLE CRASHES BY COUNTY AND YEAR, 2012 - 2016

	2012	2013	2014	2015	2016	TOTAL
ATLANTIC	87	87	74	82	82	412
BERGEN	220	218	207	195	190	1,030
BURLINGTON	163	121	136	130	126	676
CAMDEN	153	139	122	118	100	632
CAPE MAY	39	46	37	46	30	198
CUMBERLAND	66	68	48	52	61	295
ESSEX	209	197	197	219	169	991
GLOUCESTER	77	72	66	58	74	347
HUDSON	129	159	138	153	153	732
HUNTERDON	74	51	52	63	51	291
MERCER	105	84	91	71	76	427
MIDDLESEX	201	172	163	169	186	891
MONMOUTH	199	200	186	153	181	919
MORRIS	141	123	117	123	108	612
OCEAN	176	163	136	156	116	747
PASSAIC	203	151	125	144	163	786
SALEM	32	28	19	27	21	127
SOMERSET	100	81	76	85	79	421
SUSSEX	87	78	54	74	50	343
UNION	133	133	108	137	133	644
WARREN	38	43	41	45	39	206
NJ STATE TOTALS	2,632	2,414	2,193	2,300	2,188	11,727

COUNTERMEASURE STRATEGY: COMMUNICATION AND OUTREACH

Effectiveness of Countermeasure

Kardamanidis, Martiniuk, Stevenson, and Thistlethwaite (2010) evaluated the results of 23 studies for a Cochrane Review and found conflicting evidence with regard to the effectiveness of motorcycle rider training in reducing crashes or offenses. Due to the poor quality of available studies, the authors were unable to draw any conclusions about its effectiveness.

Several States have conducted communications and outreach campaigns to increase other drivers awareness of motorcyclists. Typical themes are "Share the Road" or "Watch for Motorcyclists." Some States build campaigns around "Motorcycle Awareness Month," often in May, early in the summer riding season. Many motorcyclist organizations, including MSF, SMSA, the Gold Wing Road Riders Association, and State and local rider groups, have driver awareness materials available. Some organizations also make presentations on drivers' awareness of motorcyclists to driver education classes.

Assessment of Safety Impacts

Both Basic and Experienced Rider Courses are offered by the Motor Vehicle Commission in an effort to better prepare riders to recognize potentially hazardous riding situations and encourage riders to assess their own risks and limitations, and to ride within those constraints.

Many drivers are not aware of how to safely share roads with motorcycles. Although there are limited empirical studies testing the effectiveness of public awareness campaigns, statewide awareness messages pushed out by shareholders cannot be ignored.

Linkage between Problem Identification and Performance Targets

The State experienced a spike in motorcycle fatalities in 2017 from 66 in 2016 to a preliminary number of 81. Motorcyclists account for approximately 13 percent of all traffic fatalities. Although the younger rider (21-35 years of age) is overrepresented in fatalities, representing 41 percent of motorcycle fatalities (2012-2016), one trend that appears to be changing is that fatalities among older motorcyclists and passengers (51+ years of age) have increased. Motorcyclists over 50 years of age now account for 47 percent of motorcycle fatalities (2012-2016), out pacing the younger driver category. In addition, motorcycle fatalities of unhelmeted riders have increased in three of the last four years (2013-2017).

Project Name: MOTORCYCLE TRAINING AND AWARENESS

Sub-Recipients: BRAIN INJURY ALLIANCE

Total Project Amount: $200,000

Project Description:

The Motorcycle Safety Coalition is a committee of the Brain Injury Alliance of New Jersey and is comprised of stakeholders throughout the State. The Coalition is comprised of the following groups and agencies: AAA Clubs of NJ, ABATE of the Garden State, Back Roads USA, Bergen Harley Davidson, Central Jersey Rider Training, Farleigh Dickenson University Ride Safe, Metropolitan Motor Bikes, NJ Motor Vehicle Commission, Rider Education of NJ, Rider Insurance, Sinister Steel Motorcycle Association, DHTS, South Jersey Traffic Safety Alliance, TransOptions and the TLJ Foundation. The accomplishments of the Coalition include educational and awareness programs geared towards the rider and general public, providing rider coaches' annual trainings, and the development of print material. The programs are interactive and engaging and are promoted through the web, social and traditional media with the "Share the Road" message.

Recognizing the importance of training motorcycle riders, the members of the Coalition brought the Motorcycle Safety Foundations Basic Rider Course Update (BRCu) to all of the rider training programs in the State in 2018. The Coalition will continue to work with the Motor Vehicle Commission to include the e-course in the BRCu curriculum to facilitate expeditious trainings for all motorcycle riders. Also, by the Spring of 2019, the new Motorcycle Safety Foundation *Basic Rider Course* curriculum will be fully implemented in the State.

In addition, the Brain Injury Alliance will again promote the *Share the Road* message that will be targeted to automobile drivers and the general public to make them aware of motorcycles on the road and how they can contribute to motorcyclist safety. The *NJSmartDrivers* website focuses on a *Share the Road* message, including the importance of why to share the road and how to share the road safely. Social and traditional media will be utilized to promote the website.

Also, pursuant to existing statutory authority, P.L. 1991 c.451 (27:5F-36 et seq.), the Chief Administrator of the Motor Vehicle Commission established a motorcycle safety education program. The program consists of a motorcycle safety education course of instruction and training that meets or exceeds the standards and requirements of the rider's course developed by the Motorcycle Safety Foundation. The course is open to any person who is an applicant or who has been issued a New Jersey motorcycle license or endorsement. Training was provided to 8,036 riders in 2017 in motorcycle education basic and experienced rider courses. The Motorcycle Safety Education Fund supports the program and is used to defray the costs of the program. Five dollars of the fee collected by the Motor Vehicle Commission for the issuance of each motorcycle license or endorsement is deposited in the Fund. Funds will be used for motorcycle safety rider coach trainings and materials to promote the *Share the Road* campaign.

Funding Source: SECTION 405(f) **Additional Funding Source: $600,000 (Motorcycle Safety Education Fund)**
Local Benefit: $200,000

COUNTERMEASURE STRATEGY: TRAINING AND DATA IMPROVEMENTS

Effectiveness of Countermeasure

High quality State traffic records data is critical to effective safety programming, operational management, and strategic planning. Every State, in cooperation with its local, regional and Federal partners, should maintain a traffic records system that supports the data-driven, science-based decision making necessary to identify problems; develop, deploy, and evaluate countermeasure; and efficiently allocate resources. (Traffic Records Program Assessment Advisory, NHTSA, 2012.)

Assessment of Safety Impacts

Traffic records data remains the basis for funding programs to transport people safely and to reduce motor vehicle crashes. Accurate data enables safety officials to know the who, what, when, where, and why in the transportation safety field so improvements can be implemented.

The crash data that will be received in the coming year will need to be analyzed to identify trends and problem causes for crashes. This information will be provided to managers in highway traffic safety program development and will be offered to other public and private agencies.

The NHTSA and the Governor's Highway Safety Association developed a methodology for mapping the data collected on the State Police Accident Reports (PARs) to the data elements and attributes in the Model Minimum Uniform Crash Criteria (MMUCC) Guidelines (4th Edition, 2012). This methodology is intended to standardize how States compare their PARs to MMUCC. New Jersey volunteered to pilot the mapping process and as a result, a list of compatibility ratings have been generated for each recommended Data Element and Attribute collected or derived from New Jersey's PAR. The mapping process has provided a straightforward roadmap for implementing the MMUCC into the data collection process in the State. By completing this mapping process, the State has determined and prioritized changes that have been implemented in a newly revised NJTR-1 crash report.

New Jersey modified the NJTR-1 to include criteria where data collection was lacking or needed to be enhanced. The new NJTR-1 went into use on January 1, 2017 and there have been a number of training classes offered to address not only the additions/changes to the crash report form, but to also educate traffic safety officers on how to accurately fill out the form.

Linkage between Problem Identification and Performance Targets

New Jersey's primary crash information system is hosted and maintained by the DOT. With few exceptions, the statewide database contains records for all police-reported motor vehicle crashes resulting in $500 or more of property damage. All crashes reported to the Motor Vehicle Commission undergo a process that relies heavily on the following characteristics: Timeliness, Accuracy, Completeness, Integration, and Accessibility.

TIMELINESS	FOR	CITATION SYSTEM
ACCURACY		DRIVER INFORMATION SYSTEM
COMPLETENESS		INJURY SURVEILLANCE
INTEGRATION		VEHICLE INFORMATION
ACCESSIBILITY		ROADWAY INFORMATION

Timeliness:
The transfer of motor vehicle crash data in an electronic format enhances timeliness facilitating a quick turn-around time from crash occurrence to entry into the system. The Division of State Police, NJDOT and the Office of Information Technology developed new procedures and protocols for the State Police to electronically transfer all crash records to both agencies for processing. The success of this operation enables the State to move forward in providing a way for law enforcement agencies to submit their records electronically in the future. Over the next few years, NJDOT will be developing a systematic way to allow for statewide participation and making sure the technical needs are met in order to do so.

Accuracy:
Despite there being geocoders responsible for identifying crash locations for unidentified crashes in the system, locating crashes remains problematic since not all police agencies use the same locating methodologies in reports.

Completeness:
The State crash report, the NJTR-1, collects a large volume of data on all reportable crashes. Training and education is provided to law enforcement agencies on the proper method of data collection to ensure the most accurate data is received.

Integration:
The State Traffic Records Coordinating Committee aims to integrate statewide crash data to the Motor Vehicle Commission's licensing information as well as Emergency Medical Service information.

Accessibility:
The DHTS Crash Analysis Tool is a decision support tool developed for Utah Department of Transportation by Numetric, a business intelligence company. Several states throughout the US also subscribe to this software for their data accessibility needs. This new multi-layered support program is made available to all law enforcement personnel and stakeholders of DHTS.

Project Name: **TRAFFIC RECORDS PROGRAM MANAGEMENT**

Sub-Recipients: **DIVISION OF HIGHWAY TRAFFIC SAFETY**

Total Project Amount: **$33,000**

Project Description:

This management grant will provide funds for the administration of traffic records-related activities including participation on the Statewide Traffic Records Coordinating Committee (STRCC) and the coordination of projects under the Traffic Records program area. Funds will be used for salaries, fringe benefits, travel and other administrative costs that may arise for program supervisors and their respective staff. Salaries and fringe benefits represent $30,000 of the budgeted amount and another $3,000 is budgeted for travel and other miscellaneous expenditures.

Funding Source: **SECTION 402** **Local Benefit:** **0**

Project Name: **DATA ANALYSIS**

Sub-Recipients: **RUTGERS UNIVERSITY**

Total Project Amount: **$190,000**

Project Description:

Promoting and supporting the collection and use of data is critical for reducing fatalities and serious injuries on New Jersey's roadways. Each year the DHTS is responsible for producing the Highway Safety Plan and Annual Report. These documents detail the data behind the various highway safety program areas and review not only the progress made in the Annual Report, but discusses priority and emphasis areas based on

recent data analysis for steps in the future to minimize motor vehicle crashes and the involvement of people, vehicles and roadways in crashes. The data analysis behind these documents is extensive and involves several databases in order to ensure accuracy. The DHTS Crash Analysis Tool as well as the FARS database has been used to provide the data necessary for these reports. In order to efficiently and accurately provide this information to the State in a timely manner, dedicated individuals are assigned to this task to perform data analysis and assist in the preparation of the Highway Safety Plan and Annual Report. Funds will be provided to Rutgers University to pay for staff salaries and travel expenses.

Funding Source: SECTION 402 **Local Benefit:** $190,000

Project Name: **TRAFFIC RECORDS COORDINATING COMMITTEE**

Sub-Recipients: RUTGERS UNIVERSITY

Total Project Amount: $150,000

Project Description:

This task will continue to provide resources to lead the STRCC. Responsibilities will include facilitating STRCC meetings, recruiting new members and retaining current members, and updating the Strategic Plan in accordance with the recent traffic records assessment, preparing reports of the STRCC projects, and facilitating and/or participating in any subcommittees. Funds will be used to pay for the salary of the STRCC Chairperson.

The Committee will continue to review and act upon the recommendations of the traffic records assessment completed in fiscal year 2017. These recommendations include the need to improve the data dictionary and data quality control programs of the crash and vehicle data systems. Other recommendations include improving the description and contents of the driver data system and the data quality control program for both the driver and roadway data systems. In addition, recommendations were provided to improve the citation/adjudication and injury surveillance systems as well as improving the traffic records systems capacity to integrate data.

Funding Source: SECTION 402 **Local Benefit:** 0

Project Name: **NJTR-1 TRAINING**

Sub-Recipients: RUTGERS UNIVERSITY

Total Project Amount: $100,000

Project Description:

The NJTR-1 crash report form is completed by law enforcement officers for any incident resulting in injury, death, or damage of $500 or more. With respect to police academy or in-service training, police officers receive only brief training on how to properly complete the NJTR-1 crash form. Funds from this task will be used to provide workshops for law enforcement that will address proper form completion and the importance of data accuracy. In addition, the revised NJTR-1 forms will be featured in the training sessions in 2019. The training will help improve data and support information that is used by decision makers to improve roadway safety. Funds will be used to pay for training materials and hourly wages of instructors.

Funding Source: SECTION 402 **Local Benefit:** $100,000

Project Name: **TRAFFIC RECORDS INFORMATION SYSTEM**

Sub-Recipients: **NJ OFFICE OF INFORMATION TECHNOLOGY, NJ OFFICE OF EMERGENCY MEDICAL SERVICES, RUTGERS UNIVERSITY**

Total Project Amount: **$1,800,000**

Project Description:

The projects listed below will be continued in 2019 and funds from this task will be used to implement projects under the traffic safety information system improvement grant program.

The Department of Health will continue to use funds to implement electronic patient care reporting to the state's advanced life support programs. The project will use real-time data management tools to provide stakeholders (Office of Emergency Medical Services, hospitals and advanced life support programs) with data needed to make decisions in the most efficient manner possible. With the electronic patient care program, patient and circumstantial data is collected through tablet personal computer devices by the Advanced and Basic Life Support providers who are the first responders. As the data fields are completed, the information is transferred via modem, in real-time, to the closest hospital so all relative data to the patient and their injuries are available upon their arrival for treatment. Simultaneously, data is also transmitted to the New Jersey Office of Information Technology data warehouse where EMS providers as well as the Division of State Police and Motor Vehicle Commission and other agencies can access the data for report purposes. In essence, all patient information is captured electronically as one chart at the site of the injury, shared with any treatment facilities, updated by those facilities and used by multiple state and federal agencies to produce their required reports. The Funds will again be used for contractual services to expand the current electronic patient care report project. This project will provide data sets and real-time surveillance with analysis reports/statistics that is tied to the NHTSA data set.

The on-going project of the Office of Information Technology will continue to integrate crash data collected by police agencies and maintained by the Department of Transportation and the Division of State Police, injury and fatality data collected by volunteer and career EMS units and maintained by the Department of Health, and motor vehicle inspection and driver data maintained by the Motor Vehicle Commission. This is an initiative recommended in the traffic records assessment. Funds will be used to pay hourly wages of staff dedicated to the project as well as supporting software.

Approximately 25 percent of crash records reach the crash database with no geocoding information, leaving an unacceptable number of records that are excluded when users search for problem locations and crash clusters essential in determining where countermeasures are needed. Until crash records are generated and submitted electronically with precise GIS information automatically entered at the site of the crash, there will be a need to have crash locations identified. Crash records geocoded under this task will be shared with the Department of Transportation. The Department of Transportation will then upload the enhanced records to the crash database, impacting the completeness and quality of crash data available in the state repository. Funds will be used to pay the hourly wages of geocoders.

The New Jersey Department of Transportation, Bureau of Transportation Data and Safety (BTDS) collects all crash report NJTR-1 forms statewide from state and local law enforcement agencies. At each crash, the investigating officer completes the NJTR-1. This report records the collection of over 140 pieces of information regarding the crash, the crash type, individuals involved in the crash and various other types of information at the crash site. The BTDS receives an average of 315,000 crash reports a year that need to be processed, scanned, verified and stored. This information is used to develop the Department's safety programs. In addition, crash data is sent on a regular basis to the DHTS, Federal Motor Carriers and the Motor Vehicle Commission. The DHTS uses the information to support their educational and grant programs, Federal Motor Carriers uses the information for their Safety Net Program and the Motor Vehicle Commission uses the data to support driver licensing efforts.

The completed NJTR-1 forms are submitted to BTDS who submits the records to a vendor who scans each into an electronic database. Both the original record and the resulting database are returned to BTDS where verifiers run processes to the database for accuracy. Funds will be provided to the vendor for their services, including scanning and courier services.

Funding Source: **SECTION 405(c)** **Local Benefit:** **0**

COUNTERMEASURE STRATEGY: WORK ZONE SAFETY TRAINING

Effectiveness of Countermeasure

Training and administrative controls are vital in the highway construction process which contractors need to implement among their workers in order to reduce the fatality rate. Proper training and administrative control is very important in the highway construction industry, and if implemented properly, the highway fatality and crash rate could possibly decline. (Work Zone Safety in the Highway Construction Industry, Virginia Polytechnic Institute and State University, 2010)

Assessment of Safety Impacts

New Jersey streets and highways are expected to safely and efficiently move millions of vehicles each year. A complex network of interstate and state highways, county roads and city streets require ongoing maintenance to keep the state moving.

Many challenges can be attributed to this network, such as the growing and shifting population that may cause some routes to become inadequate; aging infrastructure and maintenance cost increases; increasing congestion that leads to increased frustration levels of drivers and increased travel and commute times; and the growing population causes drastic alterations in traffic flow patterns.

Responsibility for the design, construction and maintenance of the highway system falls on the public works departments, at the state, county and local levels of government. There continues to be a need for advanced traffic engineering work to monitor highway operations, recommend improvements in the highway system and improve the safety of vehicle operators, pedestrians and bicyclists.

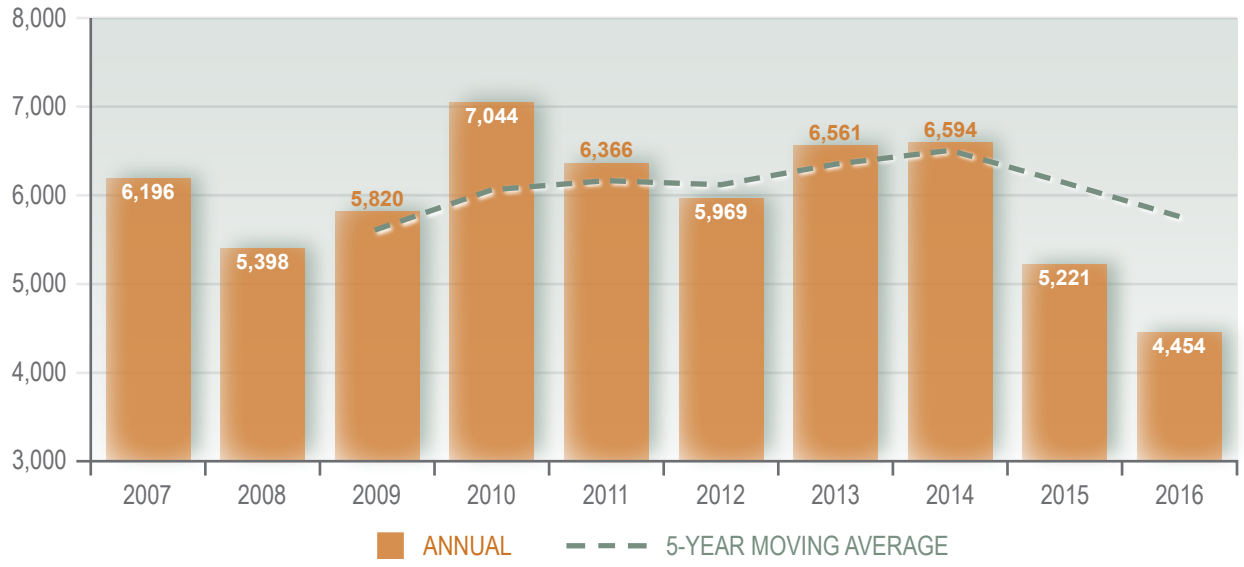
Local jurisdictions vary widely in the degree to which they are equipped to handle the roadway maintenance and operational review. Many lack basic programs such as sign and signal inventories, systematic traffic counts, or means and criteria for identifying and analyzing high crash locations. As county population sizes increase, many do not have access to specialized expertise in traffic engineering to improve or maintain existing roadways.

Work zone safety continues to be a high-priority issue for traffic engineering professionals and highway agencies. Construction and maintenance crews, plus other groups working on the roadway require training on how best to protect themselves as well as the driving public in construction zones. Effective temporary traffic control must provide for the safety of workers, road users and pedestrians. Training in the proper set-up of a work zone by public works employees, utility workers, and police officers will allow drivers to clearly identify the proper travel lane and reduce the chances for a vehicle-vehicle or vehicle-worker conflict.

Linkage between Problem Identification and Performance Targets

Over the past five years from 2012-2016, there have been 28,799 reported crashes in construction, maintenance, and utility zones. On average, a little more than 2 percent of all crashes in the State occur in a work zone.

WORK ZONE CRASHES, 2007 - 2016



The table reveals that Middlesex County (2,170) had the highest number of work zone crashes over the past three years accounting for over 13 percent of total work zone crashes.

WORK ZONE CRASHES BY COUNTY AND YEAR, 2014 - 2016

COUNTY	2014		2015		2016		TOTALS	
	Total Crashes	% of Total	Total Crashes	% of Total	Total Crashes	% of Total	Total Crashes	% of Total
ATLANTIC	206	3.12%	409	7.83%	386	8.67%	1,001	6.15%
BERGEN	528	8.01%	462	8.85%	350	7.86%	1,340	8.24%
BURLINGTON	274	4.16%	115	2.20%	86	1.93%	475	2.92%
CAMDEN	459	6.96%	577	11.05%	584	13.11%	1,620	9.96%
CAPE MAY	119	1.80%	82	1.57%	61	1.37%	262	1.61%
CUMBERLAND	23	0.35%	24	0.46%	28	0.63%	75	0.46%
ESSEX	410	6.22%	464	8.89%	589	13.22%	1,463	8.99%
GLOUCESTER	84	1.27%	54	1.03%	75	1.68%	213	1.31%
HUDSON	477	7.23%	564	10.80%	590	13.25%	1,631	10.03%
HUNTERDON	52	0.79%	37	0.71%	159	3.57%	248	1.52%
MERCER	311	4.72%	86	1.65%	85	1.91%	482	2.96%
MIDDLESEX	1,051	15.94%	643	12.32%	476	10.69%	2,170	13.34%
MONMOUTH	429	6.51%	378	7.24%	138	3.10%	945	5.81%
MORRIS	770	11.68%	388	7.43%	122	2.74%	1,280	7.87%
OCEAN	685	10.39%	425	8.14%	163	3.66%	1,273	7.82%
PASSAIC	321	4.87%	128	2.45%	194	4.36%	643	3.95%
SALEM	16	0.24%	14	0.27%	8	0.18%	38	0.23%
SOMERSET	128	1.94%	121	2.32%	73	1.64%	322	1.98%
SUSSEX	29	0.44%	23	0.44%	15	0.34%	67	0.41%
UNION	168	2.55%	171	3.28%	211	4.74%	550	3.38%
WARREN	54	0.82%	56	1.07%	61	1.37%	171	1.05%
TOTAL	6,594		5,221		4,454		16,269	

Over 24 percent of work zone crashes over the past five years occurred on urban Interstate roadways.

WORK ZONE CRASHES BY FUNCTIONAL CLASS, 2012 - 2016						
FUNCTIONAL CLASS	2012	2013	2014	2015	2016	TOTAL
URBAN INTERSTATE	1,705	1,889	1,657	1,005	755	7,011
UNKNOWN	1,235	1,283	1,494	1,214	1,110	6,336
URBAN PRINCIPLE ARTERIAL	1,167	993	1,227	1,143	1,044	5,574
URBAN FREEWAY / EXPRESSWAY	879	1,457	1,358	1,098	847	5,639
URBAN MINOR ARTERIAL	473	449	478	474	461	2,335
RURAL PRINCIPLE ARTERIAL	190	181	121	76	36	604
URBAN COLLECTOR	121	127	106	100	102	556
RURAL INTERSTATE	142	124	101	40	30	437
URBAN LOCAL	28	25	20	26	30	129
RURAL MAJOR COLLECTOR	14	8	11	15	11	59
RURAL MINOR ARTERIAL	12	15	17	24	22	90
RURAL MINOR COLLECTOR	3	-	4	3	5	15
RURAL LOCAL	-	-	-	3	1	4
TOTAL	5,969	6,551	6,594	5,221	4,454	28,789

Project Name: TRAINING

Sub-Recipients: RUTGERS UNIVERSITY

Total Project Amount: $195,000

Project Description:

Roadway construction and maintenance activities result in significant safety and mobility issues for both workers and motorists. Awareness of proper work zone set up, maintenance, personal protection and driver negotiation are all factors to be considered in establishing a safe work zone culture.

The 20th Annual Work Zone Safety Conference will be held in conjunction with National Work Zone Safety Week in 2019. The conference agenda appeals to a wide variety of attendees – typically laborers, managers, law enforcement, engineers and maintenance personnel. Input from a diverse group of stakeholders is used to develop a comprehensive agenda. Partnering agencies also use this venue to distribute pertinent safety materials and offer assistance and resources to attendees.

There will be a variety of training programs offered that will vary from half-day overview courses that provide the basics for safe working conditions and safe motorist conditions to a comprehensive training program for police officers who will return to their organizations and in turn instruct their own personnel. Courses to be offered during the year are as follows: five four-day police work zone safety train-the-trainer program; two one-day police work zone safety refresher course; three half-day work zone safety awareness for local police course and two half-day work zone safety awareness for municipal and county public works/ engineering course.

Resources will also be provided to requesting agencies through a variety of means, including responses to commonly asked questions about work zone set up, technical information, course handouts and guideline publications. In addition, six work zone safety support equipment packages will be provided to either a municipal or county public works department.

Funds will be used to pay partial salaries for Rutgers' training staff, handouts and other training materials and conference related costs.

Funding Source: SECTION 402 **Local Benefit:** $195,000

OVERVIEW OF METHODOLOGY

Conducting evidence-based enforcement requires three main components. It begins with an analysis of relevant data to form problem identification. The second phase is deployment of proven countermeasures targeted at the problems identified during the analysis, and lastly, evidence-based enforcement relies on continuous follow-up and necessary adjustments to the plan. Correctly identifying roadways, jurisdictions and their law enforcement agencies to participate in enforcement initiatives requires a data-driven process and careful resource analysis. Selected police departments must have particular enforceable roadways with the best opportunity to effectively reduce crashes, injuries, and ultimately, deaths. Funding levels are also based on a jurisdiction's proportion of the overall contribution or piece of the problem within each safety focus area. For example, over the last five years, Hudson County accounts for nearly 15 percent of all pedestrian involved crashes reported by local police departments. Therefore, data shows they should receive approximately 15 percent of the pedestrian safety enforcement and education funding. This amount is used as a starting point, but the final award amount is determined by also evaluating past performance, ability to participate, and internal contributions to serve as matching efforts.

DHTS uses two primary sources of crash data to identify and analyze traffic safety problem areas: the New Jersey Crash Records system maintained by the DOT, Bureau of Safety Programs, and FARS, maintained by the Division of State Police. All reportable crashes in the state are submitted to DOT for entry into the statewide crash records system. The data contained in the New Jersey Crash Records System provides for the analysis of crashes within specific categories defined by person (i.e., age and gender), location (i.e. roadway type and geographic location) and vehicle characteristics (i.e. mechanical conditions), and the interactions of various components (i.e. time of day, day of week, driver actions, etc.).

At both the state and local level, the DHTS Crash Analysis Tool is also used to analyze crash data. The DHTS Crash Analysis Tool is a decision support tool developed for Utah Department of Transportation by Numetric, a business intelligence company, and maintained by Rutgers University. Several states throughout the US also subscribe to this software for their data accessibility needs. This new multi-layered support program is made available to all law enforcement personnel and other decision makers to help identify and assess the most cost-effective ways and improve safety on the state's roadways through a data driven approach. Data provided by NJDOT is used to clearly identify and target roadways and jurisdictions where crashes are occurring, through the Crash Analysis Tool.

PROJECT DESCRIPTION - HUDSON COUNTY PEDESTRIAN SAFETY

DHTS has been providing technical and administrative support to several towns in Hudson County, specifically those in which Route 501 (JFK Boulevard) passes through. Route 501 is a heavily travelled roadway that runs North to South through three different counties. This roadway, especially through Hudson and Bergen Counties, has a long history of being one of New Jersey's most dangerous roads for pedestrian traffic.

Over the past five years (2012-2016) there were 3,876 crashes involving pedestrians in Hudson County making up 14.8 percent of all pedestrian involved crashes in NJ during that same time period. In 2016, pedestrian fatalities made up 50 percent of total fatalities in Hudson County (12 of 24), down from 63 percent in 2015.

COMPARISON OF NJ AND HUDSON COUNTY FATALITIES AND PEDESTRIAN FATALITIES

	FATALITIES 2015			FATALITIES 2016		
	FAT	%	DESCRIPTION	FAT	%	DESCRIPTION
TOTAL NJ FATALITIES	562			602		
TOTAL HUDSON FATALITIES (INCL PEDS)	27	4.8%	% OF TOTAL NJ (12TH)	24	4.0%	% OF TOTAL (12TH)
TOTAL NJ PEDESTRIAN FATALITIES	170	30.2%	% OF TOTAL NJ	166	27.5%	% OF TOTAL NJ
TOTAL HUDSON PEDESTRIAN FATALITIES	17	10.0%	% OF TOTAL PEDS 2ND IN NJ	12	7.2%	% OF TOTAL PEDS 2ND IN NJ

Over the past 5-years (2012-2016), 44 percent of pedestrian crashes in Hudson County occurred in Jersey City (1,724), 11 percent in Union City (430), and 10 percent in Bayonne (394).

HUDSON COUNTY PEDESTRIAN CRASHES, 2012 - 2016

	2012	2013	2014	2015	2016	TOTAL	% OF TOTAL
BAYONNE	79	92	55	85	83	394	10.2%
EAST NEWARK	2	3	1	-	2	8	0.2%
GUTTENBERG	13	17	13	6	10	59	1.5%
HARRISON	27	19	22	17	20	105	2.7%
HOBOKEN	67	66	50	37	37	257	6.6%
JERSEY CITY	346	376	337	312	353	1,724	44.5%
KEARNY	25	26	35	30	27	143	3.7%
NORTH BERGEN	78	63	56	81	75	353	9.1%
SECAUCUS	30	15	16	16	12	89	2.3%
UNION CITY	91	88	77	89	85	430	11.1%
WEEHAWKEN	9	9	9	7	16	50	1.3%
WEST NEW YORK	46	50	61	52	55	264	6.8%
TOTALS	813	824	732	732	775	3,876	100%
CHANGE FROM PRIOR YR	-0.9%	1.4%	-11.2%	0.0%	5.9%		

In 2019, NJ DHTS will continue to provide support to several towns along JFK Boulevard, including Jersey City. An analysis was completed to focus on the circumstances of pedestrian related crashes in Hudson County that was supplied to the towns affected. The analysis focused on some of the specific locations of where pedestrian crashes are occurring, as well as a temporal analysis. The temporal analysis helps to determine if there is a specific time where enforcement could be applied or if there is a particular age group or demographic that can be educated. This study is an example of how DHTS uses data to inform stakeholders on the safety concerns of the state, and strategies on how and where to address them.

PROJECT DESCRIPTION - NEW JERSEY PEDESTRIAN WEIGHTING

Injury weight ranking is conducted to identify which municipalities have the most severe pedestrian related crashes, as opposed to those municipalities that experience the highest volumes. The methodology for weight based ranking derives from an FHWA study: *Crash Cost Estimates by Maximum Police-Reported Injury Severity Within Selected Crash Geometries*. The weighted values are attributed to the injury severity as determined by the reporting police officer at the scene of the crash. A scale has been calculated to determine the weighted values for the KABCO (Killed, Incapacitated, Moderate Injury, Complaint of Pain and Property Damage Only) scale. Because survivability is random given external factors (ex. Travel time to hospital, response time to scene, age of victim, etc.) weights for incapacitations and fatalities are equal. Weighing the severity of injuries sustained in crashes assists in neutralizing the rural versus urban conflict. By attributing higher weights to severe injuries, it helps boost the rank of places that experience low volume, albeit, severe crashes compared to those that experience high volume low severity occurrences. For example, a rural municipality may experience a low volume of pedestrian crashes; however the injuries sustained are typically severe. The chart provides an example of a weighted ranking list to target the Top 10 municipalities in NJ that had the most severe pedestrian related crashes over the past 5 years (2012-2016).

PEDESTRIAN RELATED CRASHES, TOP 10 MUNICIPALITIES (WEIGHTED), 2012 - 2016

MUNICIPALITY	TOTAL PED CRASHES	WEIGHTED SCORE	WEIGHTED RANK	NON WEIGHTED RANK	WEIGHTED DIFFERENCE
NEWARK	2,176	18,194.76	1	1	0
JERSEY CITY	1,416	11,310.55	2	2	0
PATERSON	620	5,095.66	3	3	0
IRVINGTON	463	3,616.84	4	4	0
TRENTON	376	3,200.04	6	5	-1
EAST ORANGE	365	2,810.00	8	6	-2
CAMDEN	352	3,493.40	5	7	2
BAYONNE	336	2,837.44	7	8	1
ATLANTIC CITY	334	2,802.03	9	9	0
UNION CITY	327	2,528.66	14	10	-4

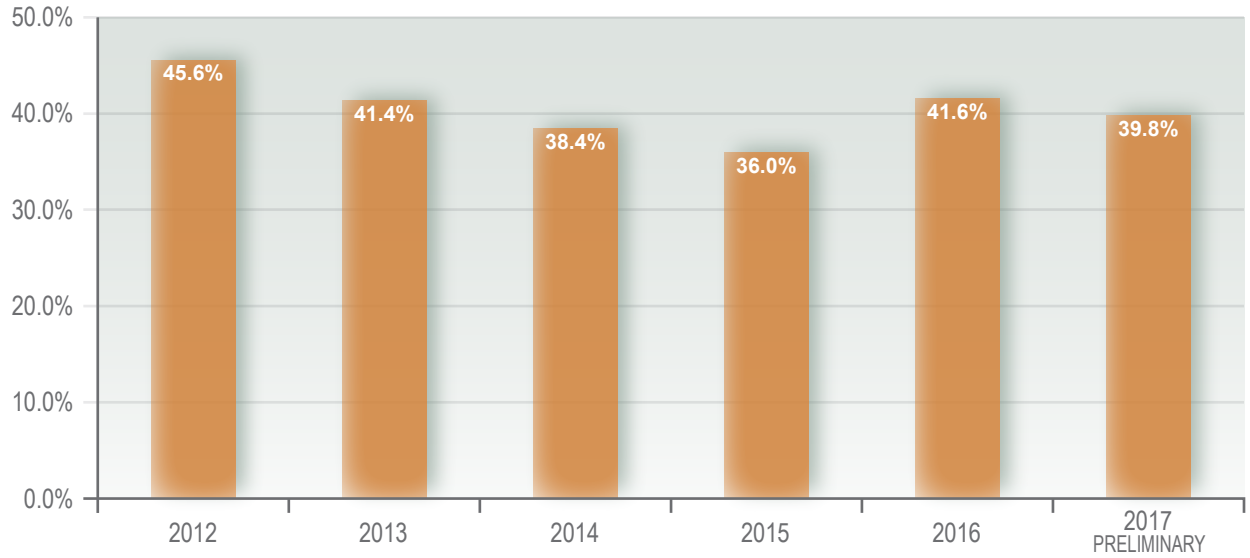
After enforcement efforts are completed, DHTS analyzes the enforcement effectiveness by looking at crash data for reduction trends. Continuous analysis is conducted for all targeted enforcement efforts, comparing historical crash data at the targeted areas while monitoring incoming crash and citation data as the year progresses. Evaluation of funded programs is conducted, and adjustments are made according to the effectiveness of the enforcement effort and the value of its impact.

The evidence-based enforcement program will be continuously evaluated. Law enforcement agencies will be monitored to ensure that the project is moving forward as planned. Activity reports will be assessed against the latest crash data to identify crash reductions in targeted locations as well as any new risks that may be on the horizon. Program staff will meet with those agencies that are lacking in performance or failing to meet the objectives of the project. The State's LEL will also be utilized to assist in the monitoring process and play a greater role in working with law enforcement agency representatives where projects are falling short of meeting their goals.

PROJECT DESCRIPTION - UNRESTRAINED OCCUPANT ENFORCEMENT

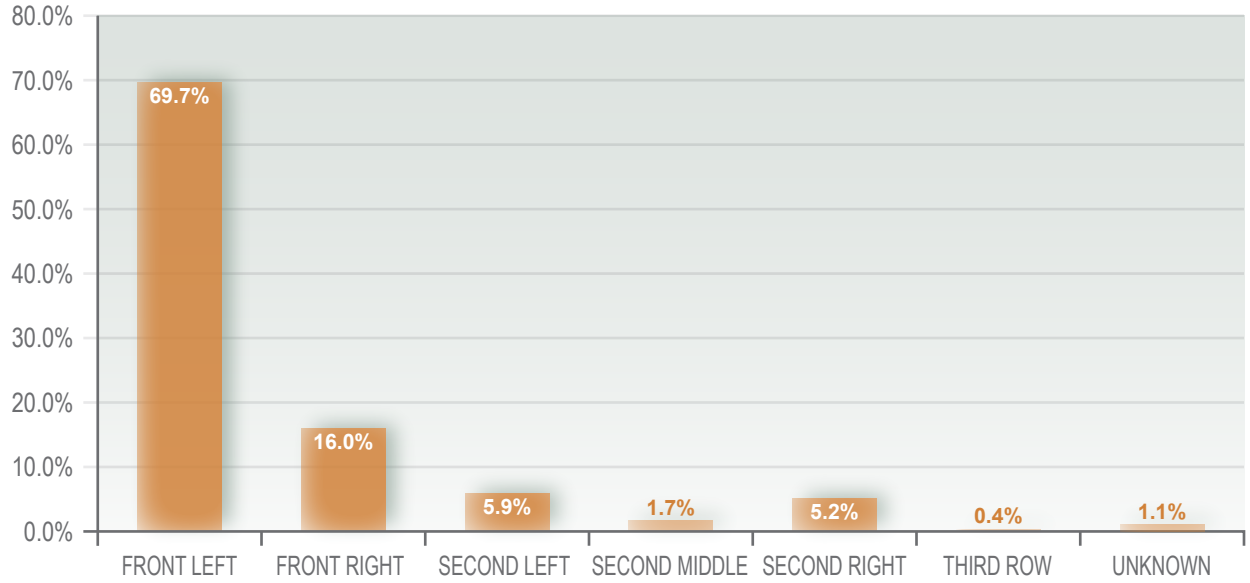
New Jersey has one of the highest front seat belt observation rates in the nation, though 41.6 percent of New Jersey's fatally injured occupants were unrestrained at the time of the crash (2016). DHTS aims to improve this with a data-driven approach by enhancing our understanding of the specifics.

MOTOR VEHICLE FATALITIES, % OF UNRESTRAINED OCCUPANTS BY YEAR, 2012 - 2017



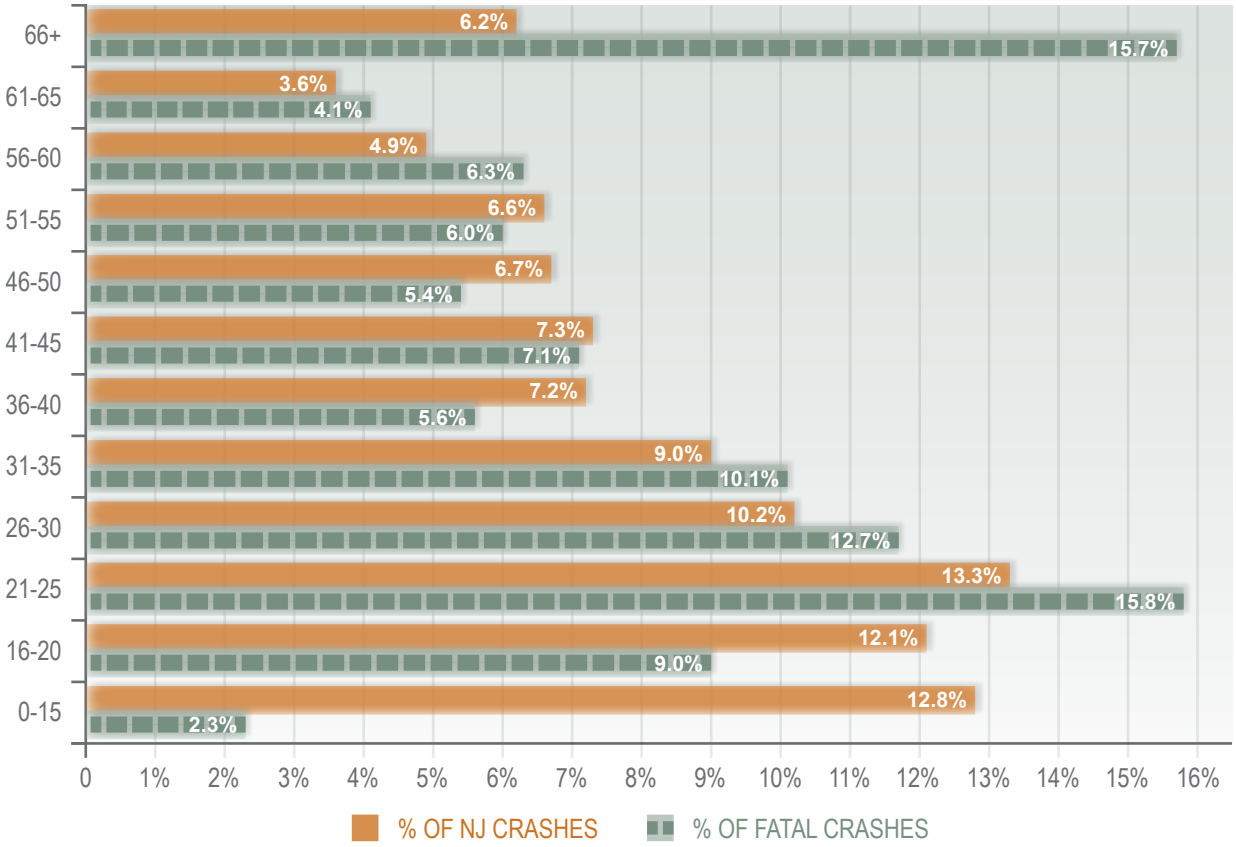
Analyzing unrestrained motorists killed in crashes, nearly 70 percent were drivers and 30 percent were passengers. NHTSA estimates that in 2016, the lives of 214 motor vehicle occupants in New Jersey were saved because of their seat belt use at the time of the crash, and an additional two children age 4 and younger were saved by proper child restraint use. It was also estimated that if every occupant within a motor vehicle was using seat belts at the time of the crash, 22 additional lives would have been saved in 2016.

UNRESTRAINED FATALITY % BY SEATING POSITION, 2012 - 2016



Seat belt use is a good habit that all drivers and occupants should practice. The forming of this habit is important among younger drivers, as ages 0-30 are the populations with the highest rate of non-use, accounting for almost 50 percent of all individuals not wearing a seat belt at the time of a crash. As individuals age, their decision to wear a seat belt increases and the volume of injuries sustained in motor vehicle crashes decreases simultaneously. One of the trends seen in unrestrained fatality data is that individuals 66 years-of-age and older represent over 15 percent of unrestrained occupant fatalities. Educational messages will be bolstered and disseminated within our senior community regarding the importance of wearing a seat belt at all times and while riding in all positions of the vehicle they are travelling in.

UNRESTRAINED CRASH % VERSUS UNRESTRAINED FATAL CRASH % BY AGE, 2012 - 2016



The *Click It or Ticket* campaign will be conducted from May 20 – June 2, 2019 to increase seat belt use and educate the public about the impact belt use has on reducing injuries and fatalities in motor vehicle crashes. Funds will be provided to state and municipal law enforcement agencies to implement seat belt saturation and/or tactical overtime patrols. Approximately 180 state, county and municipal police departments will receive funds to participate in the enforcement efforts. All education-related occupant protection initiatives conducted at the local level will utilize the DHTS *Buckle Up — Everyone, Every Ride* materials. Emphasis will be placed on enforcing the secondary seat belt law requiring all adult passengers in the back seat to buckle up.

New Jersey will also join peers in other States in a coordinated border-to-border seat belt enforcement campaign that will kick off the annual *Click It or Ticket* campaign. Law enforcement officers in New Jersey will join with colleagues from other States to set up checkpoints and roving patrols near border crossings to enforce seat belt usage.

A list of locations throughout the State that have a high percentage of unrestrained motor vehicle crashes will be identified and used for selecting grant participants during the *Click It or Ticket* mobilization. The results of the

annual seat belt survey are also used to target those counties that have the lowest occupant usage rates. Based on this information, municipal police agencies are invited to participate in the annual mobilization.

In an effort to employ strategies of "sustained seat belt enforcement" throughout the year, the Division of State Police will schedule personnel on an overtime basis to patrol service areas and toll plazas along the length of the toll roads. The purpose of these patrols will be to place an emphasis on the enforcement of the primary seat belt law, the secondary rear passenger law and the child passenger safety law as well.

Awareness about the importance of wearing a seat belt will be further enhanced by the distribution of educational materials, earned media efforts, paid media conducted by NHTSA, *Click It or Ticket* banners and displays on dynamic message signs on major highways. Visibility is further heightened when law enforcement agencies join forces with police departments from states participating in the border-to-border initiative.

New Jersey recently updated its police accident report to include additional fields for child passenger safety. There are now 3 different categories to capture child restraint use. This data will first become available for analysis in 2017. DHTS will monitor the trends of child passenger safety equipment use using these newly added fields and will conduct child passenger safety programs that will contribute towards child safety seat checks and educational presentations at schools, day care centers and social meetings.

CERTIFICATIONS AND ASSURANCES

FOR FISCAL YEAR 2019 HIGHWAY SAFETY GRANTS

(23 U.S.C. CHAPTER 4 AND SEC. 1906, PUB. L. 109-59, AS AMENDED)

[The Governor's Representative for Highway Safety must sign these Certifications and Assurances each fiscal year. Requirements that also apply to subrecipients are noted under the applicable caption, and must be included in agreements with subrecipients.]

STATE: NEW JERSEY

By applying for Federal grant funds under 23 U.S.C. Chapter 4 or Section 1906, the State Highway Safety Office, through the Governor's Representative for Highway Safety, agrees to the following conditions and requirements:

GENERAL CERTIFICATIONS AND ASSURANCES

In my capacity as the Governor's Representative for Highway Safety, I hereby affirm that ---

- **I have reviewed the information in support of the State's application for 23 U.S.C. Chapter 4 and Section 1906 grants, and based on my review, the information is accurate and complete to the best of my knowledge.**
- **In addition to the certifications and assurances contained in this document, I am aware and I acknowledge that each statement in the State's application bearing the designation "CERTIFICATION" or "ASSURANCE" constitutes a legal and binding Certification or Assurance that I am making in connection with this application.**
- **As a condition of each grant award, the State will use the grant funds in accordance with the specific statutory and regulatory requirements of that grant, and will comply with all applicable laws, regulations, and financial and programmatic requirements for Federal grants, including but not limited to ---**
  - **23 U.S.C. Chapter 4 – Highway Safety Act of 1966, as amended**
  - **Sec. 1906, Pub. L. 109-59, as amended by Sec. 4011, Pub. L. 114-94**
  - **23 CFR part 1300 – Uniform Procedures for State Highway Safety Grant Programs**
  - **2 CFR part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards**
  - **2 CFR part 1201 – Department of Transportation, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards**
- **I understand and accept that incorrect, incomplete, or untimely information submitted in support of the State's application may result in the denial of a grant award. If NHTSA seeks clarification of the State's application, I authorize the State Highway Safety Office to provide additional information in support of the State's application for a 23 USC Chapter 4 and Section 1906 grant.**

SECTION 402 CERTIFICATIONS AND ASSURANCES

In my capacity as the Governor's Representative for Highway Safety, I hereby affirm that ---

- The Governor is the responsible official for the administration of the State highway safety program, by appointing a Governor's Representative for Highway Safety who shall be responsible for a State highway safety agency that has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program. (23 U.S.C. 402(b)(1)(A))
- The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation. (23 U.S.C. 402(b)(1)(B))
- At least 40 percent of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of political subdivisions of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(1)(C)) or 95 percent by and for the benefit of Indian tribes (23 U.S.C. 402(h)(2)), unless this requirement is waived in writing. (This provision is not applicable to the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)
- The State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks (23 USC 402(b) (1) (D))
- The State will provide for an evidenced-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. (23 U.S.C. 402(b)(1)(E))
- The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State, as identified by the State highway safety planning process, including:
- Participation in the National high-visibility law enforcement mobilizations as identified annually in the NHTSA Communications Calendar, including not less than 3 mobilization campaigns in each fiscal year to —
    - Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
    - Increase use of seatbelts by occupants of motor vehicles;
- Sustained enforcement of statutes addressing impaired driving, occupant protection and driving in excess of posted speed limits;
- An annual Statewide safety belt use survey in accordance with 23 CFR Part 1340 for the measurement of State seat belt use rates, except for the Secretary of Interior on behalf of Indian tribes;
- Development of statewide data systems to provide timely and effective data analysis to support allocations of highway safety resources;
- Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. Section 148(a). (23 U.S.C. 402(b)(1)(F)
- The State will actively encourage relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect (23 U.S.C. 402(j))
- The State will not expend Section 402 funds to carry out a program to purchase, operate, or maintain an automated traffic enforcement system. (23 U.S.C. 402(c)(4))

OTHER REQUIRED CERTIFICATIONS AND ASSURANCES

In my capacity as the Governor's Representative for Highway Safety, I hereby provide the following additional certifications and assurances:

INTERGOVERNMENTAL REVIEW OF FEDERAL PROGRAMS

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs).

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

The State will comply with FFATA guidance, OMB Guidance on FFATA Subward and Executive Compensation Reporting, August 27, 2010, (https://www.fsrs.gov/documents/OMB_Guidance_on_FFATA_Subaward_and_Executive_Compensation_Reporting_08272010.pdf) by reporting to FSRS.gov for each sub-grant awarded:

- **Name of the entity receiving the award;**
- **Amount of the award;**
- **Information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number (where applicable), program source;**
- **Location of the entity receiving the award and the primary location of performance under the award, including the city, State, congressional district, and country; and an award title descriptive of the purpose of each funding action;**
- **A unique identifier (DUNS);**
- **The names and total compensation of the five most highly compensated officers of the entity if:**
  - **(i) the entity in the preceding fiscal year received—**
    - **(I) 80 percent or more of its annual gross revenues in Federal awards; and**
    - **(II) $25,000,000 or more in annual gross revenues from Federal awards; and**
  - **(ii) the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986;**
- **Other relevant information specified by the OMB guidance.**

NONDISCRIMINATION (APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

The State highway safety agency will comply with all Federal statutes and implementing regulations relating to nondiscrimination ("Federal Nondiscrimination Authorities"). These include but are not limited to:

- **Title VI of the Civil Rights Act of 1964** (42 U.S.C. 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin) and 49 CFR Part 21;
- **The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970**, (42 U.S.C. 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal-aid programs and projects);

- **Federal-Aid Highway Act of 1973,** (U.S.C. 324 *et seq.*) **and Title IX of the Education Amendments of 1972,** as amended (20 U.S.C. 1681-1683 and 1685-1686) (prohibit discrimination on the basis of sex);
- **Section 504 of the Rehabilitation Act of 1973,** (29 U.S.C. 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability) and 49 CFR Part 27;
- **The Age Discrimination Act of 1975,** as amended (42 U.S.C. 6101 *et seq.*), (prohibits discrimination on the basis of age);
- **The Civil Rights Restoration Act of 1987**, (Pub. L. 100-209), (broadens scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal aid recipients, sub-recipients and contractors, whether such programs or activities are Federally-funded or not);
- **Titles II and III of the Americans with Disabilities Act** (42 U.S.C. 12131-12189) (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing) and 49 CFR parts 37 and 38;
- **Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations** (prevents discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations); and
- **Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency** (guards against Title VI national origin discrimination/discrimination because of limited English proficiency (LEP) by ensuring that funding recipients take reasonable steps to ensure that LEP persons have meaningful access to programs (70 FR at 74087 to 74100).

The State highway safety agency—

- **Will take all measures necessary to ensure that no person in the United States shall, on the grounds of race, color, national origin, disability, sex, age, limited English proficiency, or membership in any other class protected by Federal Nondiscrimination Authorities, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any of its programs or activities, so long as any portion of the program is Federally-assisted.**
- **Will administer the program in a manner that reasonably ensures that any of its subrecipients, contractors, subcontractors, and consultants receiving Federal financial assistance under this program will comply with all requirements of the Non-Discrimination Authorities identified in this Assurance;**
- **Agrees to comply (and require any of its subrecipients, contractors, subcontractors, and consultants to comply) with all applicable provisions of law or regulation governing US DOT's or NHTSA's access to records, accounts, documents, information, facilities, and staff, and to cooperate and comply with any program or compliance reviews, and/or complaint investigations conducted by US DOT or NHTSA under any Federal Non-Discrimination Authority;**
- **Acknowledges that the United States has a right to seek judicial enforcement with regard to any matter arising under these Non-Discrimination Authorities and this Assurance;**
- **Agrees to insert in all contracts and funding agreements with other State or private entities the following clause:**

  "During the performance of this contract/funding agreement, the contractor/funding recipient agrees—

  a. **To comply with all Federal nondiscrimination laws and regulations, as may be amended from time to time;**
  b. **Not to participate directly or indirectly in the discrimination prohibited by any Federal non-discrimination law or regulation, as set forth in Appendix B of 49 CFR part 21 and herein;**

c. To permit access to its books, records, accounts, other sources of information, and its facilities as required by the State highway safety office, US DOT or NHTSA;

d. That, in the event a contractor/funding recipient fails to comply with any nondiscrimination provisions in this contract/funding agreement, the State highway safety agency will have the right to impose such contract/agreement sanctions as it or NHTSA determine appropriate, including but not limited to withholding payments to the contractor/funding recipient under the contract/agreement until the contractor/funding recipient complies; and/or cancelling, terminating, or suspending a contract or funding agreement, in whole or in part; and

e. To insert this clause, including paragraphs a through e, in every subcontract and sub-agreement and in every solicitation for a subcontract or sub-agreement, that receives Federal funds under this program.

THE DRUG-FREE WORKPLACE ACT OF 1988 (41 USC 8103)

The State will provide a drug-free workplace by:

a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

b. Establishing a drug-free awareness program to inform employees about:
   - The dangers of drug abuse in the workplace.
   - The grantee's policy of maintaining a drug-free workplace.
   - Any available drug counseling, rehabilitation, and employee assistance programs.
   - The penalties that may be imposed upon employees for drug violations occurring in the workplace.
   - Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).

c. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will —
   - Abide by the terms of the statement.
   - Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.

d. Notifying the agency within ten days after receiving notice under subparagraph (c)(2) from an employee or otherwise receiving actual notice of such conviction.

e. Taking one of the following actions, within 30 days of receiving notice under subparagraph (c)(2), with respect to any employee who is so convicted —
   - Taking appropriate personnel action against such an employee, up to and including termination.
   - Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by Federal, State, or local health, law enforcement, or other appropriate agency.

f. Making a good faith effort to continue to maintain a drug-free workplace through implementation of all of the paragraphs above.

POLITICAL ACTIVITY (HATCH ACT) (APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

The State will comply with provisions of the Hatch Act (5 U.S.C. 1501-1508) which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

CERTIFICATION REGARDING FEDERAL LOBBYING (APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. **No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.**
2. **If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.**
3. **The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, sub-grants, and contracts under grant, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.**

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 or not more than $100,000 for each such failure.

RESTRICTION ON STATE LOBBYING (APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State and local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION
(APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

Instructions for Primary Certification (States)

1. **By signing and submitting this proposal, the prospective primary participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.**
2. **The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.**

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency may terminate this transaction for cause or default or may pursue suspension or debarment.

4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has been erroneous by reasons of changed circumstances.

5. The terms *covered transaction, debarment, suspension, ineligible, lower tier, participant, person, primary tier, principal, and voluntarily excluded*, as used in this clause, have the meaning set out in the Definitions and coverage sections of 2 CFR Part 180. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by NHTSA.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Instruction for Lower Tier Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR Parts 180 and 1300.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the department or agency may disallow costs, annul or terminate the transaction, issue a stop work order, debar or suspend you, or take other remedies as appropriate.

Certification Regarding Debarment, Suspension, and Other Matters — Primary Covered Transactions

(1) The prospective primary participant certifies to the best of its knowledge and belief, that its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by an Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement,

theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instruction for Lower Tier Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

4. The terms *covered transaction, debarment, suspension, ineligible, lower tier, participant, person, primary tier, principal, and voluntarily excluded*, as used in this clause, have the meanings set out in the Definition and Coverage sections of 2 CFR Part 180. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.

5. The prospective lower tier participant agrees, by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by NHTSA.

6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion—Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR Parts 180 and 1300.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the department or agency with which this transaction originated may disallow costs, annul or terminate the transaction, issue a stop work order, debar or suspend you, or take other remedies as appropriate.

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion — Lower Tier Covered Transactions

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

BUY AMERICAN ACT (APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

The State and each subrecipient will comply with the Buy America requirement (23 U.S.C. 313) when purchasing items using Federal funds. Buy America requires a State, or subrecipient, to purchase only steel, iron, and manufactured products produced in the United States with Federal funds, unless the Secretary of Transportation determines that such domestically produced items would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. In order to use Federal funds to purchase foreign produced items, the State must submit a waiver request that provides an adequate basis and justification to and approved by the Secretary of Transportation.

PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE (APPLIES TO SUB-RECIPIENTS AS WELL AS STATES)

The State and each subrecipient will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcyclists.

POLICY ON SEAT BELT USE

In accordance with Executive Order 13043, Increasing Seat Belt Use in the Unites States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information on how to implement such a program, or statistics on the potential benefits and cost-savings to your company or organization, please visit the Buckle Up America section on NHTSA's website at www.nhtsa.dot.gov. Additional resources are available from the Network of Employers for Traffic Safety (NETS), a public-private partnership headquartered in the Washington, D.C. metropolitan area, and dedicated to improving the traffic safety practices of employers and employees. NETS is prepared to provide technical assistance, a simple, user-friendly program kit, and an award for achieving the President's goal of 90 percent seat belt use. NETS can be contacted at 1 (888) 221-0045 or visit its website at www.trafficsafety.org.

POLICY ON BANNING TEXT MESSAGING WHILE DRIVING

In accordance with Executive Order 13513, Federal Leadership On Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, States are encouraged to adopt and enforce workplace safety policies to decrease crashes caused by distracted driving, including policies to ban text messaging while driving company-owned or rented vehicles, Government-owned, leased or rented vehicles, or privately-owned when on official Government business or when performing any work on or behalf of the Government. States are also encouraged to conduct workplace safety initiatives in a manner commensurate with the size of the business, such as establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving, and education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

I understand that the information provided in support of the State's application for Federal grant funds and these Certifications and Assurances constitute information upon which the Federal Government will rely in determining qualification for grant funds, and that knowing misstatements may be subject to civil or criminal penalties under 18 U.S.C. 1001. I sign these Certifications and Assurances based on personal knowledge, and after appropriate inquiry.

06-29-2018

SIGNATURE OF GOVERNOR'S REPRESENTATIVE FOR HIGHWAY SAFETY — DATE

Gary Poedubicky

PRINTED NAME OF GOVERNOR'S REPRESENTATIVE FOR HIGHWAY SAFETY

PROGRAM COST SUMMARY

FFY 2019 PROGRAM COST SUMMARY				
PROGRAM AREA	APPROVED PROGRAM COST	STATE/LOCAL FUNDS	FEDERAL SHARE TO LOCAL	CURRENT BALANCE
SECTION 402				
PLANNING & ADMIN - PA 19-01	$ 500,000	$ 500,000	0	$ 500,000
ALCOHOL - AL 19-07	$ 340,000	0	0	$ 340,000
PED/BICYCLE SAFETY – PS 19-16	$ 65,000	0	0	$ 65,000
OCCUPANT PROTECTION – OP 19-11	$ 325,000	0	0	$ 325,000
POLICE TRAFFIC SVCS. – PT 19-03	$ 2,900,000	$ 67,100,276	$ 1,400,000	$ 2,900,000
CTSP – CP 19-08	$ 2,190,000	0	$ 2,190,000	$ 2,190,000
PAID MEDIA & PI&E – PM 19-21	$ 300,000	0	$ 300,000	$ 300,000
TRAFFIC RECORDS – TR 19-02	$ 473,000	0	$ 290,000	$ 473,000
ROADWAY SAFETY - RS 19-61	$ 195,000	0	0	$ 195,000
TOTAL SECTION 402	$ 7,288,000	$ 67,600,276	$ 4,180,000	$ 7,288,000
SECTION 405(b)				
OCCUPANT PROTECTION	$ 1,400,000	$ 10,839,277	$ 1,200,000	$ 1,400,000
TOTAL SECTION 405(b)	$ 1,400,000	$ 10,839,277	$ 1,200,000	$ 1,400,000
SECTION 405(c)				
TRAFFIC RECORDS	$ 1,800,000	$ 650,000	0	$ 1,800,000
TOTAL SECTION 405(c)	$ 1,800,000	$ 650,000	0	$ 1,800,000
SECTION 405(d)				
IMPAIRED DRIVING	$ 5,500,000	$ 42,532,737	$ 4,755,000	$ 5,500,000
TOTAL SECTION 405(d)	$ 5,500,000	$ 42,532,737	$ 4,755,000	$ 5,500,000
SECTION 405(e)				
DISTRACTED DRIVING	$ 4,250,000	$ 30,437,072	$ 4,000,000	$ 4,250,000
TOTAL SECTION 405(e)	$ 4,250,000	$ 30,437,072	$ 4,000,000	$ 4,250,000
SECTION 405(f)				
MOTORCYCLE	$ 200,000	$ 1,306,340	$ 200,000	$ 200,000
TOTAL SECTION 405(f)	$ 200,000	$ 1,306,340	$ 200,000	$ 200,000
SECTION 405(h)				
NON-MOTORIZED SAFETY	$ 1,600,000	$ 8,590,319	$ 1,600,000	$ 1,600,000
TOTAL SECTION 405(h)	$ 1,600,000	$ 8,590,319	$ 1,600,000	$ 1,600,000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