# STATE OF NEW JERSEY

# HIGHWAY SAFETY PLAN

## **FEDERAL FISCAL YEAR 2021**

OCTOBER 1, 2020 THROUGH SEPTEMBER 20, 2021



PHILIP D. MURPHY

GOVERNOR

SHEILA Y. OLIVER
LIEUTEANT GOVERNOR



GURBIR S. GREWAL
ATTORNEY GENERAL



ERIC HEITMANN
DIRECTOR

State of New Jersey Highway Safety Plan Federal Fiscal Year 2021 • October 1, 2020 through September 30, 2021

Philip D. Murphy • Governor

Sheila Y. Oliver • Lieutenant Governor

Gurbir S. Grewal • Attorney General

Eric Heitmann • Director

#### NEW JERSEY FFY 2021 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) 2021 HSP addresses the national priority program areas of NHTSA and FHWA. The following program areas will be addressed in FFY 2021: alcohol and other drug countermeasures, pedestrian and bicycle safety, occupant protection, police traffic services, community traffic safety programs, public information and paid media, other vulnerable road users, and traffic records. 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 54 percent for projects that benefit local jurisdictions.

In addition to the Section 402 Program, several other funding sources in FFY 2021 will be used to continue the highway safety program. These include the Section 405(b) Occupant Protection grant, Section 405(c) Traffic Safety Information System Improvements grant, Section 405(d) Impaired Driving grant, Section 405(e) Distracted Driving grant, Section 405(f) Motorcycle Safety grant, and Section 405(h) Non-motorized Safety grant.

The FFY 2021 HSP includes a budget of nearly \$24 million that will be allocated as illustrated below:

|                | FFY 2021 FEDERAL HIGHWAY SAFETY FUNDING        |             |  |  |  |  |  |
|----------------|--|-------------|--|--|--|--|--|
| SECTION 402    | SECTION 402 STATE AND COMMUNITY GRANT PROGRAM  |             |  |  |  |  |  |
| SECTION 405(b) | OCCUPANT PROTECTION                            | \$1,400,000 |  |  |  |  |  |
| SECTION 405(c) | TRAFFIC SAFETY INFORMATION SYSTEM IMPROVEMENTS | \$1,725,000 |  |  |  |  |  |
| SECTION 405(d) | IMPAIRED DRIVING                               | \$5,050,000 |  |  |  |  |  |
| SECTION 405(e) | DISTRACTED DRIVING                             | \$3,800,000 |  |  |  |  |  |
| SECTION 405(f) | MOTORCYCLE SAFETY                              | \$ 200,000  |  |  |  |  |  |
| SECTION 405(h) | NON-MOTORIZED SAFETY                           | \$1,500,000 |  |  |  |  |  |

The FFY 2021 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.

| NEV        | 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

Municipal Excess Liability Joint Insurance Fund
Partnership for a Drug-Free New Jersey
New Jersey Licensed Beverage Association
Rutgers University
NJ Institute of Technology
Kean University
Rowan University

#### FFY 2021 HIGHWAY SAFETY PLAN

#### Planning Cycle

#### October

- 1. Begin to close out prior year projects.
- 2. Reprogram carryover funds from the prior year into the current Highway Safety Plan.
- **3.** Follow up with grantees for final progress reports and reimbursement requests.

- **November 1.** DHTS staff prepares final monitoring reports while processing reports 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 prior year 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 on DHTS and NJOAG websites.
- **4.** Complete the Highway Safety Plan Annual Report and submit to the NHTSA.

#### **January**

- 1. Monitor current grant project performance through the first quarter.
- 2. Make adjustment to the Highway Safety Plan as necessary.
- 3. Begin receiving applications from potential grantees for the next project year.

#### **February**

- 1. Begin to review grant applications that have been received.
- 2. Conduct initial meeting with program staff to get input for the next Highway Safety Plan.
- 3. Solicit input from partner agencies for the next Highway Safety Plan.
- **4.** Monitor progress of current grantees.

#### March

- 1. Continue reviewing grant applications that have been received.
- 2. Follow up meetings are held to discuss Highway Safety Plan development.
- **3.** Monitor progress of current grantees.

#### April

- 1. Highway Safety Plan continues to be developed.
- 2. Monitor progress of current grantees through the second quarter.
- 3. Deadline for grant applications to be received for the next project year.

#### May

- 1. Program staff meets with Director to finalize grant awards for the upcoming Fiscal Year.
- 2. Monitor progress of current grantees.
- 3. First draft of the Highway Safety Plan is prepared and submitted to the Director for review.

#### June

- 1. Highway Safety Plan draft 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 grant applicants for the next project year of approval or denial.
- 2. Monitor progress of current grantees through the third quarter.
- 3. Make adjustments to the Highway Safety Plan, if requested by the NHTSA.

#### August

- 1. Grantees are contacted and reminded that their project period ends September 30.
- 2. Monitor progress of current grantees.

- **September 1.** Begin to prepare final reports for current year projects.
  - 2. Remind grantees at the end of the project year to submit their final reports.

#### **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 DHTS Crash Analysis Tool is also used to analyze crash data. The Crash Analysis Tool is a support tool, maintained with the assistance of 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 the annual seat belt observational survey 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 and motorcycle related 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. Grant funding decisions ultimately made by DHTS (amounts, locations, project periods) are made within the prism of a "data-driven" approach to the maximum extent possible.

The problem identification process for the FY2021 HSP took place simultaneously with the planning process for the 2020 NJ Strategic Highway Safety Plan. Extensive work on the part of many stakeholders went into the updated Strategic Highway Safety Plan, and the SHSP process proved beneficial in the creation of this HSP. The input and ideas generated during the SHSP working group meetings were utilized in the creation of this HSP, and ultimately many of the emphasis area tasks and goals in the SHSP have been incorporated into this HSP. The end result is an HSP that aligns and supports, wherever possible, the SHSP.

The 2020 Strategic Highway Safety Plan is an action-oriented and data-driven, comprehensive multidisciplinary plan integrating the "4Es" of safety: Education, Engineering, Enforcement, and Emergency medical services/response. The SHSP includes emphasis areas that represent important sectors where meaningful safety improvements can be made with added attention and resources. The emphasis areas were decided upon by a thorough review of safety data and input from stakeholders around New Jersey. The 2020 SHSP emphasis areas are: Data, Pedestrians and Bicyclists, Other Vulnerable Road Users, Driver Behavior, Intersections, and Lane Departure.

The 2020 SHSP leaders and stakeholders recognize the need to consider vulnerable members of the community in the development of emphasis area goals, objectives, strategies and action plans. Vulnerable members include low-income residents, minorities, children, persons with disabilities and older adults. Data analyses, to the extent possible, will assess roadway safety risks that disproportionately affect vulnerable populations. The 2020 SHSP will continue to seek opportunities to improve data collection and analyses to identify overrepresented fatalities and serious injuries in vulnerable populations and develop actions to address them.

The DHTS problem identification process covers the following program areas, many of which are also addressed in the SHSP: alcohol and other drug countermeasures, pedestrian and bicycle safety, occupant protection, police traffic services, other vulnerable road users, community traffic safety programs, public information and paid media, and traffic records.

Based on a data-driven approach, and in concert with the 2020 NJ Strategic Highway Safety Plan, 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 2021:

- 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.
- 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.
- Other Vulnerable Road Users: The development and implementation of programs that focus on the safety of younger drivers, older drivers, motorcyclists, and work zone personnel.
- **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.

#### Goal Development

The performance goals identified herein for the various priority program areas are determined and updated on an annual basis in accordance with the problem identification process, established and accepted methodology, and the understanding that several of the goals must coordinate directly with the SHSP.

DHTS uses a multi-tiered approach to goal development and ultimately to project selection. Program and data managers review statistical information on a rolling basis. Projects under consideration for funding are analyzed within a framework of established goals, data, demographic information, past trends, and staff experience. The ability, willingness, and past performance of agencies seeking funding are also considered.

In addition to the DOT, which is the lead agency in the development of the State's Strategic Highway Safety Plan, a broad cross section of stakeholders also has input into the vision, mission, and goals of the HSP including engineers, planners, advocates, public health officials, law enforcement officers, educators and emergency response providers. Much of this input comes from members of the Highway Traffic Safety Policy Advisory Council. HTSPAC consists of 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. 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 HSP goals.

The State has adopted the national vision of <u>zero deaths</u> for highway safety – *The Road to Zero* (2018). This calls for a national goal of zero traffic fatalities by the year 2050. This aspirational goal, which will take a generation to achieve, is worthy of support by all New Jersey traffic safety partners. To that end, the NJ Strategic Highway Safety Plan is collaboratively linked to the DHTS HSP as well as the Highway Safety Improvement Program and 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 with a goal of zero roadway deaths.

The Plans (SHSP and HSP) 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 in a data-driven way 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 three 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 motor vehicle fatalities in the State decreased in 2018 and in 2019, which followed four consecutive years of increases (2014-2017). 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 and crashes experienced on the State's roadways, and in some cases, represent increases. New Jersey has seen increases in pedestrian and motorcyclist 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 as well as Child Passenger Safety, and because of increased detection, some predicted values reveal increases.

#### **Project Selection**

Projects are designed and selected with an eye towards impacting 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 on the NJ OAG and DHTS web sites of 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.
- **7.** Past performance by the grantee (such as achievement of stated objectives, meeting deadlines for project reporting and financial claims) is also considered.

The applications are rated for potential traffic safety impact based on data driven considerations, performance of previous grants received, and seriousness of identified problems. The review also reflects how well the grant application is written. Each individual considering the grant application completes the review sheet attached to the grant application in the SAGE e-grant system. 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.

The FY2021 HSP will, whenever possible, consider vulnerable members of the community in the identification, development, and implementation of traffic safety grant programs. Vulnerable members include low-income residents, minorities, children, persons with disabilities and older adults. A key factor in this effort will be improving data collection and analyses to identify overrepresented fatalities and serious injuries in vulnerable populations and incorporating these findings into existing programs as well as new initiatives.

Efforts that began in earnest in FFY 2020 to fund grants based on a comprehensive, data-driven approach in an effort to migrate toward a truly evidence-based allocation of funding will be continued in FY2021. Historical efforts have proven that some areas with great need may not be receptive to the constraints of funding. Nevertheless, DHTS will continue efforts to work with all potential recipients as we move toward our goal of zero highway deaths.

#### STATEWIDE OVERVIEW

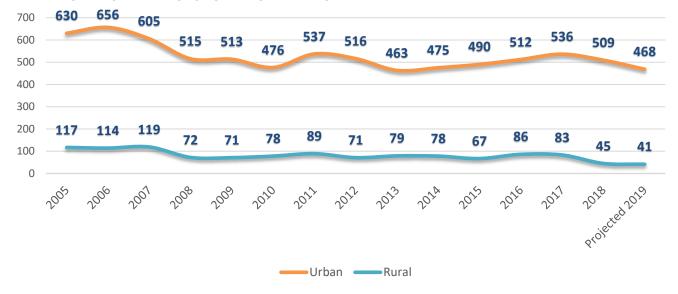
In 2019, the State experienced 560 fatalities on its roadways, the lowest total since 2014. This resulted in a 0.5 percent decrease in overall traffic fatalities from the previous year (2018). The graph depicts overall traffic fatalities in New Jersey as well as the 5-year moving average of those fatalities.

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



Fatalities by roadway function are shown in the chart below. The figures from 2019 are projections based on 2018 figures. Both Urban and Rural roadway fatalities in 2018 decreased from 2017 by 5 percent and 45 percent, respectively.

#### FATALITIES BY ROADWAY FUNCTION\* - RURAL AND URBAN



<sup>\*</sup> Excludes undefined Roadway Function.

Comparing fatalities by operator category in 2019, *Driver* (213 or 38% of total), *Passenger* (74 or 13.2% of total) and *Bicyclist* (11 or 2% of total) fatalities decreased compared to the 2018 total fatalities (-5.3%, -20.4% and -35.3% respectively). *Pedestrian* fatalities (179 or 32% of total) increased by 2.3 percent from 2018. *Motorcyclist* (83 or 14.8% of total) increased by 56.6 percent compared to 2018.

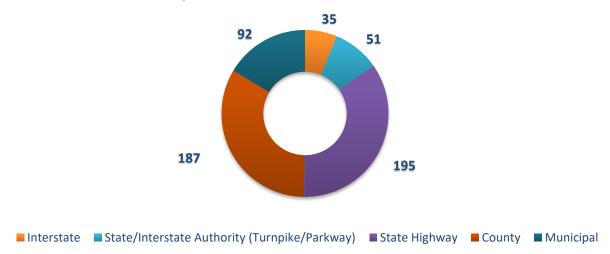
|                 | TRAFFIC RELATED FATALITIES BY CATEGORY, 2010 - 2019 |      |      |      |      |      |      |      |      |      |
|-----------------|---|------|------|------|------|------|------|------|------|------|
|                 | 2010  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| DRIVER          | 233   | 270  | 239  | 248  | 235  | 226  | 268  | 259  | 225  | 213  |
| PASSENGER       | 101   | 105  | 103  | 95   | 80   | 96   | 83   | 83   | 93   | 74   |
| PEDESTRIAN      | 139   | 142  | 156  | 129  | 168  | 172  | 162  | 183  | 175  | 179  |
| BICYCLIST       | 13  | 17   | 14   | 14   | 11   | 18   | 18   | 16   | 17   | 11   |
| MOTORCYCLIST    | 70  | 93   | 77   | 56   | 62   | 50   | 71   | 83   | 53   | 83   |
| NJ STATE TOTALS | 556   | 627  | 589  | 542  | 556  | 562  | 602  | 624  | 563  | 560  |
| FATAL CRASHES   | 530   | 586  | 553  | 508  | 523  | 521  | 570  | 591  | 525  | 526  |

In 2019, pedestrian fatalities were the most prevalent in Camden County (24) accounting for 13.4 percent of all pedestrians killed in the State. The County with the highest number of motor vehicle fatalities (48) was Middlesex County and was comprised mostly of driver fatalities followed by motor vehicle occupants. The most bicycle fatalities (2) occurred in Hudson, Middlesex and Passaic Counties. Atlantic, Burlington and Monmouth Counties had the highest number of motorcycle fatalities in 2019 (9).

|                 |        | 2019 VICTIM | CLASSIFICATIO | N BY COUNTY |              |       |             |
|-----------------|--------|-------------|---------------|-------------|--------------|-------|-------------|
|                 | DRIVER | PASSENGER   | PEDESTRIAN    | BICYCLIST   | MOTORCYCLIST | TOTAL | %<br>CHANGE |
| ATLANTIC        | 7      | 4           | 12            | 0           | 9            | 32    | 6.7%        |
| BERGEN          | 12     | 5           | 18            | 1           | 4            | 40    | 25.0%       |
| BURLINGTON      | 12     | 4           | 8             | 0           | 9            | 33    | -25.0%      |
| CAMDEN          | 14     | 4           | 24            | 0           | 4            | 46    | 0.0%        |
| CAPE MAY        | 5      | 0           | 3             | 1           | 4            | 13    | 30.0%       |
| CUMBERLAND      | 12     | 1           | 4             | 0           | 3            | 20    | 5.3%        |
| ESSEX           | 8      | 2           | 19            | 0           | 7            | 36    | -20.0%      |
| GLOUCESTER      | 22     | 7           | 10            | 1           | 2            | 42    | 10.5%       |
| HUDSON          | 5      | 4           | 5             | 2           | 3            | 19    | -13.6%      |
| HUNTERDON       | 3      | 1           | 1             | 0           | 1            | 6     | 100.0%      |
| MERCER          | 8      | 2           | 9             | 1           | 1            | 21    | -27.6%      |
| MIDDLESEX       | 23     | 10          | 9             | 2           | 4            | 48    | -4.0%       |
| MONMOUTH        | 12     | 3           | 11            | 1           | 9            | 36    | 24.1%       |
| MORRIS          | 11     | 9           | 7             | 0           | 3            | 30    | 7.1%        |
| OCEAN           | 21     | 5           | 10            | 0           | 4            | 40    | 2.6%        |
| PASSAIC         | 11     | 2           | 10            | 2           | 6            | 31    | 47.6%       |
| SALEM           | 5      | 1           | 1             | 0           | 2            | 9     | 0.0%        |
| SOMERSET        | 5      | 2           | 4             | 0           | 0            | 11    | -52.2%      |
| SUSSEX          | 9      | 2           | 1             | 0           | 2            | 14    | 16.7%       |
| UNION           | 6      | 5           | 11            | 0           | 1            | 23    | -14.8%      |
| WARREN          | 2      | 1           | 2             | 0           | 5            | 10    | 42.9%       |
| NJ STATE TOTALS | 213    | 74          | 179           | 11          | 83           | 560   |             |

State Highways experienced the highest total of roadway fatalities (195 or 35%) in the State followed by County roadways (187 or 33%).

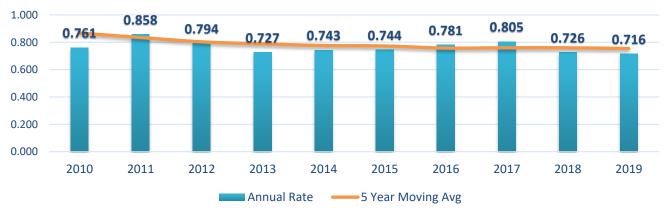
#### **FATALITIES BY ROADWAY SYSTEM\*, 2019**



<sup>\*</sup> Excludes undefined Roadway Function.

The statewide fatality rate per 100 million vehicle miles traveled decreased from 0.726 in 2018 to 0.716 in 2019. The fatality rate for 2019 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 2018 decreased 2.41 percent from 86,168 in 2017 to 84,095. Preliminary numbers for 2019 injuries are showing a 12.23 percent decrease (73,811) at the time of this report, however, that total is expected to increase as the remaining crash records are processed.

TOTAL INJURIES SUSTAINED IN MOTOR VEHICLE CRASHES



The Federal Highway Administration's (FHWA) Safety Performance Management Measures Final Rule (23 CFR 490) and the National Highway Traffic Safety Administration's (NHTSA) Uniform Procedures for State Highway Safety Grants Program Interim Final Rule (23 CFR 1300) established a single, national definition for States to report serious injuries per the Model Minimum Uniform Crash Criteria (MMUCC) 4th Edition "Suspected Serious Injury (A)" attribute found in the "Injury Status" element.

States were required to comply with the new definition by April 15, 2019. However, New Jersey began using the MMUCC 4th Edition definition and attribute beginning January 1, 2019 in order to have a complete and consistent crash data file for the entire 2019 calendar year.

Changes in the NJTR-1 (police accident report) form implemented on January 1, 2019, to re-define the injury classifications on the report are as follows:

| NJTR - 1 INJURY SEVERITY REVISION - 2019 |                          |  |  |  |  |  |  |  |
|--|--------------------------|--|--|--|--|--|--|--|
| SEVERITY PRE-2019 SEVERITY POST-2019     |                          |  |  |  |  |  |  |  |
| FATAL FATAL INJURY                       |                          |  |  |  |  |  |  |  |
| INCAPACITAING                            | SUSPECTED SERIOUS INJURY |  |  |  |  |  |  |  |
| MODERATE INJURY                          | SUSPECTED MINOR INJURY   |  |  |  |  |  |  |  |
| COMPLAIN OF PAIN                         | POSSIBLE INJURY          |  |  |  |  |  |  |  |
|  | NO APPARENT INJURY       |  |  |  |  |  |  |  |

Serious injuries sustained on New Jersey's roadways in 2018 (1,284) increased 12.93 percent from 1,137 in 2017. At the time of this report, total Suspected Serious Injuries in 2019 increased to 2,519. DHTS predicts the updated severity labels/definitions and the interpretation of injuries sustained in the crash by the reporting officer led to this large increase. An updated curriculum component was added to the NJTR-1 Refresher Trainings pertaining to the Final Rule in FY2020 and will continue in future years.

#### SERIOUS INJURIES, ANNUAL AND 5 - YEAR MOVING AVERAGE



Most 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. Several additional contributing circumstances were added to New Jersey's Police Accident Report in 2017. The elements Failed to Obey Stop Sign, Other Distraction Inside Vehicle, Other Distraction Outside Vehicle, Distracted – Hand Held Electronic Device, Distracted – Hands Free Electronic Device, Distracted by Passenger, Separated Load/Spill, Failure to Remove Snow/Ice, Traffic Congestion – Regular Congestion, and Traffic Congestion – Prior Incident were added to the report.

For Driver Actions, *Driver Inattention* is cited as the State's largest contributing circumstance in crashes annually and was a cited reason in 25.6 percent of all vehicles involved in 2018, down from 26.3 percent in 2017. However, DI is cited in 49.6 percent of all crash events in 2018, down from 51.2 percent in 2017.

*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.

Over the past 5 years (2014-2018), *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 cited circumstances in crashes, followed by *Steering* and *Wheels* malfunction.

| TOP CONTRIBUTING DRIV                              | ER ACTION | S IN CRAS | TOP CONTRIBUTING DRIVER ACTIONS IN CRASHES, 2014 - 2018 |         |         |         |  |  |  |  |  |
|--|-----------|-----------|---|---------|---------|---------|--|--|--|--|--|
| CONTRIBUTING DRIVER ACTION                         | 2014      | 2015      | 2016  | 2017    | 2018    | TOTAL   |  |  |  |  |  |
| Driver Inattention                                 | 151,034   | 142,107   | 147,572   | 138,618 | 137,024 | 716,355 |  |  |  |  |  |
| Following Too Closely                              | 30,783    | 32,518    | 37,402  | 38,299  | 38,842  | 177,844 |  |  |  |  |  |
| Failed to Yield Right of Way to Vehicle/Pedestrian | 21,522    | 21,851    | 24,027  | 24,177  | 24,895  | 116,472 |  |  |  |  |  |
| Unsafe Speed                                       | 17,549    | 17,610    | 15,884  | 16,126  | 16,931  | 84,100  |  |  |  |  |  |
| Improper Lane Change                               | 12,568    | 14,026    | 15,589  | 16,572  | 17,023  | 75,778  |  |  |  |  |  |
| Backing Unsafely                                   | 19,572    | 10,360    | 10,853  | 10,667  | 10,807  | 62,259  |  |  |  |  |  |
| Improper Turning                                   | 8,914     | 8,396     | 9,353   | 9,205   | 9,315   | 45,183  |  |  |  |  |  |
| Other Driver Action                                | 10,440    | 9,839     | 9,730   | 7,833   | 7,146   | 44,988  |  |  |  |  |  |
| Improper Passing                                   | 5,817     | 5,913     | 6,525   | 6,584   | 6,699   | 31,538  |  |  |  |  |  |
| Failed to Obey Traffic Control Device              | 8,793     | 9,165     | 8,843   | 0       | 0       | 26,801  |  |  |  |  |  |
| Failed to Obey Traffic Signal                      | 0         | 0         | 0   | 6,624   | 6,297   | 12,921  |  |  |  |  |  |
| Improper Parking                                   | 3,458     | 2,014     | 2,187   | 2,085   | 2,152   | 11,896  |  |  |  |  |  |
| Failure To Keep Right                              | 2,380     | 2,189     | 2,354   | 2,185   | 2,231   | 11,339  |  |  |  |  |  |
| Failed to Obey Stop Sign                           | 0         | 0         | 0   | 4,102   | 4,578   | 8,680   |  |  |  |  |  |
| Other Distraction Inside Vehicle                   | 0         | 0         | 0   | 2,502   | 2,381   | 4,883   |  |  |  |  |  |
| Other Distraction Outside Vehicle                  | 0         | 0         | 0   | 1,565   | 1,492   | 3,057   |  |  |  |  |  |
| Wrong Way  | 612       | 581       | 605   | 619     | 602     | 3,019   |  |  |  |  |  |
| Distracted - Hand Held Electronic Device           | 0         | 0         | 0   | 1,148   | 1,008   | 2,156   |  |  |  |  |  |
| Improper Use/Failed to Use Turn Signal             | 448       | 427       | 444   | 444     | 380     | 2,143   |  |  |  |  |  |
| Distracted by Passenger                            | 0         | 0         | 0   | 404     | 356     | 760     |  |  |  |  |  |
| Distracted - Hands Free Electronic Device          | 0         | 0         | 0   | 365     | 375     | 740     |  |  |  |  |  |
| Improper Use/No Lights                             | 142       | 121       | 140   | 122     | 134     | 659     |  |  |  |  |  |

| TOP CONTRIBUTING VEHIC               | CLE FACTOR | RS IN CRAS | SHES, 2014 | - 2018 |       |       |
|--------------------------------------|------------|------------|------------|--------|-------|-------|
| CONTRIBUTING VEHICLE FACTOR          | 2014       | 2015       | 2016       | 2017   | 2018  | TOTAL |
| Brakes                               | 1,647      | 1,513      | 1,572      | 1,604  | 1,669 | 8,005 |
| Tires                                | 950        | 1,053      | 1,110      | 1,057  | 1,082 | 5,252 |
| Steering                             | 460        | 493        | 499        | 546    | 559   | 2,557 |
| Wheels                               | 326        | 359        | 386        | 366    | 352   | 1,789 |
| Separated Load / Spill               | 0          | 0          | 0          | 375    | 417   | 792   |
| Windows/ Windshield                  | 151        | 109        | 134        | 101    | 137   | 632   |
| Vehicle Coupling/Hitch/Safety Chains | 146        | 128        | 118        | 99     | 100   | 591   |
| Defective Lights                     | 81         | 81         | 62         | 60     | 70    | 354   |
| Failure to Remove Snow / Ice         | 0          | 0          | 0          | 229    | 100   | 329   |
| Mirrors                              | 33         | 28         | 27         | 35     | 32    | 155   |
| Wipers                               | 14         | 11         | 16         | 6      | 15    | 62    |
| Other Vehicle Factor                 | 2,398      | 2,082      | 2,075      | 1,639  | 1,541 | 9,735 |

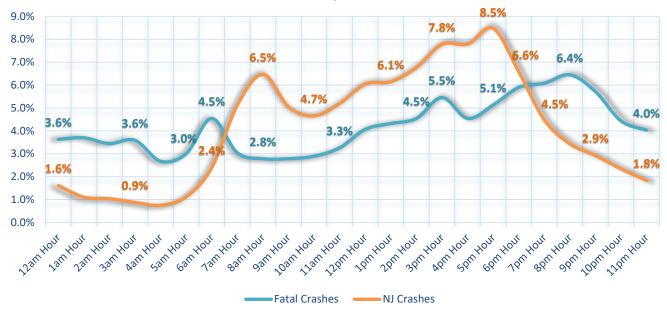
Road and Environmental factors are the second leading factor in motor vehicle crashes statewide. *Animals in Roadway* and *Road Surface Condition*, consisting of snowy, slushy, icy, wet, sandy and oily, were the two leading Road/Environmental factors in crashes.

| TOP CONTRIBUTING ROAD / ENVIRONMENTAL FACTORS IN CRASHES, 2014 - 2018 |        |        |       |        |        |        |  |  |
|---|--------|--------|-------|--------|--------|--------|--|--|
| CONTRIBUTING ROAD / ENVIRONMENTAL FACTOR                              | 2014   | 2015   | 2016  | 2017   | 2018   | TOTAL  |  |  |
| Road Surface Condition  | 13,109 | 11,163 | 7,107 | 7,847  | 9,524  | 48,750 |  |  |
| Animals in Roadway  | 8,958  | 8,746  | 9,779 | 10,239 | 10,492 | 48,214 |  |  |
| Obstruction/Debris In Road  | 2,171  | 2,091  | 2,171 | 1,856  | 1,971  | 10,260 |  |  |
| Sunglare  | 1,527  | 1,324  | 1,804 | 1,449  | 1,352  | 7,456  |  |  |
| Physical Obstructions (viewing / sight lines)                         | 853    | 629    | 660   | 630    | 687    | 3,459  |  |  |
| Other Roadway Factors   | 633    | 496    | 504   | 526    | 680    | 2,839  |  |  |
| Ruts/ Holes/ Bumps  | 676    | 397    | 239   | 308    | 474    | 2,094  |  |  |
| Traffic Congestion - Regular Congestion                               | 0      | 0      | 0     | 417    | 644    | 1,061  |  |  |
| Traffic Congestion - Prior Incident                                   | 0      | 0      | 0     | 250    | 251    | 501    |  |  |
| Control Device Defective or Missing                                   | 96     | 79     | 72    | 60     | 83     | 390    |  |  |
| Improper Work Zone  | 43     | 32     | 24    | 47     | 47     | 193    |  |  |
| Improper/Inadequate Lane Markings                                     | 35     | 39     | 26    | 35     | 41     | 176    |  |  |

Note: Contributing Circumstances are sorted on 5-year Total values.

Most crashes taking place on New Jersey's roadways occur between the hours of 7am and 6pm. Over the last five years, 76.1 percent of all crashes occurred between those hours. Compared to total crashes over the last 5 years, only 48.7 percent of fatal crashes took place between 7am and 6pm, the rest occurring during nighttime hours. Over the past 5 years, the most fatal crashes occurred during the 6pm to 8pm interval (18.4%).

NJ CRASH % VERSUS FATAL CRASH % BY TIME OF DAY, 2014 - 2018



Statewide motor vehicle crashes by crash type show that *Same Direction – Rear End* crashes remain the most common crash type, which is also most crash types when one is *Following Too Closely* (2nd most cited contributing circumstance).

| TOP CRAS                             | H TYPES, 2 | 014 - 2018 |        |        |        |         |
|--------------------------------------|------------|------------|--------|--------|--------|---------|
| CRASH TYPE                           | 2014       | 2015       | 2016   | 2017   | 2018   | TOTAL   |
| SAME DIRECTION – REAR END            | 80,529     | 83,986     | 88,474 | 87,262 | 87,338 | 427,589 |
| SAME DIRECTION – SIDE SWIPE          | 35,866     | 38,370     | 40,769 | 41,225 | 42,793 | 199,023 |
| RIGHT ANGLE                          | 36,292     | 35,731     | 37,771 | 37,411 | 38,501 | 185,706 |
| STRUCK PARKED VEHICLE                | 40,348     | 31,962     | 32,269 | 30,622 | 31,109 | 166,310 |
| FIXED OBJECT                         | 34,331     | 32,085     | 29,769 | 30,619 | 31,918 | 158,722 |
| BACKING                              | 24,365     | 11,126     | 11,797 | 12,192 | 12,684 | 72,164  |
| ANIMAL                               | 9,104      | 8,958      | 10,072 | 10,337 | 10,747 | 49,218  |
| LEFT TURN / U TURN                   | 6,098      | 6,538      | 6,687  | 6,975  | 6,555  | 32,853  |
| PEDESTRIAN                           | 4,829      | 4,406      | 4,528  | 4,696  | 4,393  | 22,852  |
| OPPOSITE DIRECTION - HEAD ON/ANGULAR | 4,629      | 4,450      | 4,363  | 4,093  | 4,062  | 21,597  |
| OTHER                                | 3,209      | 3,860      | 3,759  | 2,254  | 2,214  | 15,296  |
| NON-FIXED OBJECT                     | 3,059      | 2,997      | 2,721  | 2,954  | 3,287  | 15,018  |
| OPPOSITE DIRECTION - SIDE SWIPE      | 2,846      | 2,526      | 2,621  | 2,527  | 2,776  | 13,296  |
| PEDALCYCLIST                         | 1,737      | 1,791      | 1,813  | 1,921  | 1,621  | 8,883   |
| OVERTURNED                           | 1,610      | 1,681      | 1,502  | 1,424  | 1,392  | 7,609   |
| ENCROACHMENT                         | 869        | 812        | 795    | 986    | 1,026  | 4,488   |
| RAILCAR-VEHICLE                      | 27         | 17         | 24     | 23     | 22     | 113     |

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                         | MOTOR VEHICLE CRASH TRENDS, 2014 - 2018 |         |         |         |         |           |  |  |
|---------------------------------------|---|---------|---------|---------|---------|-----------|--|--|
| CRASH RECORD TOTALS                   | 2014                                    | 2015    | 2016    | 2017    | 2018    | TOTAL     |  |  |
| TOTAL CRASH RECORDS                   | 289,873                                 | 271,445 | 279,874 | 277,664 | 282,590 | 1,401,446 |  |  |
| TOTAL VEHICLES INVOLVED IN CRASHES    | 546,459                                 | 512,773 | 532,054 | 527,040 | 535,266 | 2,653,592 |  |  |
| TOTAL DRIVERS INVOLVED IN CRASHES     | 546,459                                 | 512,773 | 532,054 | 527,040 | 535,266 | 2,653,592 |  |  |
| TOTAL OCCUPANTS INVOLVED IN CRASHES   | 643,233                                 | 624,252 | 642,800 | 639,602 | 645,010 | 3,194,897 |  |  |
| TOTAL PEDESTRIANS INVOLVED IN CRASHES | 7,775                                   | 7,303   | 7,334   | 7,255   | 7,082   | 36,749    |  |  |
| PROGRAM AREA                          | 2014                                    | 2015    | 2016    | 2017    | 2018    | TOTAL     |  |  |
| Distracted Driving Crashes            | 151,034                                 | 142,107 | 147,572 | 142,036 | 140,227 | 722,976   |  |  |
| Single Vehicle Crashes                | 54,246                                  | 51,844  | 50,588  | 50,549  | 52,268  | 259,495   |  |  |
| Older Driver Involved Crashes         | 47,779                                  | 43,729  | 46,265  | 46,614  | 48,619  | 233,006   |  |  |
| Young Driver Involved Crashes         | 36,040                                  | 35,942  | 36,352  | 34,501  | 34,338  | 177,173   |  |  |
| Curve Related Crashes                 | 26,703                                  | 26,004  | 25,542  | 26,261  | 26,463  | 130,973   |  |  |
| Run Off Road Crashes                  | 22,468                                  | 23,465  | 21,837  | 21,768  | 22,109  | 111,647   |  |  |
| Unsafe Speed Involved Crashes         | 17,549                                  | 17,610  | 15,884  | 16,133  | 16,931  | 84,107    |  |  |
| Live Animal Crashes                   | 10,274                                  | 10,114  | 11,270  | 10,883  | 11,306  | 53,847    |  |  |
| Alcohol Involved Crashes              | 7,595                                   | 7,101   | 7,007   | 7,215   | 7,061   | 35,979    |  |  |
| Head-On Collision Crashes             | 7,475                                   | 6,976   | 6,984   | 6,620   | 6,838   | 34,893    |  |  |
| Work Zone Related Crashes             | 6,594                                   | 5,221   | 4,454   | 4,054   | 4,091   | 24,414    |  |  |
| Pedestrian Involved Crashes           | 5,214                                   | 4,709   | 4,840   | 4,997   | 4,393   | 24,153    |  |  |
| Unrestrained Crashes                  | 4,376                                   | 3,741   | 3,661   | 3,474   | 3,495   | 18,747    |  |  |
| Drowsy Driving Crashes                | 2,740                                   | 2,753   | 2,834   | 3,382   | 3,101   | 14,810    |  |  |
| Motorcycle Involved Crashes           | 2,193                                   | 2,300   | 2,188   | 2,186   | 1,989   | 10,856    |  |  |
| Bicyclists Involved Crashes           | 1,863                                   | 1,959   | 1,923   | 1,931   | 1,718   | 9,394     |  |  |
| Drugged Driving Crashes               | 988                                     | 1,119   | 1,129   | 1,610   | 1,668   | 6,514     |  |  |

#### PERFORMANCE REPORT

Outcomes from the Coordination of the Highway Safety Plan and Strategic Highway Safety Plan

#### Fatalities, Serious Injuries and Fatality Rate

The State met its goal of limiting the forecasted increase of total fatalities of 1.88 percent from 575 to 586 by 2018. The 2014-2018 average of total fatalities is 581.2. New Jersey saw a 9.8 percent reduction in roadway fatalities from 2017 to 2018, and preliminary totals for 2019 show a 0.5 percent reduction. Driver fatalities accounted for over 38 percent of all fatalities in 2019 and were reduced by 5.3 percent from 2018. The second largest category of fatalities is represented by pedestrians accounting for 32 percent of all statewide fatalities in 2019.

Serious injuries sustained on New Jersey's roadways in 2018 (1,284) increased 12.93 percent from 1,137 in 2017. The State did not meet its goal of reducing serious injuries by 7.22 percent from 1,191 to 1,105 by 2018. The 2014-2018 average of total serious injuries is 1,113.6.

The goal to limit the forecasted increase of fatalities/vehicle miles traveled (VMT) rate by 0.59 percent from 0.773 to 0.778 by 2018 was met. The 2014-2018 average of fatalities/VMT is .758.

From a global perspective, the programs laid out in the 2021 HSP will target enforcement and educational programs in a comprehensive data-driven approach, incorporating the overriding goals of the 2020 SHSP, with an eye towards engendering a reduction in statewide fatalities and serious injuries.

#### **Occupant Protection**

The State met its goal of obtaining a seatbelt usage rate of no less than 92.15 percent by 2018. The 2014-2018 average usage rate was 92.29 percent. However, in 2019 the usage rate for front seat occupants in passenger motor vehicles declined to 90.23 percent, a decrease of 4.5 percent from the previous year (2018). Driver usage rates decreased by 4.05 percent from 94.46 percent in 2018 and front-seat passenger rates decreased by 5.06 percent from 94.47 percent in 2018.

The State did not meet its goal of reducing unrestrained fatalities by 19.29 percent from 135.8 to 109.6 by 2018. The 2014-2018 average of unrestrained fatalities is 125.4. Preliminary numbers for 2019 indicate a decrease in the number of unrestrained fatalities from 126 (2018) to 122 (2019). Slightly over 42 percent of occupants killed in crashes were unbuckled in 2018, up from 36 percent in 2017.

The 2021 HSP will continue to provide funds for annual *Click It or Ticket* seat belt mobilization, with a special emphasis on counties with lower seat belt usage rates and higher rates of unrestrained injury crashes. Year-round occupant protection enforcement efforts will also be expanded to include statewide, county, and large municipal law enforcement agencies in these targeted areas. New Jersey's strong commitment to child passenger safety will continue as educational programs will 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 did not meet its goal of reducing total alcohol related fatalities by 24.2 percent from 155.6 to 117.9 by 2018. The 2014-2018 average of alcohol related fatalities is 129.6. A reduction in the number of alcohol impaired driving fatalities from 125 in 2018 to 122 in 2019 is forecasted. The overall percentage of alcohol impaired driving deaths is decreasing; 21.8 percent of all fatalities in 2018 involved alcohol down from 22.2 percent in 2017.

The State met its goal of limiting the forecasted increase of drug involved fatalities of 1.8 percent from 111 to 113 by 2018. The 2014-2018 average of drug involved fatalities is 90. At the time of this report, preliminary figures for drug involved fatalities in 2019 indicate an increase of 30 percent (73 in 2018 to 95 in 2019).

The State did not meet its goal of limiting the forecasted increase in drug involved crashes by 1.31 percent from 1,085.6 to 1,099.8 by 2018. The 2014-2018 average of drug involved crashes is 1,303. 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 also modified its police accident report to include a second driver physical status field (in 2017). This allows reporting officers to indicate illicit drug or medication use in addition to other statuses. NJ expects to see an increase in detected impairment, therefore a slight increase in drug involved crashes are predicted.

The 2021 HSP includes a multi-faceted approach to the issue of impaired driving. High visibility enforcement campaigns will be conducted in targeted data-driven locations during the summer and end-of-year national impaired driving mobilization periods. Underage drinking initiatives will 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 be provided to the law enforcement community. New Jersey has a robust DRE Call-Out Program, and efforts will be made in FY2021 to identify additional new counties to come on board with the program. To better understand the current state of affairs, work is underway to study DWI court dismissals in the state, and why they are occurring, and to establish a baseline for drug impaired driving crashes, in advance of the possible legalization of marijuana in New Jersey. Programmatic efforts in FY2021 will also include supporting the roll out of a new Alcotest breath test unit in the state, enhanced data collection, oversight, and reporting tools for DRE's, and the critically important DRE validation court case.

#### Distracted Driving

The State did not meet its goal of limiting the forecasted increase of distracted driving related fatalities of 57.9 percent from 79.6 to 125.7 by 2018. The 2014-2018 average of distracted driving related fatalities is 156.6. The previous figures being used to determine distracted driving fatalities was only counting motor vehicle occupants and was updated in the FY2020 plan to include all motorists as well as non-motorists. Goals set in the FY2018 and FY2019 Plans are also only counting motorists, therefore are not comparable to goals set from FY2020 forward. Crashes related to driver inattention decreased in 2018 to 140,227 from 142,036 (2017). Driver inattention remains the most significant cause of fatal and incapacitating crashes in New Jersey. The State did not meet its goal of reducing distracted driving related crashes 5.29 percent from 148,972.8 to 141,092.8 by 2018. The 2014-2018 average of distracted driving related crashes is 144,595.

New Jersey is fortunate to qualify for enhanced Federal Section 405e funding for distracted driving programs. As such, efforts in FY2021 will include a major enforcement blitz that will begin during the April national mobilization and will continue on a sustained basis in the months that follow. Grant funding will be offered on a targeted, data driven basis in counties and municipalities with documented high rates of crashes with a driver distraction contributing circumstance. To raise awareness about this critical issue, a major public information program encompassing paid, earned, and social media will be carried out in conjunction with the enforcement crackdown. The paid media campaign will focus on delivering this important messaging to at-risk, diverse populations.

#### **Speed**

The State met its goal of reducing speed related fatalities by 9.54 percent from 135.2 to 122.3 by 2018. The 2014-2018 average of speed related fatalities is 119.8. The State met its goal of reducing speed related crashes by 4.07 percent from 17,909.8 to 17,180.8 by 2018. The 2014-2018 average of speed related crashes is 16,821.4.

In 2018, speeding was a factor in approximately 6 percent of all traffic crashes and over 20 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 2021 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 as well as to NJ State Police for sustained radar speed enforcement on major highways.

#### Other Vulnerable Road Users - Motorcycles

The State did not meet its goal of reducing motorcycle fatalities by 25.67 percent from 67.4 to 50.1 by 2018. The 2014-2018 average of motorcycle fatalities is 63.8. Motorcycle deaths accounted for 9 percent of all motor vehicle fatalities in the State in 2018 with a preliminary estimate of 14.5 percent of all fatalities in 2019. There have been large year-to-year fluctuations in motorcycle fatalities over the last several years. There was a 42 percent increase in motorcycle fatalities from 50 in 2015 to 71 in 2016, and a 17 percent increase from 71 in 2016 to 83 in 2017, and a 36 percent decrease from 83 in 2017 to 53 in 2018. The preliminary figures for 2019 is 83, a 56 percent increase. In addition, the goal of reducing unhelmeted motorcycle fatalities by 1.85 percent from 5.4 to 5.3 was achieved. The 2014-2018 average of unhelmeted motorcycle fatalities is 5. However, according to preliminary figures, the number of unhelmeted fatalities is expected to increase from 7 in 2018 to 8 in 2019.

In an effort to reduce motorcycle related crashes and fatalities, the 2021 HSP will continue efforts to promote the *Share the Road* message to the motoring public and support the State's motorcycle safety education programs offered by the Motor Vehicle Commission. Two dozen recently certified Quality Assurance Specialists will also work in FY2021 to ensure that Motorcycle Safety Foundation training programs are delivered in a consistent and effective fashion.

#### Other Vulnerable Road Users - Younger Drivers (16-20 Years of Age)

The State did not meet its goal of reducing young driver involved fatalities by 7.26 percent from 62 to 57.5 by 2018. The 2014-2018 average of young driver involved fatalities is 60.6. Motor vehicle fatalities remain the leading cause of death among teenage males and females in the State. Young drivers were involved in nearly 11 percent of total motor vehicle fatalities in 2019, up from 9 percent in 2018. Preliminary figures indicate fatalities involving younger drivers increased 13 percent from 2018 to 2019, however, forecasted estimates are projected to decline by 2022.

Extensive public outreach and awareness efforts planned in FY2020 marking the anniversary of New Jersey's GDL laws were postponed, so these efforts will instead be carried out FY2021. In addition, there will be dedicated social media outreach, special programs on high school and college campuses, ongoing Parent/Teen Driver Orientation programs, and sustained GDL enforcement and education efforts by NJ State Police.

#### Pedestrians and Bicycles

The State did not meet its goal of limiting the forecasted increase of pedestrian fatalities by 11.6 percent from 153 to 170.7 by 2018. The 2014-2018 average of pedestrian fatalities is 171.8. Reducing pedestrian injuries and fatalities continues to be a challenge in New Jersey. 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 2018 from 183 in 2017 to 175, however, New Jersey saw a 2.3 percent increase in pedestrian fatalities in 2019 (179).

The State met its goal of limiting the forecasted increase of bicyclist fatalities by 14 percent from 14.8 to 16.9 by 2018. The 2014-2018 average of bicyclist fatalities is 15.8. The overall number of bicycle fatalities decreased 35 percent from 17 in 2018 to 11 in 2019.

The 2020 Traffic Safety Symposium, postponed from the spring of 2020, will take place during FY2021 instead and will place a statewide focus on pedestrian safety. Other efforts in FY2021 will include extensive, data-driven pedestrian safety enforcement grants (both State and Federally funded). Locations to be offered grant support will be selected based on analysis by the Crash Analysis Tool as well as previously documented pedestrian crash weighting factors. Efforts will also be made in 2021 to identify new pedestrian safety enforcement training tools for law enforcement and to re-engage some of the larger cities in the state in the pedestrian safety program. DHTS

will continue partnering with other agencies invested in this issue such as the New Jersey Bicycle and Pedestrian Advisory Council and the NJTPA pedestrian safety Street Smart campaign.

#### Other Vulnerable Road Users - Older Drivers (65+)

The State did not meet its goal of reducing older driver fatalities by 6.81 percent from 64.6 to 60.2 by 2018. The 2014-2018 average of older driver fatalities is 65.2.

Older drivers accounted for over 26 percent of all driver fatalities in the State in 2018 and preliminary estimates are showing them to be 21 percent of all driver fatalities in 2019. Older driver fatalities in 2018 remained consistent with 2017 (72 fatalities) and the preliminary figure for 2019 is 62, a 13.9 percent decline. 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 2021 HSP will include partnering with AAA on the *Car Fit* program, which assists older drivers in maintaining a safe, comfortable position while driving. DHTS will also gage the attitude of older drivers towards traffic safety as part of a renewed statewide traffic safety attitudes and awareness survey.

#### Other Vulnerable Road Users - Work Zone Safety

The State met its goal of reducing work zone related crashes by 15.7 percent from 6,142.2 to 5,178 by 2018. The 2014-2018 average work zone related crashes are 4,882.8.

Work zone safety continues to be a priority for traffic engineering professionals and highway agencies. Awareness of proper work zone setup, maintenance, personal protection, and driver negotiation are all factors to be considered in establishing a safe work zone. In 2021 DHTS will support ongoing work zone training activities and the annual Work Zone Conference through funding a comprehensive police training grant.

Work zone related crashes decreased by 9 percent from 2016 to 2017 and slightly increased by 0.9 percent from 2017 to 2018.

#### Social Media Engagements

The State met its goal of having at least 100 social media engagements in FY2020. More than 200 social media posts via Twitter, Facebook and Instagram were produced on a variety of subjects including winter driving, child passenger safety, and "congestion suggestions." Each post received hundreds of interactions and shares and reached a sizable audience of followers.

Public information is the cornerstone of our highway safety efforts. 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 will look to expand its social media presence in FY2021 with an eye towards getting important traffic safety messages out to all segments of the community and furthering the division's mission. Twitter, Facebook and Instagram pages will be used in such a way that the public will be engaged and informed about the division's campaigns and programs including major events such as the *Click it or Ticket*, *U Drive U Text U Pay*, and *Drive Sober or Get Pulled Over* campaigns.

After an absence of several years, DHTS plans to contract for a statewide traffic safety attitudes and awareness survey in FY2021, the results of which should help tailor social media messaging moving forward.

#### Counties Supported in Community Traffic Safety Programs

New Jersey met its goal of supporting 21 counties with a Community Traffic Safety Program (CTSP). The CTSP members share a vision of saving lives and preventing injuries caused by traffic related issues and their associated costs to society. Each CTSP member 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 services organizations, injury prevention professionals, educational institutions, businesses, hospital and emergency medical systems, engineers, and other community stakeholders are brought together to develop county-wide traffic safety education programs based on analysis of their crash data.

DHTS will continue to provide resources to assist CTSPs in each of the 21 counties of New Jersey and will prioritize support based on analyses identifying those counties/communities with high crash and fatality rates and/or existence of traffic safety related challenges. CTSP's will be encouraged to target programming and resources into at-risk segments of their communities.

#### **Police Accident Report Trainings**

The State expects to meet its goal of conducting 12 Police Accident Report training events in FY2020. Additional classes will be scheduled for FY2021. The State PAR (NJTR-1) collects a large volume of data for all reportable crashes (270K+/Year). It is critical that the reports be completed properly, so training and education is provided to law enforcement agencies on the proper methods of collecting data to ensure the most accurate and complete reports are submitted. A 5-hour training session on how to properly complete the NJTR-1 Crash Report is offered through the Comprehensive Police Training Grant.

#### Registered Crash Analysis Tool - Numetric Users

The State met its goal of reaching 250 unique users within the Crash Analysis Tool. At both the State and local level, the DHTS Crash Analysis Tool is used to analyze crash data. The Crash Analysis Tool is a support tool, maintained with the assistance of 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 Crash Analysis Tool constantly receives new requests for access and has been expanded recently to include new modes of functionality and analysis.

#### PERFORMANCE GOALS

It is the ultimate goal of the NJ Division of Highway Traffic Safety to reduce the number of fatalities and serious injuries occurring on New Jersey's roadways through enforcement, education and encouragement in a variety of safety strategies. In some cases, the performance goals shown are reflected as increases over the moving average cycle, namely motorcycle and unhelmeted motorcycle fatalities, pedestrian fatalities, older driver involved fatalities and drug involved crashes. 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 |                                       |   |                                  |  |                                |  |  |  |  |
|------------------------|---------------------------------------|---|----------------------------------|--|--------------------------------|--|--|--|--|
| UMBER OF TRAFFIC F     | ATALITIES*                            |   |                                  |  |                                |  |  |  |  |
| BASELINE VALUE         | 581.2                                 | BASELINE START YEAR   | 2014                             | BASELINE END YEAR  | 2018                           |  |  |  |  |
| TARGET VALUE           | 574.0                                 | TARGET START YEAR   | 2017                             | TARGET END YEAR  | 2021                           |  |  |  |  |
| GOAL STATEMENT         | Reduce total ro                       | adway fatalities by 1.5% from 581.2   | (2014-2018 av                    | verage) to 574 (2017-2021 average  | e).                            |  |  |  |  |
| JUSTIFICATION          | calculated leadi<br>using this rate t | in fatalities from year-to-year was eving up to the base period. Using this no determine 5-year rolling averages for all annual fatalities by 2.4 (from 2019) | nethod, the predor the target ye | dicted figures for 2019 and 2020 we<br>ears. With these forecasts, New Jer | re determined<br>sey expects a |  |  |  |  |

| NUMBER OF SERIOUS I            | NJURIES*  |  |  |  |   |
|--------------------------------|---|--|--|--|---|
| BASELINE VALUE<br>TARGET VALUE | 1,113.6<br>2,124.8  | BASELINE START YEAR<br>TARGET START YEAR   | 2014<br>2017   | BASELINE END YEAR<br>TARGET END YEAR   | 2018<br>2021  |
| GOAL STATEMENT                 | Limit the forec   | asted increase of total serious traffic in   | juries to less   | than 90.8% from 1,113.6 (2014-2018 a   | average)  |
| JUSTIFICATION                  | calculated lead<br>using this rate<br>accident repor<br>Minor Injuries,<br>serious injuries<br>increase creat | ding up to the base period. Using this to determine 5-year rolling averages to reflect the federally required injury Possible Injury and No Apparent Injury (1,284 to 2,678) due to the interpre | method, the p<br>for the targe<br>y classification<br>). As a result<br>ation of the<br>l totals for fut | and a 9-year average of the annual fluc<br>predicted figures for 2020 and 2021 we<br>et years. Beginning in 2019, NJ updat<br>ons (Killed, Suspected Serious Injurie<br>of this change, NJ saw a 116% increase<br>new definitions by the reporting office<br>ture years. New Jersey expects the mo | ere calculated the police is, Suspected se in reported ir. This large |

| FATALITIES/VMT* |                                |   |               |                                      |                |
|-----------------|--------------------------------|---|---------------|--------------------------------------|----------------|
| BASELINE VALUE  | 0.758                          | BASELINE START YEAR                             | 2014          | BASELINE END YEAR                    | 2018           |
| TARGET VALUE    | 0.740                          | TARGET START YEAR                               | 2017          | TARGET END YEAR                      | 2021           |
| GOAL STATEMENT  | Reduce the to                  | tal fatalities/VMT by 3.0% from .758 (20        | )14-2018 Ave  | rage) to .740 (2017-2021 Average)    |                |
| JUSTIFICATION   | VMTs for 2020<br>Leap Years (3 | and 2021 were forecasted based on 2<br>66 days) | 2019 VMT valu | ues. The years 2008, 2012 + 2016 are | e adjusted for |

| NUMBER OF UNRESTRA             | AINED FATALIT                   | IES   |                               |  |               |  |  |  |  |  |
|--------------------------------|---------------------------------|---|-------------------------------|--|---------------|--|--|--|--|--|
| BASELINE VALUE<br>TARGET VALUE | 125.4<br>120.5                  | BASELINE START YEAR<br>TARGET START YEAR  | 2014<br>2017                  | BASELINE END YEAR<br>TARGET END YEAR   | 2018<br>2021  |  |  |  |  |  |
| GOAL STATEMENT                 | Reduce total ur                 | Reduce total unrestrained passenger fatalities by 3.9% from 125.4 (2014-2018 Average) to 120.5 (2017-2021). |                               |  |               |  |  |  |  |  |
| JUSTIFICATION                  | up to the base reduction rate t | period. Using this method, the predic   | ted figures for the target ye | ge of the annual fluctuations were calculated or 2019, 2020 and 2021 were calculated ears. A decrease of 4 is forecasted from is forecasted for 2020-2021. | ed using this |  |  |  |  |  |

<sup>\*</sup> These three performance measures are common in both the HSP and SHSP

#### CORE PERFORMANCE GOALS (Continued)

#### NUMBER OF ALCOHOL INVOLVED FATALITIES

BASELINE VALUE 129.6 BASELINE START YEAR 2014 BASELINE END YEAR 2018 TARGET VALUE 120.8 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Reduce total Alcohol related fatalities 6.8% from 129.6 (2014-2018 Average) to 120.8 (2017-2021 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 2019, 2020 and 2021 were calculated using this rate to determine 5-year rolling averages for the target years. A decrease of 3 is forecasted from 2018-2019, a decrease of 2 is forecasted for 2019-2020, and a decrease of 4 is forecasted for 2020-2021.

#### **NUMBER OF SPEED RELATED FATALITIES**

BASELINE VALUE 119.8 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 119.8 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Reduce total speed related fatalities by more than .01% from 119.8 (2014-2018 Average) to 119.8 (2017-2021

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 2019, 2020 and 2021 were calculated using this reduction rate to determine rolling averages for the target years. An increase of 4.8 is forecasted for 2018-2019, an increase of 2.4 is forecasted for 2019-2020, and a decrease of 2.2 is forecasted for 2020-2021.

New Jersey expects the number of speed related fatalities to remain consistent.

#### NUMBER OF MOTORCYCLE FATALITIES

BASELINE VALUE 63.8 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 78 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Limit total motorcycle fatalities to the forecasted increase of 22.3% from 63.8 (2014-2018 Average) to 78

(2017-2021 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 2020 and 2021 were calculated using this rate to determine rolling averages for the target years. Preliminary figures were used in 2019. NJ experienced an increase of 30 motorcycle fatalities from 2018 to 2019, the largest increase since 2006. An increase of 1.8 is forecasted for 2019-2020 and an increase of 1.48 is forecasted for 2020-

2021.

#### NUMBER OF UNHELMETED MOTORCYCLE FATALITIES

BASELINE VALUE 5 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 6.5 TARGET START YEAR 2017 TARGET END YEAR 2021

**GOAL STATEMENT** Limit total unhelmeted motorcyclist fatalities to the forecasted increase of 30% from 5 (2014-2018 Average) to 6.5 (2017-2021 Average).

JUSTIFICATION The change from year-to-year was evaluated and a 10-year average of the annual fluctuations

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 2020 and 2021 were calculated using this rate to determine rolling averages for the target years. Preliminary figures were used in 2019. A decrease of 0.6 is forecasted for 2019-2020, and a decrease of 0.08 is forecasted for 2020-2021. New Jersey forecasts the number of unhelmeted motorcycle fatalities to decline over the next two years, however the moving average is forecasted to increase.

#### **CORE PERFORMANCE GOALS** (CONTINUED)

#### NUMBER OF YOUNG DRIVER INVOLVED FATALITIES

BASELINE VALUE 60.6 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 56.7 TARGET START YEAR 2017 TARGET END YEAR 2021

**GOAL STATEMENT** 

Reduce total young driver involved fatalities 6.44% from 60.6 (2014-2018 Average) to 56.7 (2017-2021 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 2020 and 2021 were calculated using this reduction rate to determine rolling averages for the target years. A decrease of 2.1 is forecasted for 2019-2020, and a decrease of 1.2 is forecasted for 2020-2021. New Jersey has made great progress in the area of young driver education and safety. Young drivers are mandated to participate in a Graduated Driver's 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 young driver involved fatalities, a trend that is forecasted to continue.

#### **NUMBER OF PEDESTRIAN FATALITIES**

BASELINE VALUE 171.8 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 180.7 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Limit total pedestrian fatalities to the forecasted increase of 5.18% from 171.8 (2014-2018 Average) to

180.7 (2017-2021 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 2020 and 2021 were calculated using this rate to determine rolling averages for the target years. Preliminary figures were used for 2019. An increase of 2 is forecasted for 2019-2020, and an increase of 4.2 is forecasted for 2020-2021. New Jersey experienced a 30% increase in pedestrian fatalities in 2013 to 2014 and a 12.27% increase from 2016 to 2017. These large increases overshadow the smaller year-to-year decreases, thus deriving a forecasted increase in

uture years

#### **NUMBER OF BICYCLIST FATALITIES**

BASELINE VALUE 15.8 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 13.1 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Reduce total bicyclist fatalities by 17.1% from 15.8 (2014-2018 Average) to 13.1 (2017-2021 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 2020 and 2021 were calculated using this rate to determine rolling averages for the target years. Preliminary figures were used for 2019. No changes are forecasted from 2019 through 2021.

SEAT BELT OBSERVATIONAL USE

BASELINE VALUE 0.9282 BASELINE START YEAR 2015 BASELINE END YEAR 2019
TARGET VALUE 0.9167 TARGET START YEAR 2017 TARGET END YEAR 2021

**GOAL STATEMENT** Obtain a seatbelt observational usage rate of no less than 91%.

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 2020 and 2021 were calculated using this rate to determine 5-year rolling averages for the target years. A decrease of .0024 is

forecasted for 2019-2020, and a decrease of .0037 is forecasted for 2020-2021.

| NUMBER OF CITA           | ATIONS ISS                             | UED OR ARRESTS MADE D   | URING GRA | ANT FUNDED ENFORCE | MENT ACT | IVITIES 2019                            |        |  |  |  |
|--------------------------|--|-------------------------|-----------|--------------------|----------|---|--------|--|--|--|
| SEAT BELT                | 25,715                                 | IMPAIRED DRIVING        | 4,537     | SPEEDING           | 26,421   | CELL PHONE/TEXTING                      | 19,949 |  |  |  |
| ANNUAL TARGE             | ANNUAL TARGET GOALS ESTABLISHED FY2021 |                         |           |                    |          |   |        |  |  |  |
| SOCIAL MEDIA<br>OUTREACH | 200                                    | CTSP SUPPORTED COUNTIES | 21        | PAR TRAININGS      | 12       | REGISTERED CRASH<br>ANALYSIS TOOL USERS | 450    |  |  |  |

#### ADDITIONAL PERFORMANCE GOALS

#### NUMBER OF DRUG INVOLVED FATALITIES

BASELINE VALUE 90 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 86 TARGET START YEAR 2017 TARGET END YEAR 2021

**GOAL STATEMENT** Reduce total drug involved fatalities 4.4% from 90 (2014-2018 Average) to 86 (2017-2021 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 2020 and 2021 were calculated using this rate to determine 5-year rolling averages for the target years. No change is forecasted for 2019 to 2020, and an increase of 2 is forecasted for 2020-2021. New Jersey is actively training law enforcement personnel to better detect driver impairment through the DRE Program, and has resulted in higher accounts of

detected drug use among drivers.

#### NUMBER OF DRUG INVOLVED CRASHES

BASELINE VALUE 1,303 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 1,739 TARGET START YEAR 2017 TARGET END YEAR 2021

**GOAL STATEMENT** Limit total drug involved crashes to the forecasted increase of 33.5% from 1,303 (2014-2018 Average) to 1,739 (2017-2021 Average).

JUSTIFICATION The change from year-to-year was evaluated and a 10-year average of the annual fluctuations were

colculated leading up to the base period. Using this method, the predicted figures for 2019, 2020 and 2021 were calculated using this rate to determine 5-year rolling averages for the target years. An increase of 65 is forecasted from 2018-2019, an increase of 73 is forecasted from 2019-2020, and an increase of 70 is forecasted from 2020-2021. 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 also modified its police accident report to include a second driver physical status field (in 2017). This allows reporting officers to indicate illicit drug or medication use in addition to other statuses. NJ expects to see an increase in detected impairment, therefore a slight increase in drug involved crashes are predicted.

#### NUMBER OF DISTRACTED DRIVING RELATED FATALITIES

JUSTIFICATION

BASELINE VALUE 156.6 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 99 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Reduce total distracted driving related fatalities by 36% 156.6 (2014-2018 Average) to 99 (2017-2021

Average).

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 2019, 2020 and 2021 were calculated using this reduction rate to determine rolling averages for the target years. No change is forecasted for 2018-2019, a decrease of 18 is forecasted for 2019-2020 and a decrease of 14 is forecasted for 2020-2021. 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. 2019 experienced a 36% reduction in distracted driving related fatalities and future years are forecasted based on this figure.

#### **ADDITIONAL PERFORMANCE GOALS (CONTINUED)**

#### NUMBER OF DISTRACTED DRIVING RELATED CRASHES

BASELINE VALUE 144,595 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 138,927 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Reduce total distracted driving related crashes by 3.9% from 144,595 (2014-2018 Average) to 138,927

(2017-2021 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 2019, 2020 and 2021 were calculated

using this rate to determine rolling averages for the target years. A decrease of 1,312.4 is forecasted for 2018-2019, a decrease of 1,325.5 is forecasted for 2019-2020, and a decrease of 1,718.6 is forecasted for 2020-2021.

#### **NUMBER OF SPEED RELATED CRASHES**

BASELINE VALUE 16,821.4 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 16,126.8 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Reduce total speed involved crashes by 4.13% from 16,821.4 (2014-2018 Average) to 16,126.8 (2017-

2021 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 2019, 2020 and 2021 were calculated using this rate to determine rolling averages for the target years. A decrease of 523 is forecasted for 2018-2019, a decrease of 637 is forecasted for 2019-2020, and a decrease of 378 is

forecasted for 2020-2021.

#### NUMBER OF OLDER DRIVER FATALITIES

BASELINE VALUE 65.2 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 65.4 TARGET START YEAR 2017 TARGET END YEAR 2021

GOAL STATEMENT Limit older driver fatalities to the forecasted increase of 0.3% from 65.2 (2014-2018 Average) to 65.4

(2017-2021 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 2020 and 2021 were

calculated leading up to the base period. Using this method, the predicted figures for 2020 and 2021 were calculated using this rate to determine rolling averages for the target years. A decrease of 1.2 is forecasted for 2019-2020, and a decrease of .62 is forecasted for 2020-2021. New Jersey expects the number and

moving average of older driver fatalities to remain consistent.

#### NUMBER OF WORK ZONE RELATED CRASHES

BASELINE VALUE 4,882.8 BASELINE START YEAR 2014 BASELINE END YEAR 2018
TARGET VALUE 3,365.4 TARGET START YEAR 2017 TARGET END YEAR 2021

**GOAL STATEMENT** Reduce Work Zone related crashes by 20.8% from 4,882.8 (2014-2018 Average) to 3,865.4 (2017-2021

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 2019, 2020 and 2021

were calculated using this rate to determine 5-year rolling averages for the target years. A decrease of 130 is forecasted from 2018-2019, a decrease of 186 is forecasted for 2019-2020, and a decrease of 327 is

forecasted for 2020-2021.

#### PERFORMANCE PLAN

#### Planning and Administration

Project Name: PLANNING AND ADMINISTRATION

Sub-Recipient: DIVISION OF HIGHWAY TRAFFIC SAFETY

Total Project Amount: \$897,000

**Project Description:** 

The DHTS is the lead agency tasked with 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, as evidenced by the adoption of the 2020 SHSP.

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 along with equipment, supplies, rent, and utility expenses to carry out the functions of the States' Highway Safety Office.

DHTS hopes to address significant staffing issues in FY2021 in the Fiscal, Program, and clerical sections of the office as the result of many years of attrition, in order to properly manage grant funds and office operations.

Funding Source: SECTION 402 Local Benefit: 0

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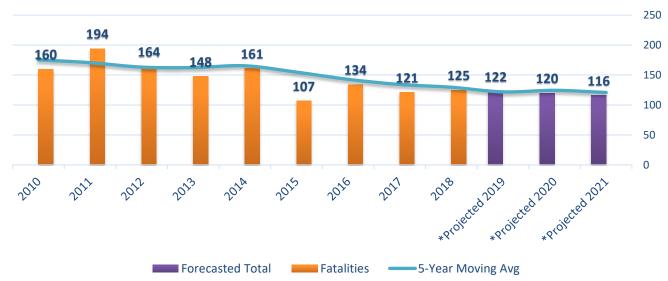
#### ALCOHOL AND OTHER DRUG COUNTERMEASURES

#### Alcohol Impaired • General Overview

Due to the large volume of alcohol related pending cases that remain open in 2019, the numbers analyzed in this area are based on 2018 fatal records and preliminary data from 2019. 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 (2018). Using this method, the predicted figures for 2019, 2020 and 2021 were calculated using this reduction rate to determine 5-year rolling averages for the target years.

**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.





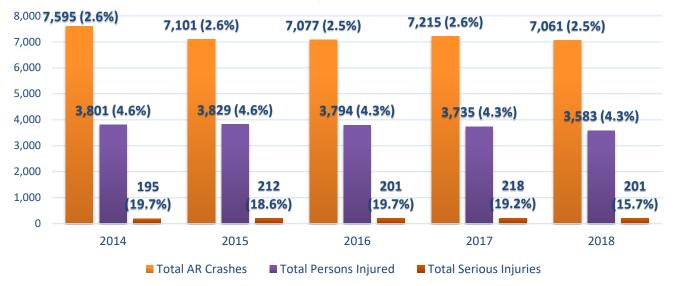
Over the past five years, New Jersey's roadways have experienced 36,049 alcohol involved crashes, resulting in 648 fatalities (2014-2018). Driving while intoxicated remains a major factor in contributing to fatalities, crashes and injuries on the State's roadways. Projected figures in 2019 show a decline in alcohol related fatalities statewide. In terms of alcohol related crashes overall, there was a 2.1 percent decrease from 2017 to 2018 and a 7 percent reduction from 2014 to 2018, although alcohol impaired driving accounts for a large portion of fatalities occurring on the roadways (22.2% in 2018 and 21.8% in 2019 based on projected numbers).

#### PROPORTION OF ALCOHOL IMPAIRED FATALITIES VERSUS TOTAL NEW JERSEY MV FATALITIES



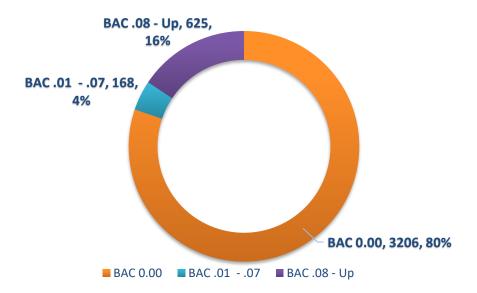
Over the past five years, alcohol contributed to roughly 2.5 percent of all crashes in New Jersey each year. Alcohol involvement in crashes contributed to 4.4 percent of all injured persons (motorists and non-motorists) and 18.6 percent of all seriously injured persons.

INJURY OUTCOME OF ALCOHOL RELATED CRASHES, 2014 - 2018



Nearly 4,000 drivers were involved in fatal motor vehicle crashes on New Jersey's roadways between 2014 and 2018. Over 80 percent (3,206) had no alcohol in their system. Just over four percent (168) had a BAC between .01 - .07, below the legal limit, and approximately 15.6 percent (625) had a blood alcohol concentration of .08 or higher.

#### BLOOD ALCOHOL CONCENTRATIONS OF DRIVERS INVOLVED IN FATAL CRASHES, 2014 - 2018



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. On the following page is a representation of crashes involving alcohol and how they combine with other performance areas. From 2014-2018, 17.9 percent of crashes involving alcohol also involved drug impairment. About 17 percent of crashes involving alcohol also involved a younger driver and 7.4 percent involved an older driver.

| ALCOHOL INVOLVED CRASHES AND OTHER PERFORMANCE AREAS, 2014 - 2018 |       |       |       |       |       |        |          |                    |  |
|---|-------|-------|-------|-------|-------|--------|----------|--------------------|--|
| ALCOHOL INVOLVEMENT AND   | 2014  | 2015  | 2016  | 2017  | 2018  | TOTAL  | 5 YR AVG | % OF 5 YR<br>TOTAL |  |
| DRUG INVOLVEMENT  | 972   | 1,101 | 1,115 | 1,602 | 1,668 | 6,458  | 1,292    | 17.9%              |  |
| DISTRACTED DRIVING  | 5,004 | 4,741 | 4,732 | 4,693 | 4,556 | 23,726 | 4,745    | 65.8%              |  |
| UNSAFE SPEED  | 1,330 | 1,263 | 1,117 | 1,093 | 1,094 | 5,897  | 1,179    | 16.4%              |  |
| YOUNG DRIVERS   | 526   | 504   | 457   | 396   | 333   | 2,216  | 443      | 6.1%               |  |
| OLDER DRIVERS   | 518   | 505   | 480   | 544   | 630   | 2,677  | 535      | 7.4%               |  |
| MOTORCYCLES   | 79    | 83    | 73    | 90    | 71    | 396    | 79       | 1.1%               |  |
| PEDESTRIANS   | 402   | 260   | 273   | 301   | 240   | 1,376  | 275      | 3.8%               |  |
| UNRESTRAINED PASSENGER  | 449   | 372   | 379   | 344   | 317   | 1,861  | 372      | 5.2%               |  |
| TOTAL ALCOHOL INVOLVED  | 7,595 | 7,101 | 7,077 | 7,215 | 7,061 | 36,049 | 7,210    | 100.0%             |  |

#### Alcohol Impaired • Analysis of Age/Gender

The difference in age and gender was a factor in the likelihood of an individual being a part of an alcohol involved crash. Notably, these demographic groups with elevated crash likelihoods are commonly referred to as "high-risk" drivers. In New Jersey, the age group that is the most susceptible to being involved in drug and alcohol related crashes are the 21-30-year-old drivers. This group represents 30.47 percent of all drivers involved in alcohol related crashes for both male and female drivers from 2014-2018. Male drivers account for nearly 70 percent of all alcohol related crashes that occurred from 2014-2018.

| 9                      | % OF ALCOHOL RELATED CRASHES BY AGE GROUP AND GENDER, 2014 - 2018 |               |                        |                    |                       |  |  |  |
|------------------------|---|---------------|------------------------|--------------------|-----------------------|--|--|--|
| % OF ALL<br>AGE GROUPS | AGE GROUP   | AGE % OF MALE | TOTAL GENDER<br>FEMALE | GENDER % O<br>MALE | F AGE GROUP<br>FEMALE |  |  |  |
| 0.01%                  | 0-15  | 0.01%         | 0.00%                  | 100.0%             | 0.0%                  |  |  |  |
| 4.57%                  | 16-20   | 4.37%         | 5.04%                  | 66.3%              | 33.7%                 |  |  |  |
| 15.24%                 | 21-25   | 15.30%        | 15.11%                 | 69.7%              | 30.3%                 |  |  |  |
| 15.23%                 | 26-30   | 15.32%        | 15.02%                 | 69.8%              | 30.2%                 |  |  |  |
| 12.49%                 | 31-35   | 12.78%        | 11.83%                 | 71.0%              | 29.0%                 |  |  |  |
| 10.56%                 | 36-40   | 10.71%        | 10.23%                 | 70.4%              | 29.6%                 |  |  |  |
| 8.84%                  | 41-45   | 8.85%         | 8.83%                  | 69.4%              | 30.6%                 |  |  |  |
| 9.04%                  | 46-50   | 8.72%         | 9.76%                  | 67.0%              | 33.0%                 |  |  |  |
| 8.31%                  | 51-55   | 8.23%         | 8.49%                  | 68.7%              | 31.3%                 |  |  |  |
| 6.62%                  | 56-60   | 6.54%         | 6.82%                  | 68.5%              | 31.5%                 |  |  |  |
| 4.14%                  | 61-65   | 4.22%         | 3.98%                  | 70.7%              | 29.3%                 |  |  |  |
| 4.93%                  | 66+   | 4.95%         | 4.89%                  | 69.7%              | 30.3%                 |  |  |  |
| 100.00%                | TOTALS*   |               |                        | 69.4%              | 30.6%                 |  |  |  |

<sup>\*</sup> Excludes undefined driver age or gender type.

#### Alcohol Impaired • Analysis of Occurrence

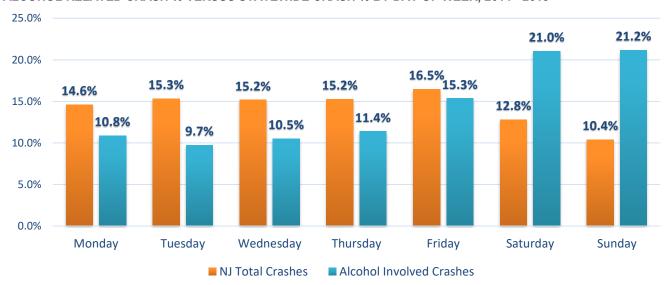
To assist in targeting the enforcement of drivers driving under the influence of alcohol, it is important to observe when alcohol involved crashes are most likely to occur. The graphic below shows the Time of Day and Time of Year distribution of alcohol involved crashes. Over the past 5 years (2014-2018) approximately 43 percent of alcohol involved crashes occur between 9:00PM and 2:59AM, with a majority occurring in December.

ALCOHOL INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN   | FEB         | MAR         | APR         | MAY         | JUN         | JUL         | AUG         | SEPT        | OCT         | NOV         | DEC         | TOT    | AL   |
|----------------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|------|
| Midnight to 2:59AM   | 618   | 585         | 684         | 630         | 703         | 630         | 692         | 712         | 641         | 672         | 686         | 774         | 8,027  | 22%  |
| 3:00AM to<br>5:59AM  | 317   | 298         | 349         | 324         | 310         | 281         | 300         | 321         | 291         | 288         | 296         | 298         | 3,673  | 10%  |
| 6:00AM to<br>8:59AM  | 152   | 133         | 148         | 134         | 174         | 150         | 146         | 131         | 141         | 154         | 126         | 107         | 1,696  | 5%   |
| 9:00AM to<br>11:59AM | 144   | 125         | 144         | 139         | 136         | 156         | 160         | 142         | 126         | 149         | 142         | 148         | 1,711  | 5%   |
| Noon to<br>2:59PM    | 185   | 198         | 217         | 206         | 222         | 203         | 250         | 258         | 198         | 215         | 194         | 192         | 2,538  | 7%   |
| 3:00PM to<br>5:59PM  | 289   | 293         | 360         | 343         | 388         | 376         | 352         | 374         | 388         | 365         | 411         | 457         | 4,396  | 12%  |
| 6:00PM to<br>8:59PM  | 502   | 485         | 517         | 441         | 492         | 478         | 515         | 531         | 508         | 612         | 588         | 655         | 6,324  | 18%  |
| 9:00PM to<br>11:59PM | 510   | 550         | 620         | 634         | 720         | 679         | 763         | 652         | 631         | 643         | 584         | 698         | 7,684  | 21%  |
| TOTAL                | 2,717 | 2,667<br>7% | 3,039<br>8% | 2,851<br>8% | 3,145<br>9% | 2,953<br>8% | 3,178<br>9% | 3,121<br>9% | 2,924<br>8% | 3,098<br>9% | 3,027<br>8% | 3,329<br>9% | 36,049 | 100% |

An analysis of the Day of the Week where the most alcohol involved crashes occur also assists in the targeting of impaired driving enforcement. Over the past 5 years (2014-2018), 23 percent of all crashes in New Jersey took place on the weekend, compared to 42 percent of all alcohol involved crashes.

ALCOHOL RELATED CRASH % VERSUS STATEWIDE CRASH % BY DAY OF WEEK, 2014 - 2018



#### 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. Despite a 1.9 percent increase in alcohol involved crashes from last year (2017), most counties have experienced a slight decrease

in the total number of alcohol involved crashes over the past five years. Union, Hunterdon, and Warren Counties experienced the highest increase in alcohol related crashes from 2017-2018 (19.5%, 8.5% and 6.6% respectively).

| ,          | ALCOHOL INVOLVED | CRASHES CO | UNTY PERCE | NT CHANGE | FROM PREVI | OUS YEAR (I | BAC > 0.00)           |
|------------|------------------|------------|------------|-----------|------------|-------------|-----------------------|
|            | COUNTY           | 2014       | 2015       | 2016      | 2017       | 2018        | 2014 - 2018<br>CHANGE |
|            | ATLANTIC         | -4.2%      | -12.8%     | -2.9%     | 14.3%      | -17.6%      | -4.4%                 |
|            | BURLINGTON       | -3.4%      | -1.5%      | -3.5%     | 1.1%       | 2.0%        | -0.4%                 |
| =          | CAMDEN           | -8.5%      | -12.9%     | -7.6%     | 23.2%      | -11.3%      | -2.5%                 |
| REGION I   | CAPE MAY         | -25.1%     | -9.0%      | -3.3%     | 28.0%      | -23.8%      | -3.0%                 |
| RE         | CUMBERLAND       | -3.5%      | 4.5%       | -22.4%    | 24.4%      | -23.2%      | -5.0%                 |
|            | GLOUCESTER       | 10.8%      | -1.4%      | 0.0%      | 5.5%       | -9.7%       | -1.3%                 |
|            | SALEM            | 10.6%      | -22.3%     | 0.0%      | 17.8%      | 2.3%        | -1.3%                 |
|            | HUNTERDON        | 0.8%       | 1.7%       | 0.8%      | -4.1%      | 8.5%        | 1.3%                  |
|            | MERCER           | 2.2%       | -14.5%     | 13.7%     | -12.4%     | 5.4%        | -2.1%                 |
| =          | MIDDLESEX        | -2.9%      | -5.8%      | 13.4%     | -8.8%      | 5.0%        | 0.4%                  |
| REGION II  | MONMOUTH         | -8.9%      | -6.2%      | 10.6%     | -9.1%      | 2.2%        | -0.7%                 |
| RE         | OCEAN            | -8.5%      | -3.6%      | -5.5%     | 2.5%       | -5.7%       | -2.5%                 |
|            | SOMERSET         | -0.8%      | 2.5%       | -21.3%    | 5.2%       | 4.0%        | -2.5%                 |
|            | UNION            | 12.0%      | -7.5%      | -1.4%     | -11.6%     | 19.5%       | -0.7%                 |
|            | BERGEN           | 0.4%       | -15.7%     | 5.3%      | -5.5%      | 6.2%        | -2.3%                 |
|            | ESSEX            | 3.5%       | 1.8%       | -0.4%     | 3.1%       | -2.3%       | 0.4%                  |
| =          | HUDSON           | -1.4%      | -7.6%      | 11.9%     | 8.2%       | -1.0%       | 2.0%                  |
| REGION III | MORRIS           | -4.9%      | -0.7%      | -9.0%     | 10.1%      | -7.7%       | -1.7%                 |
| REC        | PASSAIC          | -0.7%      | -14.1%     | -1.1%     | -5.9%      | 0.0%        | -4.4%                 |
|            | SUSSEX           | -11.1%     | -5.6%      | 1.5%      | 11.6%      | -13.0%      | -1.4%                 |
|            | WARREN           | -30.1%     | 25.8%      | -6.0%     | -3.6%      | 6.6%        | 4.0%                  |
| TOT        | TAL PERCENTAGE   | -6.0%      | -3.1%      | -6.5%     | -0.3%      | 1.9%        | -2.1%                 |

From 2014-2018, Bergen (8.3%) and Monmouth (8.3%) Counties had the most alcohol involved crashes. Camden and Middlesex accounted for 7.4 percent of these crashes. A breakdown of the Top 3 Municipalities per county is shown in the table on the following pages.

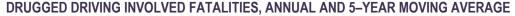
|                                     | ALCOHOL-RELATED CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY/STATE TOTAL | % CHANGE FROM<br>2013 - 2017 |
|-------------------------------------|--|----------------------------------|------------------------------|
| NEW JERSEY                          | 36,049                                 |                                  | -2.1%                        |
| Atlantic County                     | 1,923                                  | 5.3%                             | -5.3%                        |
| Egg Harbor Township                 | 330                                    | 17.2%                            | -6.5%                        |
| Atlantic City                       | 303                                    | 15.8%                            | -15.6%                       |
| Hamilton Township (Atlantic Co)     | 265                                    | 13.8%                            | -0.4%                        |
| Bergen County                       | 3,005                                  | 8.3%                             | -2.3%                        |
| Hackensack City                     | 149                                    | 5.0%                             | -2.0%                        |
| Teaneck Township                    | 149                                    | 5.0%                             | -13.4%                       |
| Garfield City                       | 126                                    | 4.2%                             | -10.0%                       |
| Burlington County                   | 2,233                                  | 6.2%                             | -1.2%                        |
| Mount Laurel Township               | 224                                    | 10.0%                            | 3.2%                         |
| Evesham Township                    | 178                                    | 8.0%                             | -3.8%                        |
| Pemberton Township                  | 151                                    | 6.8%                             | -3.8%                        |
| Camden County                       | 2,683                                  | 7.4%                             | -4.5%                        |
| Camden City                         | 593                                    | 22.1%                            | -4.0%                        |
| Cherry Hill Township                | 322                                    | 12.0%                            | 0.9%                         |
| Pennsauken Township                 | 293                                    | 10.9%                            | -14.3%                       |
| Cape May County                     | 640                                    | 1.8%                             | -9.3%                        |
| Lower Township                      | 129                                    | 20.2%                            | -7.9%                        |
| Middle Township                     | 126                                    | 19.7%                            | -13.7%                       |
| Upper Township                      | 90                                     | 14.1%                            | -15.9%                       |
| Cumberland County                   | 1,030                                  | 2.9%                             | -5.4%                        |
| Vineland City                       | 368                                    | 35.7%                            | -5.4%                        |
| Millville City                      | 184                                    | 17.9%                            | -6.1%                        |
| Bridgeton City                      | 155                                    | 15.0%                            | -20.5%                       |
| Essex County                        | 2,560                                  | 7.1%                             | 1.1%                         |
| Newark City                         | 924                                    | 36.1%                            | 6.7%                         |
| East Orange City                    | 250                                    | 9.8%                             | -4.9%                        |
| Bloomfield Township                 | 225                                    | 8.8%                             | -10.7%                       |
| Gloucester County                   | 1,371                                  | 3.8%                             | 0.7%                         |
| Deptford Township                   | 239                                    | 17.4%                            | 18.3%                        |
| Washington Township (Gloucester Co) | 235                                    | 17.1%                            | 5.4%                         |
| Monroe Township (Gloucester Co)     | 149                                    | 10.9%                            | -3.2%                        |

|                                | ALCOHOL-RELATED CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY/STATE TOTAL | % CHANGE FROM<br>2013 - 2017 |
|--------------------------------|--|----------------------------------|------------------------------|
| Hudson County                  | 1,845                                  | 5.1%                             | 1.8%                         |
| Jersey City                    | 596                                    | 32.3%                            | 8.6%                         |
| Kearny Town                    | 181                                    | 9.8%                             | -6.2%                        |
| North Bergen Township          | 173                                    | 9.4%                             | 8.1%                         |
| Hunterdon County               | 611                                    | 1.7%                             | 1.3%                         |
| Clinton Township               | 88                                     | 14.4%                            | 14.3%                        |
| Readington Township            | 77                                     | 12.6%                            | -7.2%                        |
| Raritan Township               | 74                                     | 12.1%                            | -3.9%                        |
| Mercer County                  | 1,290                                  | 3.6%                             | -1.9%                        |
| Hamilton Township (Mercer Co)  | 343                                    | 26.6%                            | -6.8%                        |
| Trenton City                   | 272                                    | 21.1%                            | 1.5%                         |
| Ewing Township                 | 132                                    | 10.2%                            | 5.6%                         |
| Middlesex County               | 2,663                                  | 7.4%                             | -0.2%                        |
| Edison Township                | 274                                    | 10.3%                            | 1.5%                         |
| Sayreville Borough             | 256                                    | 9.6%                             | 22.5%                        |
| Woodbridge Township            | 256                                    | 9.6%                             | -1.2%                        |
| Monmouth County                | 2,993                                  | 8.3%                             | -2.7%                        |
| Middletown Township            | 286                                    | 9.6%                             | -7.4%                        |
| Wall Township                  | 277                                    | 9.3%                             | -6.1%                        |
| Howell Township                | 276                                    | 9.2%                             | 0.0%                         |
| Morris County                  | 1,948                                  | 5.4%                             | -2.7%                        |
| Parsippany-Troy Hills Township | 244                                    | 12.5%                            | -7.6%                        |
| Rockaway Township              | 151                                    | 7.8%                             | -2.6%                        |
| Morristown Town                | 132                                    | 6.8%                             | -2.2%                        |
| Ocean County                   | 2,476                                  | 6.9%                             | -4.3%                        |
| Toms River Township            | 561                                    | 22.7%                            | -0.9%                        |
| Brick Township                 | 364                                    | 14.7%                            | -3.2%                        |
| Lakewood Township              | 360                                    | 14.5%                            | 4.7%                         |
| Passaic County                 | 1,891                                  | 5.2%                             | -4.6%                        |
| Paterson City                  | 474                                    | 25.1%                            | -0.2%                        |
| Clifton City                   | 396                                    | 20.9%                            | -7.7%                        |
| Passaic City                   | 285                                    | 15.1%                            | -10.9%                       |
| Salem County                   | 414                                    | 1.1%                             | 0.7%                         |
| Pittsgrove Township            | 87                                     | 21.0%                            | 10.1%                        |
| Carneys Point Township         | 69                                     | 16.7%                            | -11.5%                       |
| Pennsville Township            | 53                                     | 12.8%                            | 26.2%                        |

|                                 | ALCOHOL-RELATED CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY/STATE TOTAL | % CHANGE FROM<br>2013 - 2017 |
|---------------------------------|--|----------------------------------|------------------------------|
| Somerset County                 | 1,086                                  | 3.0%                             | -2.7%                        |
| Bridgewater Township            | 160                                    | 14.7%                            | -9.6%                        |
| Franklin Township (Somerset Co) | 148                                    | 13.6%                            | -6.9%                        |
| North Plainfield Borough        | 101                                    | 9.3%                             | 1.0%                         |
| Sussex County                   | 706                                    | 2.0%                             | -3.8%                        |
| Vernon Township                 | 113                                    | 16.0%                            | -8.1%                        |
| Wantage Township                | 80                                     | 11.3%                            | 2.6%                         |
| Sparta Township                 | 63                                     | 8.9%                             | -19.2%                       |
| Union County                    | 2,142                                  | 5.9%                             | 1.6%                         |
| Elizabeth City                  | 340                                    | 15.9%                            | 10.0%                        |
| Union Township (Union Co)       | 325                                    | 15.2%                            | -3.8%                        |
| Linden City                     | 277                                    | 12.9%                            | 3.0%                         |
| Warren County                   | 539                                    | 1.5%                             | -3.8%                        |
| Phillipsburg Town               | 70                                     | 13.0%                            | -1.4%                        |
| Allamuchy Township              | 43                                     | 8.0%                             | -2.3%                        |
| Washington Township (Warren Co) | 42                                     | 7.8%                             | -8.7%                        |

## 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 total number of illegal drug and medication related crashes increased in 2018, from 1,610 in 2017 to 1,668.



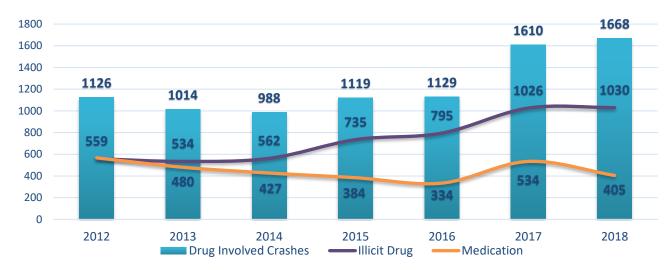


Drugged driving (illicit and/or medication) contributed to 13 percent of motor vehicle fatalities in 2018 and preliminary figured for 2019 are indicating an increase. One of the reasons for the large increase in drugged driving in New Jersey is due to the addition of a secondary Driver Physical Status field on the NJTR-1 Crash Report, which enables reporting officers to indicate more than one physical status for each driver at the time of the crash. New Jersey also has the second highest amount of certified Drug Recognition Experts (DREs) in the US, which in tandem with a robust county-wide call-out program in 11 counties led to increased detection capabilities.

#### PROPORTION OF DRUGGED DRIVING INVOLVED FATALITIES VERSUS TOTAL NEW JERSEY MV FATALITIES



The State is continuing to experience a surge in the number of illicit drug related crashes, accounting for nearly 80 percent of all drug impaired crashes (medication vs. illicit). As of 2020, New Jersey offers the reporting officer three options to report drug involvement in crashes:  $Drug\ Use\ -Medication$ ,  $Drug\ Use\ -Illicit\ and\ Alcohol\ and\ Drug\ Use\ (Illicit\ or\ Medication)$ . Drug use in conjunction with alcohol use does not specify the nature of the drug involved, therefore Illicit and Medication totals will not calculate to 100 percent.



\*Illicit and Medication totals do not calculate to 100%

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 2014-2018, 99.1 percent of crashes involving drugs also involved alcohol impairment. About 12 percent of crashes involving drugs also involved an older driver and 7.3 percent involved a younger driver.

| DRUGGED DRIV                | DRUGGED DRIVING CRASHES AND OTHER PERFORMANCE AREAS, 2014 - 2018 |       |       |       |       |       |          |                  |  |
|-----------------------------|--|-------|-------|-------|-------|-------|----------|------------------|--|
| DRUGGED DRIVING AND         | 2014   | 2015  | 2016  | 2017  | 2018  | TOTAL | 5 YR AVG | % OF 5 YR<br>TOT |  |
| ALCOHOL INVOLVEMENT         | 972  | 1,101 | 1,115 | 1,602 | 1,668 | 6,458 | 1,292    | 99.1%            |  |
| DISTRACTED DRIVING          | 674  | 744   | 761   | 1,052 | 1,099 | 4,330 | 866      | 66.5%            |  |
| UNSAFE SPEED                | 97   | 144   | 132   | 209   | 221   | 803   | 161      | 12.3%            |  |
| OLDER DRIVERS               | 98   | 107   | 87    | 180   | 164   | 636   | 127      | 9.8%             |  |
| YOUNG DRIVERS               | 87   | 91    | 94    | 103   | 99    | 474   | 95       | 7.3%             |  |
| UNRESTRAINED PASSENGERS     | 73   | 51    | 78    | 97    | 105   | 404   | 81       | 6.2%             |  |
| PEDESTRIANS                 | 13   | 20    | 10    | 17    | 9     | 69    | 14       | 1.1%             |  |
| MOTORCYCLISTS               | 8  | 8     | 6     | 17    | 13    | 52    | 10       | 0.8%             |  |
| TOTAL DRUG INVOLVED CRASHES | 988  | 1,119 | 1,129 | 1,610 | 1,668 | 6,514 | 1,303    | 100.0%           |  |

#### Drugged Driving • Analysis of Occurrence

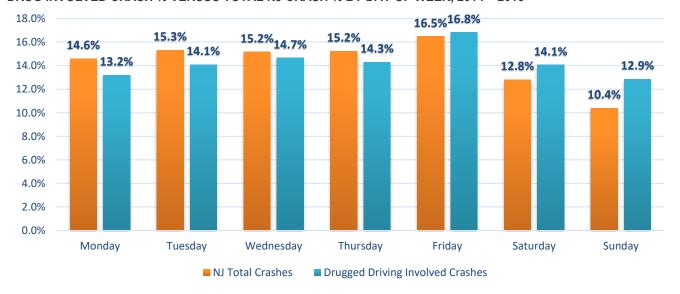
To assist in targeting the enforcement of drivers driving under the influence of drugs, it is important to observe when drug involved crashes are most likely to occur. The graphic below shows the Time of Day and Time of Year distribution of crashes involving a driver under the influence of drugs. Over the past 5 years (2014-2018) approximately 36 percent of drug-impaired driving crashes occurred between 12:00PM and 5:59PM, with a majority occurring in October. The data shows how drugged driving is mirrored in crash occurrences and is an inherent factor for crashes on the State's roadways.

DRUGGED DRIVING INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN       | FEB       | MAR       | APR       | MAY       | JUN       | JUL       | AUG       | SEPT      | OCT       | NOV       | DEC       | TOT   | AL   |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|------|
| Midnight to 2:59AM   | 34        | 34        | 39        | 33        | 39        | 46        | 44        | 59        | 46        | 52        | 36        | 56        | 518   | 8%   |
| 3:00AM to<br>5:59AM  | 18        | 21        | 25        | 32        | 21        | 18        | 24        | 32        | 36        | 28        | 21        | 20        | 296   | 5%   |
| 6:00AM to<br>8:59AM  | 28        | 44        | 41        | 38        | 65        | 64        | 51        | 36        | 56        | 68        | 41        | 40        | 572   | 9%   |
| 9:00AM to<br>11:59AM | 67        | 62        | 71        | 82        | 71        | 77        | 81        | 71        | 79        | 84        | 69        | 74        | 888   | 14%  |
| Noon to<br>2:59PM    | 89        | 75        | 98        | 96        | 95        | 85        | 102       | 116       | 91        | 105       | 87        | 86        | 1,125 | 17%  |
| 3:00PM to<br>5:59PM  | 81        | 81        | 101       | 107       | 115       | 108       | 104       | 108       | 122       | 106       | 102       | 107       | 1,242 | 19%  |
| 6:00PM to<br>8:59PM  | 76        | 68        | 82        | 80        | 85        | 95        | 94        | 83        | 92        | 88        | 106       | 88        | 1,037 | 16%  |
| 9:00PM to<br>11:59PM | 50        | 56        | 60        | 61        | 73        | 78        | 78        | 83        | 70        | 86        | 67        | 74        | 836   | 13%  |
| TOTAL                | 443<br>7% | 441<br>7% | 517<br>8% | 529<br>8% | 564<br>9% | 571<br>9% | 578<br>9% | 588<br>9% | 592<br>9% | 617<br>9% | 529<br>8% | 545<br>8% | 6,514 | 100% |

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, crashes involving drivers under the influence of drugs are similar to the typical distribution of all crashes in New Jersey. There is a slight over representation of drugged driving crashes on the weekend.

DRUG INVOLVED CRASH % VERSUS TOTAL NJ CRASH % BY DAY OF WEEK, 2014 - 2018



## 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 43 percent of total drug-related crashes that occurred from 2014-2018, and male drivers overall accounted for 68.5 percent of all drugged driver involved crashes.

|                        | % OF DRUG INVOLVED CRASHES BY AGE GROUP AND GENDER, 2014 - 2018 |         |                 |                     |                  |  |  |  |
|------------------------|---|---------|-----------------|---------------------|------------------|--|--|--|
| % OF ALL<br>AGE GROUPS | AGE GROUP   | AGE % C | OF GENDERFEMALE | GENDER % OI<br>MALE | FAGE GROUPFEMALE |  |  |  |
| 0.01%                  | 0-15  | 0.02%   | 0.00%           | 100.0%              | 0.0%             |  |  |  |
| 5.20%                  | 16-20   | 5.20%   | 5.18%           | 68.6%               | 31.4%            |  |  |  |
| 13.48%                 | 21-25   | 14.19%  | 11.93%          | 72.1%               | 27.9%            |  |  |  |
| 15.63%                 | 26-30   | 16.46%  | 13.82%          | 72.2%               | 27.8%            |  |  |  |
| 14.40%                 | 31-35   | 14.84%  | 13.46%          | 70.6%               | 29.4%            |  |  |  |
| 11.37%                 | 36-40   | 11.42%  | 11.25%          | 68.9%               | 31.1%            |  |  |  |
| 8.41%                  | 41-45   | 8.60%   | 8.00%           | 70.1%               | 29.9%            |  |  |  |
| 7.49%                  | 46-50   | 6.88%   | 8.80%           | 63.0%               | 37.0%            |  |  |  |
| 7.76%                  | 51-55   | 7.31%   | 8.76%           | 64.5%               | 35.5%            |  |  |  |
| 6.28%                  | 56-60   | 6.00%   | 6.91%           | 65.4%               | 34.6%            |  |  |  |
| 4.31%                  | 61-65   | 3.84%   | 5.34%           | 61.0%               | 39.0%            |  |  |  |
| 5.53%                  | 66+   | 5.13%   | 6.39%           | 63.6%               | 36.4%            |  |  |  |
| 100.00%                | TOTALS*   |         |                 | 68.5%               | 31.5%            |  |  |  |

<sup>\*</sup> Excludes undefined driver age or gender type.

# Drugged Driving • Analysis of Location

Over the past 5 years (2014-2018), more than 10 percent of all drugged driving crashes took place in Camden County followed by Burlington County (7.9%). 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<br>2014 - 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |  |  |  |  |
| NEW JERSEY  | 6,514                               |                            | 11.1%                        |  |  |  |  |
| Atlantic  | 379                                 | 5.8%                       | 12.8%                        |  |  |  |  |
| Hamilton Township (Atlantic Co)                       | 64                                  | 16.9%                      | 10.3%                        |  |  |  |  |
| Egg Harbor Township                                   | 61                                  | 16.1%                      | 8.9%                         |  |  |  |  |
| Galloway Township                                     | 59                                  | 15.6%                      | 7.3%                         |  |  |  |  |
| Bergen  | 417                                 | 6.4%                       | 12.4%                        |  |  |  |  |
| Saddle Brook Township                                 | 24                                  | 5.8%                       | 14.3%                        |  |  |  |  |
| Elmwood Park borough                                  | 18                                  | 4.3%                       | 12.5%                        |  |  |  |  |
| Ridgewood Village                                     | 16                                  | 3.8%                       | 6.7%                         |  |  |  |  |
| Burlington  | 515                                 | 7.9%                       | 16.0%                        |  |  |  |  |
| Mount Laurel Township                                 | 59                                  | 11.5%                      | 22.9%                        |  |  |  |  |
| Evesham Township                                      | 54                                  | 10.5%                      | 10.2%                        |  |  |  |  |
| Maple Shade Township                                  | 33                                  | 6.4%                       | 10.0%                        |  |  |  |  |

|                                     | DRUG-RELATED CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |
|-------------------------------------|-------------------------------------|----------------------------|------------------------------|
| Camden                              | 704                                 | 10.8%                      | 3.4%                         |
| Camden City                         | 167                                 | 23.7%                      | -2.9%                        |
| Cherry Hill Township                | 77                                  | 10.9%                      | 8.5%                         |
| Gloucester Township                 | 68                                  | 9.7%                       | -9.3%                        |
| Cape May                            | 119                                 | 1.8%                       | 14.4%                        |
| Middle Township                     | 38                                  | 31.9%                      | 11.8%                        |
| Lower Township                      | 21                                  | 17.6%                      | 5.0%                         |
| Dennis Township                     | 18                                  | 15.1%                      | 100.0%                       |
| Cumberland                          | 116                                 | 1.8%                       | 22.1%                        |
| Vineland City                       | 36                                  | 31.0%                      | 28.6%                        |
| Millville City                      | 22                                  | 19.0%                      | 15.8%                        |
| Maurice River Township              | 16                                  | 13.8%                      | 45.5%                        |
| Essex                               | 415                                 | 6.4%                       | 12.8%                        |
| Newark City                         | 143                                 | 34.5%                      | 7.5%                         |
| Fairfield Township                  | 43                                  | 10.4%                      | 26.5%                        |
| East Orange City                    | 36                                  | 8.7%                       | 24.1%                        |
| Gloucester                          | 329                                 | 5.1%                       | 14.2%                        |
| Deptford Township                   | 84                                  | 25.5%                      | 13.5%                        |
| Washington Township (Gloucester Co) | 62                                  | 18.8%                      | 24.0%                        |
| Monroe Township (Gloucester Co)     | 30                                  | 9.1%                       | 0.0%                         |
| Hudson                              | 268                                 | 4.1%                       | 15.0%                        |
| Jersey City                         | 125                                 | 46.6%                      | 23.8%                        |
| Bayonne City                        | 41                                  | 15.3%                      | -2.4%                        |
| Kearny Town                         | 23                                  | 8.6%                       | 0.0%                         |
| Hunterdon                           | 145                                 | 2.2%                       | 18.9%                        |
| Raritan Township                    | 29                                  | 20.0%                      | 26.1%                        |
| Clinton Township                    | 25                                  | 17.2%                      | 13.6%                        |
| Readington Township                 | 22                                  | 15.2%                      | 46.7%                        |
| Mercer                              | 240                                 | 3.7%                       | 15.4%                        |
| Hamilton Township (Mercer Co)       | 58                                  | 24.2%                      | 9.4%                         |
| Trenton City                        | 45                                  | 18.8%                      | -4.3%                        |
| Lawrence Township (Mercer Co)       | 24                                  | 10.0%                      | 50.0%                        |
| Middlesex                           | 398                                 | 6.1%                       | 10.2%                        |
| Woodbridge Township                 | 57                                  | 14.3%                      | 14.0%                        |
| Old Bridge Township                 | 41                                  | 10.3%                      | -8.9%                        |
| Sayreville Borough                  | 38                                  | 9.5%                       | 46.2%                        |

|                                | DRUG-RELATED CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |
|--------------------------------|-------------------------------------|----------------------------|------------------------------|
| Monmouth                       | 505                                 | 7.8%                       | 12.2%                        |
| Wall Township                  | 63                                  | 12.5%                      | 5.0%                         |
| Middletown Township            | 53                                  | 10.5%                      | -3.6%                        |
| Howell Township                | 49                                  | 9.7%                       | 11.4%                        |
| Morris                         | 391                                 | 6.0%                       | 11.7%                        |
| Parsippany-Troy Hills Township | 63                                  | 16.1%                      | 14.5%                        |
| Rockaway Township              | 39                                  | 10.0%                      | 8.3%                         |
| Denville Township              | 29                                  | 7.4%                       | 20.8%                        |
| Ocean                          | 497                                 | 7.6%                       | 7.3%                         |
| Toms River Township            | 146                                 | 29.4%                      | 15.0%                        |
| Brick Township                 | 72                                  | 14.5%                      | 9.1%                         |
| Lakewood Township              | 56                                  | 11.3%                      | 16.7%                        |
| Passaic                        | 283                                 | 4.3%                       | 8.0%                         |
| Paterson City                  | 90                                  | 31.8%                      | 12.5%                        |
| Clifton City                   | 43                                  | 15.2%                      | 0.0%                         |
| Wayne Township                 | 27                                  | 9.5%                       | -3.6%                        |
| Salem                          | 96                                  | 1.5%                       | 24.7%                        |
| Pennsville Township            | 14                                  | 14.6%                      | 40.0%                        |
| Carneys Point Township         | 13                                  | 13.5%                      | 62.5%                        |
| Mannington Township            | 13                                  | 13.5%                      | -27.8%                       |
| Somerset                       | 150                                 | 2.3%                       | 8.7%                         |
| Warren Township                | 29                                  | 19.3%                      | 38.1%                        |
| Bridgewater Township           | 17                                  | 11.3%                      | 0.0%                         |
| Bernards Township              | 12                                  | 8.0%                       | 20.0%                        |
| Sussex                         | 113                                 | 1.7%                       | 3.7%                         |
| Frankford Township             | 17                                  | 15.0%                      | 13.3%                        |
| Vernon Township                | 17                                  | 15.0%                      | 0.0%                         |
| Montague Township              | 10                                  | 8.8%                       | 25.0%                        |
| Union                          | 334                                 | 5.1%                       | 11.3%                        |
| Union Township (Union Co)      | 73                                  | 21.9%                      | 9.0%                         |
| Elizabeth City                 | 48                                  | 14.4%                      | 9.1%                         |
| Linden City                    | 34                                  | 10.2%                      | 36.0%                        |
| Warren                         | 100                                 | 1.5%                       | -2.0%                        |
| Allamuchy Township             | 15                                  | 15.0%                      | 25.0%                        |
| Hackettstown Town              | 10                                  | 10.0%                      | -9.1%                        |
| Phillipsburg Town              | 10                                  | 10.0%                      | -28.6%                       |

#### **Countermeasure Strategies in Program Area**

| Countermeasure Strategy                  |
|--|
| Highway Safety Office Program Management |
| Law Enforcement Training                 |
| High Visibility Saturation Patrols       |
| Underage Drinking Enforcement            |
| Youth Programs                           |

## Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** Reduce the five-year rolling average of impaired driving related fatalities by 27%, serious injuries by 18%, and total injuries by 18%, over the period from 2018 to 2023.

# Strategies in 2020 Strategic Highway Safety Plan

Recommend law enforcement training enhancements to strengthen driver behavior. Review police recruit training program for potential enhancements.

Initiate a study to evaluate the efficacy of various driver behavior modification approaches.

Discuss with Traffic Safety Resource Prosecutor opportunities to provide highway safety education to prosecutors.

Discuss opportunities with the Administrative Office of the Courts for increasing consistent, timely DUI adjudication.

#### **Associated Performance Measures**

| Fiscal | Performance measure name                               | Target End | Target | Target  |
|--------|--|------------|--------|---------|
| Year   |  | Year       | Period | Value   |
| 2021   | Number of Drug Involved Fatalities                     | 2021       | 5 Year | 86.0    |
| 2021   | Number of Drug Involved Crashes                        | 2021       | 5 Year | 1,739.0 |
| 2021   | Number of fatalities in crashes involving a driver or  | 2021       | 5 Year | 120.8   |
|        | motorcycle operator with a BAC of .08 and above (FARS) |            |        |         |

#### Countermeasure Strategy: Highway Safety Office Program Management

Project Name: ALCOHOL AND OTHER DRUG COUNTERMEASURES PROGRAM MANAGEMENT

Sub-Recipient: DIVISION OF HIGHWAY TRAFFIC SAFETY

Total Project Amount: \$700,000

**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 enforcement 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. In all, six current program staff members are provided partial salary funding in this grant, as well as a public information assistant who carries out media activities relating to impaired driving. In addition, partial salaries for three new program staffers slated to be hired in FY2021 are included.

Activities carried out by the staff members funded through this grant include all of the countermeasures in the alcohol program area, with the majority of work hours taking place in the following areas: DRE Callout and DWI Enforcement (high visibility saturation patrols, both sustained and national mobilizations).

Salaries and fringe benefits account for \$550,000 of the budgeted amount in the alcohol and other drug countermeasures program area. Additionally, another \$150,000 is budgeted for travel and other miscellaneous expenditures such as equipment, supplies, rent, and utility expenses necessary to carry out the alcohol and other drug countermeasures functions of the States' Highway Safety Office.

Funding Source: SECTION 402 Local Benefit: 0

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## **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 8,000 officers (National Sobriety Testing Resource Center, 2016). Several studies have shown DRE judgments of drug impairment are corroborated by toxicological analysis in 85 percent or more of cases (NHTSA, 1996).

In addition, NHTSA has developed the Advanced Roadside Impaired Driving Enforcement (ARIDE) Training, which bridges the gap between the SFST and DRE training programs. The program is available to those officers already certified in SFST and requires 16 hours of training (International Association of Chiefs of Police, 2017).

#### Assessment of Safety Impacts

Providing SFST, DRE, and ARIDE training to members of the law enforcement community to detect alcohol and drug impairment will ensure that officers possess the skills necessary to identify and apprehend impaired drivers and increase drunk driving arrests. Furthermore, providing training and guidance to prosecutors who oversee court related prosecutions 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 and make up for gaps in the availability and reliability 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. Furthermore, the issue of drug impaired driving in NJ may become even more prevalent in FY2021 and beyond as a statewide ballot referendum on marijuana legalization will be decided in November 2020. In light of these developments there is a need for an educational program to train local officers on drug related DWI investigations, the focus of which is 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 the opportunity 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 DRE officers called out will be available to process individual offenders and 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 proven methodologies are a critical investment in any DWI

enforcement program. Officers who can follow a prescribed protocol and clearly describe an arrest are a critical element in obtaining DWI convictions.

In New Jersey, a significant number of impaired driving arrests are dismissed during the adjudication process. It is the desire of DHTS to facilitate an audit in FY2021 with its traffic safety partners to ascertain why this is occurring and what can be done to address any deficiencies in the process.

On a positive note, in FY2020, DHTS and Rutgers University launched a web-based DRE evaluation program to capture more and better data from DRE's in the field, in real time. The program took effect January 1, 2020 and is now mandatory for every DRE. The data captured through this effort should provide a more accurate picture of DRE activity and drug trends of impaired drivers on our roadways.

The five-year average (2014-2018) for drugged driving related crashes was 1,302.8. In 2018, approximately 13 percent of all fatalities were drug related. There was a 3.6 percent increase in drug related crashes in 2018 from 1,610 in 2017 to 1,668. The DRE call-out program will assist in helping to identify impairment in drivers under the influence of drugs other than alcohol. 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.

Driver Behavior is one of the six Emphasis Areas of the 2020 Strategic Highway Safety Plan, and the issue of impaired driving falls within this area. DHTS will make it a priority to assist in implementing the strategies of the plan in which it can play a role, such as facilitating enhanced training opportunities for law enforcement and working with the Traffic Safety Resource Prosecutor and Administrative Office of the Courts to improve driver behavior and adjudication of DUI cases.

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: \$1,475,000

**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. In addition to DRE, 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 FY2021. Additionally, three DRE regional courses and one DRE Instructor course is expected to be conducted. The NJ Association of Drug Recognition Experts will be tasked with enhancing and streamlining the process by which field evaluations are reported by DRE's. These DRE program efforts come with the realization that recreational marijuana use might be legalized in New Jersey in FY2021 or beyond.

If funding allows, the establishment of a dedicated DRE Unit within NJSP will also be investigated.

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. It is anticipated that more than 1,500 officers will be trained in ARIDE in FY2021. The New Jersey Association of Drug Recognition Experts will also receive funds for training purposes.

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.

The New Jersey Chapter of Mothers Against Drunk Driving (MADD) will receive seed money in a new grant in FY2021 to carry out its work in victim advocacy and public awareness relating to impaired driving. MADD Victim Service Specialists work to mitigate the devastating effects of impaired driving crashes by helping the family members of crash victims navigate the criminal justice system and beyond from both practical and support standpoints. Another critical part of the project will be the ongoing work that MADD does to raise awareness about alcohol and impaired driving both in NJ and nationally, including providing information on New Jersey's new ignition interlock law. MADD will fill a gap that currently exists in the impaired driving spectrum and will work collaboratively with the enforcement and judicial communities to provide community-based information, support, and referral services.

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 recertification of police officers to operate approved chemical breath test instruments that recognize alcohol indicators present in suspects. Funds will be used to maintain existing breathalyzer related instruments used for training and testing. It is expected that a major focus and expense in this area in FY2021 will be the statewide roll out of a new version of the Alcotest breathalyzer unit.

Within this project area the majority of the funding (\$1.375 million) will go to NJ State Police for DWI, ARIDE, DRE and Alcotest training. MADD is slated to receive \$75,000 for its pilot project and the prevention conference will receive \$25,000.

Funding Source: SECTION 405(d) Local Benefit: \$125,000

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Project Name: DRE CALL-OUT PROGRAM

Sub-Recipients: COUNTY PROSECUTOR OFFICES

Total Project Amount: \$750,000

**Project Description:** 

The DRE call-out program, currently operational in eleven counties (Bergen, Atlantic/Camden, Monmouth, Morris/Sussex, Ocean, Somerset/Hunterdon, Middlesex, and Union) will be expanded to fifteen counties in FY2021. This expansion demonstrates the robust DRE Call-out program that exists in the state. The Division of State Police will also participate in the program by providing DRE training to law enforcement officers. County and municipal prosecutors will be included in the implementation and expansion of the program 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. Judicial outreach efforts targeting judges are being reviewed by the regional JOL. Law enforcement officers in the counties with call out programs will be advised of the protocol so they can call on a DRE when needed. Funds will be used to pay for the overtime services provided by the DRE at the time of the call-out.

County agencies that receive funding for this program will be urged to make plans to continue the program with their own resources following the initial three-year period of grant-funded support.

Funding Source: SECTION 405(d) Local Benefit: \$750,000

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## 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 and have been proven effective. Law enforcement officers in Minnesota conducted 290 saturation patrols during 2006, in which they stopped 33,923 vehicles and arrested 2,796 impaired drivers (Century Council, 2008).

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

Within the realm of traffic safety countermeasures, enforcement is the most critical tool for controlling impaired drivers. Highly visible patrols resulting in arrests for driving while intoxicated by alcohol or drugs, 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 (2014-2018) reveals an overall decrease in crashes. However, over a one-year period, there has been an increase in alcohol involved crashes in 10 of New Jersey's 21 counties, with the greatest annual increase (2017-2018) occurring in Union, Hunterdon, and Warren Counties (19.5%, 8.5% and 6.6% respectively). The primary focus of alcohol enforcement activities will be on utilizing available grant funding to increase the overall level of enforcement in the towns and counties that are identified as high-risk based on available data. DHTS will utilize a data-driven approach in its funding allocations. The towns and/or counties with the highest numbers of impaired driving-related crashes will be offered grant funding, both year-round sustained enforcement and mobilizations, on a scaled basis relating directly to data. Other agencies with historically high enforcement efforts will be included in the grant-funded program, as well. Note that an offer of grant funding to an agency by DHTS does not guarantee the agency will accept the funding.

Project Name: DWI ENFORCEMENT

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

Total Project Amount: \$2,200,000

**Project Description:** 

For FY2021, DHTS will endeavor to move the needle on the stubborn issue of impaired driving through a comprehensive data-driven approach utilizing a combination of sustained and targeted mobilization enforcement.

The preceding tables show a five-year analysis of alcohol related crashes by county. These rankings, along with a statewide top to bottom ranking of municipalities for alcohol-related crashes represent the starting point for our efforts. Based on the data included in these rankings, local and county agencies are selected and offered sustained impaired driving grants, as well as grants for the scheduled national mobilizations. Every effort is made to engage police agencies in these high crash areas in our grant programs, but there is no guarantee that all agencies will be willing or able to participate. In fact, it has been our experience that many are not. Nonetheless, DHTS will make every effort to engage these agencies to carry forward the most data driven enforcement effort possible in this area. Those agencies that are interested and able will receive funds to conduct sustained enforcement efforts through impaired driving checkpoint programs, saturation patrols, and the national mobilizations.

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 300 State, county and local police agencies will partner with DHTS during each of the two statewide enforcement campaigns that will be conducted from December 4, 2020 – January 1, 2021 and from August 20 - September 6, 2021.

To help spread the *Drive Sober or Get Pulled Over* message, a variety of public awareness techniques are utilized including a statewide press release issued prior to the start of each crackdown, variable message board messaging, and targeted social media. Police agencies also engage their communities through the dissemination of local press releases and public service announcements.

The State's Drunk Driving Enforcement Fund (DDEF) also provides support 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. There exists the option to use some of the funding for alcohol enforcement related equipment, as well. The monies from this Fund are used on a statewide basis as a supplement to the federal funds as another means of providing sustained enforcement throughout the year.

In addition to Federal and DDEF resources being used in this area, the Alcohol Education, Rehabilitation and Enforcement Fund receives monies from a tax imposed on the sale of liquors. The Fund receives approximately \$11 million in annual deposits from alcohol beverage tax collections. 75 percent of the fund is allocated for alcohol rehabilitation initiatives, 15 percent on enforcement initiatives, and 10 percent on education initiatives.

It is anticipated that (as in FY2020) approximately \$1.2 million in Sec. 405e funding will be flexed into this Alcohol Enforcement program area for FY2021 to support the national enforcement mobilizations.

Within this planned activity, the approximate breakdown for FY2021 funding will be: \$1,200,000 for the two DSOGPO crackdowns (Municipalities will be offered funding based upon a data-driven determination). \$1,000,000 for sustained enforcement (\$250,000 to New Jersey State Police, \$750,000 to municipal agencies).

Funding Source: SECTION 405(d) \$1,000,000 SECTION 405(e) flexed \$1.2 million Local Benefit: \$1,950,000

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# Countermeasure Strategy: Underage Drinking Enforcement

# Effectiveness of Countermeasure

In all 50 states, alcohol vendors are required to verify the age of young customers to be sure they are at least 21 years of age. However, several studies indicate that underage persons can obtain alcohol without much difficulty. Across several studies, young purchasers obtained alcohol without presenting identification in 44%-97% of cases (Goodwin, et al, 2005). Other studies document that well-publicized and vigorous compliance checks, in which law enforcement officers watch as underage people attempt to purchase alcohol and then cite the vendor for a violation if a sale is made, do in fact reduce alcohol sales to youth; as an 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. An effective compliance check program works primarily through deterrence.

#### 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. Teenagers brains are still developing, and this, in conjunction with inexperienced driving skills make the potential for crashes all the worse when alcohol is added to the mix. Despite underage drinking laws and prevention programs, underage alcohol consumption remains prevalent in our society. According to the National Institute on Alcohol Abuse and Alcoholism, as adolescents get older, they tend to drink more. About 18 percent of both males and females consumed alcohol within a month of the survey conducted by

the University of Michigan in 2019. Drivers in New Jersey under the age of 21 are involved in 4.5 percent of all alcohol-involved crashes while drivers under age 25 account for 15 percent of the crashes.

Project Name: UNDERAGE ENFORCEMENT

Sub-Recipients: DIVISION OF ALCOHOLIC BEVERAGE CONTROL, DIVISION OF STATE POLICE, MUNICIPAL AGENCIES

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 by municipal police agencies in Atlantic, Bergen, Camden, Essex, Gloucester, Mercer, Middlesex, Monmouth, Morris, Ocean, Union and Warren Counties. Additionally, a similar *Summer Enforcement Initiative* will be implemented during the summer in the State's shore communities, by Investigators and Detectives from the Division of ABC. 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 be enforced. The use of undercover State and local police are 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 licenses that allow this activity on their premises. This project reduces the purchase and consumption of alcohol by underage persons, while sending a strong deterrence message to the owners of licensed beverage establishments.

Though the percentage of underage people attempting to purchase alcohol in the state is not known, during the FY2015-FY2019 *Summer Enforcement Initiative*, 3,931 individuals were approached and "carded" by plainclothes officers, resulting in 459 arrests for illegally attempting to purchase alcohol underage.

Within the three primary grants in this project area, *Cops In Shops, Summer Enforcement Initiative*, and the *NJ State Police Underage Enforcement initiative*, grant funding goes solely for salaries and overtime enforcement operations (as well as fringe benefits in some cases) for the Division of ABC, municipal police, and NJSP personnel involved in the projects.

Funding Source: SECTION 405(d) Local Benefit: \$50,000

#### Countermeasure Strategy: Youth Programs

#### Effectiveness of Countermeasure

Alcohol use on college campuses has an impact on virtually all of the students at the particular institution, whether they drink or not (National Institute on Alcohol Abuse and Alcoholism, 2013). In light of this, it is important to address dangerous drinking behaviors and other cultural expectations, behaviors, and pressures that impact college students. Studies reveal that over 1,800 college student deaths each year are linked to alcohol, with a majority due

to automobile crashes. Also, each year, researchers estimate that 696,000 students are physically assaulted and 97,000 sexually assaulted relating to alcohol.

Binge drinking, and alcohol consumption in general, are concerns within the campus community. The 2018 National Survey of Drug Use and Health found the following: 54.9% of full-time college students ages 18-22 drank alcohol in the previous month, compared to 44.6% of other persons in that age group. 36.9% of college students ages 18-22 reported binge drinking in the previous month, compared to 27.9% of other persons in that age group. And 9.6% of college students ages 18-22 reported heavy alcohol use in the previous month, compared to 6.9% of other persons in the same age group.

## Assessment of Safety Impacts

General alcohol awareness programs are a good starting point to remind students about the risks of driving after drinking, but the message requires constant reinforcement in new and creative ways. These general awareness programs work best when combined with other programs that focus on individual behavioral change from a peer-to-peer perspective, and enhanced enforcement.

## Linkage between Problem Identification and Performance Targets

The 16-25-year-old age group in the State represents 20 percent of drivers involved in alcohol related crashes and 19 percent of drugged driving crashes. According to an American College Health Association, National College Health Assessment conducted at several New Jersey colleges and universities, nearly two-thirds of college students consume alcohol and 19 percent drive after drinking.

Project Name: COLLEGE CAMPUS INITIATIVES
Sub-Recipients: COLLEGES AND UNIVERSITIES

Total Project Amount: \$175,000

**Project Description:** 

The College of New Jersey (CNJ) will hold statewide events such as the Peer Institute 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. The College will also expand the Hero Campaign for Designated Driver program and messaging on campus.

Stockton University will sponsor alcohol/drug education workshops and awareness programs on campus emphasizing the risks associated with alcohol/drug abuse and driving. Special campus events and training sessions will be offered utilizing impaired driving simulators and goggles as well as on-line training resources. In addition, peer educators from the university will present alcohol and drunk driving awareness programs to local high school students on the consequences of intoxicated driving, peer pressure and decision-making.

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 allocated 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.

In general, funds in this area will be used for educational materials that will be distributed at campus events, peer education trainings, and large on-campus special events regarding impaired driving.

Funding Source: SECTION 405(d) Local Benefit: \$175,000

#### PEDESTRIAN AND BICYCLE SAFETY

## Pedestrian Safety • General Overview

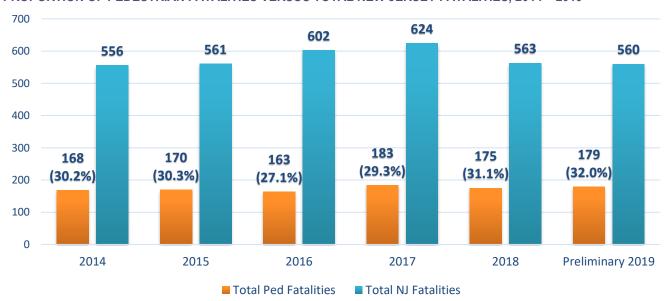
Over the past ten years, from 2010-2019, there have been a total of 1,604 pedestrian fatalities in the New Jersey. In 2018, 175 pedestrian fatalities occurred, representing a 4.4 percent decrease from the previous year. However, in 2019, a preliminary total of 179 pedestrians were killed on New Jersey's roadways, resulting in a 2.3 percent increase from 2018. Projected estimates based on trends indicate an expected increase in both 2020 and 2021.

#### 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 27 percent of total roadway fatalities in 2016, 29 percent in 2017, and 31 percent in 2018 and 32 percent in 2019.

#### PROPORTION OF PEDESTRIAN FATALITIES VERSUS TOTAL NEW JERSEY FATALITIES, 2014 - 2019



In 2018, the number of crashes between motor vehicles and pedestrians decreased for the first time since 2015. 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. This emphasized effort in outreach and education helped New Jersey achieve a decrease in the non-fatal injury rate and fatal injury rates for pedestrians in 2018.

| PEDESTRIAN INJURIES BY SEVERITY, 2014 - 2018 |       |       |       |       |       |  |  |  |
|--|-------|-------|-------|-------|-------|--|--|--|
|  | 2014  | 2015  | 2016  | 2017  | 2018  |  |  |  |
| KILLED                                       | 168   | 170   | 162   | 183   | 175   |  |  |  |
| TOTAL INJURED                                | 3,842 | 3,948 | 4,090 | 4,085 | 3,985 |  |  |  |
| SUSPECTED SERIOUS INJURY (A)                 | 173   | 175   | 171   | 164   | 188   |  |  |  |
| SUSPECTED MINOR INJURY (B)                   | 1,064 | 1,214 | 1,220 | 1,152 | 1,164 |  |  |  |
| POSSIBLE INJURY (C)                          | 2,605 | 2,559 | 2,699 | 2,769 | 2,633 |  |  |  |
| FATALITY RATE PER 100,000 POPULATION         | 1.88  | 1.92  | 1.83  | 2.06  | 1.97  |  |  |  |
| NON-FATAL INJURY RATE PER 100,000 POPULATION | 43.34 | 44.52 | 46.11 | 45.97 | 44.85 |  |  |  |
| TOTAL PEDESTRIAN CRASHES                     | 5,214 | 4,709 | 4,840 | 4,997 | 4,393 |  |  |  |

Most pedestrians involved in crashes had one or more contributing factors reported. Approximately 46 percent of crashes with pedestrians occurred at an intersection. The most common factor for pedestrians was *Crossing Where Prohibited* (2,110 or 15.9%), followed by *Running/Darting Across Traffic* (1,854 or 14.0%).

| PEDESTRIAN CRASH CONTRIBUTING CIRCUMSTANCES BY INTERSECTION INVOLVEMENT, 2014 - 2018 |                    |                                    |                        |       |  |  |  |
|--|--------------------|------------------------------------|------------------------|-------|--|--|--|
| CRASH CONTRIBUTING CIRCUMSTANCE  | AT<br>INTERSECTION | AT OR NEAR<br>RAILROAD<br>CROSSING | NOT AT<br>INTERSECTION | TOTAL |  |  |  |
| Crossing Where Prohibited  | 0                  | 1,686                              | 424                    | 2,110 |  |  |  |
| Running/Darting Across Traffic   | 1                  | 1,316                              | 537                    | 1,854 |  |  |  |
| Dark Clothing/Low Visibility to Driver   | 0                  | 903                                | 662                    | 1,565 |  |  |  |
| Pedestrian Inattentive   | 3                  | 992                                | 533                    | 1,528 |  |  |  |
| Walking in Road When Sidewalk Present  | 0                  | 348                                | 95                     | 443   |  |  |  |
| Walking on Wrong Side of Road  | 0                  | 96                                 | 16                     | 112   |  |  |  |
| Failed to Obey Traffic Control Device  | 0                  | 12                                 | 29                     | 41    |  |  |  |
| None (Pedestrian)  | 2                  | 1,269                              | 1,913                  | 3,184 |  |  |  |
| Other Pedestrian Factors   | 1                  | 1,575                              | 863                    | 2,439 |  |  |  |

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 2014-2018, 6 percent of crashes involved drugs or alcohol impairment. About 14 percent of crashes involving pedestrians also involved older drivers, 4.3 percent involved a younger driver and 2.7 percent involved unsafe speed.

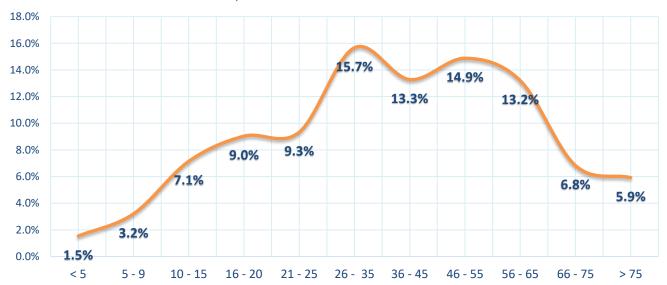
| PEDESTRIAN                        | PEDESTRIAN CRASHES AND OTHER PERFORMANCE AREAS, 2014 – 2018 |       |       |       |       |        |          |           |  |  |
|-----------------------------------|---|-------|-------|-------|-------|--------|----------|-----------|--|--|
| PEDESTRIANS AND                   | 2014  | 2015  | 2016  | 2017  | 2018  | TOTAL  | 5 YR AVG | % OF 5 YR |  |  |
| ALCOHOL INVOLVEMENT               | 302   | 260   | 273   | 301   | 240   | 1,376  | 275      | 5.7%      |  |  |
| DRUG INVOLVEMENT                  | 13  | 20    | 10    | 17    | 9     | 69     | 14       | 0.3%      |  |  |
| DISTRACTED DRIVING                | 2,378   | 2,018 | 2,107 | 2,208 | 1,812 | 10,523 | 2,105    | 43.6%     |  |  |
| UNSAFE SPEED                      | 149   | 141   | 122   | 173   | 79    | 664    | 133      | 2.7%      |  |  |
| YOUNG DRIVERS                     | 257   | 201   | 186   | 229   | 164   | 1,037  | 207      | 4.3%      |  |  |
| OLDER DRIVERS                     | 756   | 643   | 705   | 691   | 629   | 3,424  | 685      | 14.2%     |  |  |
| MOTORCYCLES                       | 15  | 23    | 18    | 13    | 10    | 79     | 16       | 0.3%      |  |  |
| TOTAL PEDESTRIAN INVOLVED CRASHES | 5,214   | 4,709 | 4,840 | 4,997 | 4,393 | 24,153 | 4,831    | 100.0%    |  |  |

## Pedestrian Safety • Analysis of Age

Pedestrian related crashes continue to be a concern for younger travelers, specifically the 0-15-year-old age group, representing 11.9 percent of total pedestrians involved in motor vehicle crashes up from 11.4 percent (2013-2017). The age group of 16–20 represented 9 percent of total pedestrians involved in crashes over the past five years (2014-2018). Pedestrian safety education is an important component for all genders and all age groups. Pedestrian safety is a 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 (2014-2018), the 26-35-year-old age group has represented the largest proportion of pedestrians being involved in crashes (15.7%) in the State, followed by 46-55 years old (14.9%).

#### PEDESTRIAN CRASH % BY AGE GROUP, 2014 - 2018



<sup>\*</sup>Excludes NULL/Unknown values

#### 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 graphic below shows the Time of Day and Time of Year distribution of crashes involving one or more pedestrians. Over the past 5 years (2014-2018) approximately 44 percent of pedestrian

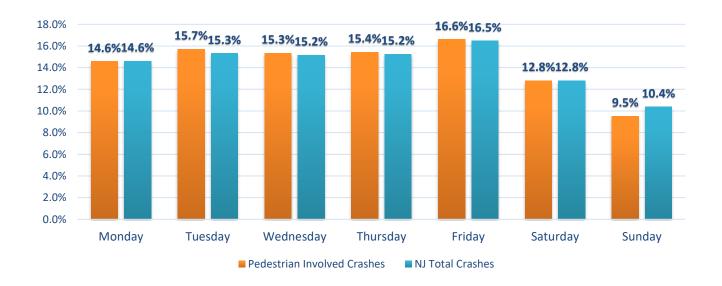
involved crashes occurred between 3:00PM and 8:59PM, with a majority occurring in December. The data shows that although pedestrian activity increases during the warmer months, it is the months with the least amount of daylight where pedestrian crashes occur most on the State's roadways.

PEDESTRIAN INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN         | FEB         | MAR         | APR         | MAY         | JUN         | JUL         | AUG         | SEPT        | OCT          | NOV          | DEC          | TOT    | AL   |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------|------|
| Midnight to 2:59AM   | 79          | 64          | 59          | 64          | 99          | 94          | 104         | 111         | 93          | 82           | 67           | 73           | 989    | 4%   |
| 3:00AM to<br>5:59AM  | 50          | 52          | 52          | 37          | 43          | 38          | 32          | 46          | 39          | 49           | 42           | 48           | 528    | 2%   |
| 6:00AM to<br>8:59AM  | 338         | 193         | 255         | 207         | 233         | 217         | 138         | 162         | 292         | 382          | 291          | 336          | 3,044  | 13%  |
| 9:00AM to<br>11:59AM | 249         | 189         | 226         | 210         | 245         | 234         | 231         | 246         | 232         | 284          | 231          | 235          | 2,812  | 12%  |
| Noon to<br>2:59PM    | 309         | 242         | 282         | 267         | 308         | 297         | 261         | 275         | 321         | 316          | 314          | 258          | 3,450  | 14%  |
| 3:00PM to<br>5:59PM  | 502         | 363         | 415         | 400         | 433         | 416         | 282         | 298         | 369         | 463          | 719          | 752          | 5,412  | 22%  |
| 6:00PM to<br>8:59PM  | 535         | 471         | 427         | 355         | 330         | 313         | 280         | 323         | 405         | 610          | 589          | 696          | 5,334  | 22%  |
| 9:00PM to<br>11:59PM | 154         | 146         | 206         | 209         | 211         | 280         | 287         | 263         | 225         | 190          | 189          | 224          | 2,584  | 11%  |
| TOTAL                | 2,216<br>9% | 1,720<br>7% | 1,922<br>8% | 1,749<br>7% | 1,902<br>8% | 1,889<br>8% | 1,615<br>7% | 1,724<br>7% | 1,976<br>8% | 2,376<br>10% | 2,442<br>10% | 2,622<br>11% | 24,153 | 100% |

Day-of-week occurrences are one of the more important indicators to help shed light on the issue of pedestrian involved crashes. As seen in the graph, crashes involving pedestrians mirror the typical distribution of all crashes in New Jersey.

#### PEDESTRIAN INVOLVED CRASH % VERSUS TOTAL NJ CRASH % BY DAY OF WEEK, 2014 - 2018



## Pedestrian Safety • Analysis of Location

A table that represents the Top 15 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, 10.43 percent of all pedestrian crashes in the State occurred in Newark, followed by Jersey City (6.49%) and Paterson (4.89%).

|      | PEDESTRIAN INVOLVE | CRASHES, T | OP 15 MUNICIP | ALITIES AND TOP 15 CO | UNTIES, 2014 - | 2018       |
|------|--------------------|------------|---------------|-----------------------|----------------|------------|
| RANK | MUNICIPALITY       | CRASHES    | % OF TOTAL    | COUNTY                | CRASHES        | % OF TOTAL |
| 1    | Newark City        | 2,519      | 10.43%        | Essex                 | 4,775          | 19.77%     |
| 2    | Jersey City        | 1,568      | 6.49%         | Hudson                | 3,546          | 14.68%     |
| 3    | Paterson City      | 1,180      | 4.89%         | Bergen                | 3,029          | 12.54%     |
| 4    | Irvington Township | 545        | 2.26%         | Passaic               | 2,233          | 9.25%      |
| 5    | Elizabeth City     | 519        | 2.15%         | Middlesex             | 1,690          | 7.00%      |
| 6    | Camden City        | 473        | 1.96%         | Union                 | 1,637          | 6.78%      |
| 7    | Passaic City       | 465        | 1.93%         | Camden                | 1,175          | 4.86%      |
| 8    | East Orange City   | 426        | 1.76%         | Monmouth              | 976            | 4.04%      |
| 9    | Trenton City       | 414        | 1.71%         | Ocean                 | 872            | 3.61%      |
| 10   | Union City         | 384        | 1.59%         | Mercer                | 815            | 3.37%      |
| 11   | Lakewood Township  | 367        | 1.52%         | Atlantic              | 700            | 2.90%      |
| 12   | Hackensack City    | 356        | 1.47%         | Burlington            | 575            | 2.38%      |
| 13   | New Brunswick City | 354        | 1.47%         | Morris                | 533            | 2.21%      |
| 14   | Bayonne City       | 344        | 1.42%         | Somerset              | 418            | 1.73%      |
| 15   | North Bergen       | 328        | 1.36%         | Gloucester            | 321            | 1.33%      |

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 (4,775 crashes) had the highest 5-year total (2014-2018) of pedestrian crashes in the State consisting of 19.77 percent of all pedestrian crashes up from 19 percent in 2013-2017. Hudson County had the second highest number of pedestrian crashes over the past five years (2013-2017) with 3,546 accounting for 14.68 percent of all pedestrian crashes.

Every county in New Jersey experienced a decrease in pedestrian crashes when comparing the 5-year periods of 2013-2017 to 2014-2018. 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.

| PEDESTRI                            | AN CRASHES, TOP 3 MUNIC           | CIPALITIES BY COUNTY       |                              |
|-------------------------------------|-----------------------------------|----------------------------|------------------------------|
|                                     | PEDESTRIAN CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |
| Atlantic County                     | 700                               | 2.9%                       | -8.7%                        |
| Atlantic City                       | 314                               | 44.9%                      | -9.0%                        |
| Egg Harbor Township                 | 67                                | 9.6%                       | -14.1%                       |
| Galloway Township                   | 60                                | 8.6%                       | -9.1%                        |
| Bergen County                       | 3,029                             | 12.5%                      | -3.7%                        |
| Hackensack City                     | 356                               | 11.8%                      | 2.6%                         |
| Fort Lee Borough                    | 208                               | 6.9%                       | -4.1%                        |
| Teaneck Township                    | 203                               | 6.7%                       | 4.6%                         |
| Burlington County                   | 575                               | 2.4%                       | -6.7%                        |
| Willingboro Township                | 53                                | 9.2%                       | -7.0%                        |
| Mount Laurel Township               | 49                                | 8.5%                       | -14.0%                       |
| Burlington Township                 | 39                                | 6.8%                       | 14.7%                        |
| Camden County                       | 1,175                             | 4.9%                       | -6.5%                        |
| Camden City                         | 473                               | 40.3%                      | -6.2%                        |
| Pennsauken Township                 | 106                               | 9.0%                       | -10.9%                       |
| Cherry Hill Township                | 94                                | 8.0%                       | -16.8%                       |
| Cape May County                     | 221                               | 0.9%                       | -7.9%                        |
| Middle Township                     | 59                                | 26.7%                      | 5.4%                         |
| Ocean City                          | 37                                | 16.7%                      | 0.0%                         |
| Lower Township                      | 29                                | 13.1%                      | -14.7%                       |
| Cumberland County                   | 311                               | 1.3%                       | -12.6%                       |
| Vineland City                       | 129                               | 41.5%                      | -11.6%                       |
| Millville City                      | 88                                | 28.3%                      | -3.3%                        |
| Bridgeton City                      | 65                                | 20.9%                      | -25.3%                       |
| Essex County                        | 4,775                             | 19.8%                      | -1.2%                        |
| Newark City                         | 2519                              | 52.8%                      | 0.0%                         |
| Irvington Township                  | 545                               | 11.4%                      | -0.5%                        |
| East Orange City                    | 426                               | 8.9%                       | -2.3%                        |
| Gloucester County                   | 321                               | 1.3%                       | -5.6%                        |
| Glassboro Borough                   | 54                                | 16.8%                      | -1.8%                        |
| Monroe Township (Gloucester Co)     | 45                                | 14.0%                      | -18.2%                       |
| Washington Township (Gloucester Co) | 43                                | 13.4%                      | -10.4%                       |
| Hudson County                       | 3,546                             | 14.7%                      | -4.9%                        |
| Jersey City                         | 1568                              | 44.2%                      | -5.7%                        |
| Union City                          | 384                               | 10.8%                      | -4.7%                        |
| Bayonne City                        | 344                               | 9.7%                       | -8.0%                        |

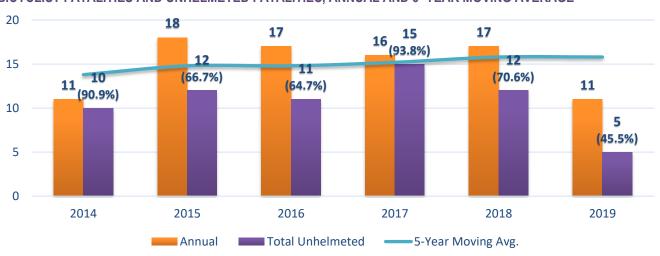
|                                 | PEDESTRIAN CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |
|---------------------------------|-----------------------------------|----------------------------|------------------------------|
| Hunterdon County                | 84                                | 0.3%                       | -6.7%                        |
| Flemington Borough              | 19                                | 22.6%                      | -5.0%                        |
| Lambertville City               | 15                                | 17.9%                      | 25.0%                        |
| Raritan Township                | 11                                | 13.1%                      | -35.3%                       |
| Mercer County                   | 815                               | 3.4%                       | -11.0%                       |
| Trenton City                    | 414                               | 50.8%                      | -8.0%                        |
| Hamilton Township (Mercer Co)   | 131                               | 16.1%                      | -16.0%                       |
| Princeton Township              | 95                                | 11.7%                      | -1.0%                        |
| Middlesex County                | 1,690                             | 7.0%                       | -3.0%                        |
| New Brunswick City              | 354                               | 20.9%                      | 9.6%                         |
| Perth Amboy City                | 283                               | 16.7%                      | 8.0%                         |
| Woodbridge Township             | 216                               | 12.8%                      | -10.7%                       |
| Monmouth County                 | 976                               | 4.0%                       | -8.9%                        |
| Neptune Township                | 110                               | 11.3%                      | 0.0%                         |
| Asbury Park City                | 98                                | 10.0%                      | -9.3%                        |
| Middletown Township             | 72                                | 7.4%                       | -12.2%                       |
| Morris County                   | 533                               | 2.2%                       | -12.8%                       |
| Morristown Town                 | 118                               | 22.1%                      | -4.8%                        |
| Dover Township                  | 71                                | 13.3%                      | -2.7%                        |
| Parsippany-Troy Hills Township  | 42                                | 7.9%                       | -27.6%                       |
| Ocean County                    | 872                               | 3.6%                       | -12.0%                       |
| Lakewood Township               | 367                               | 42.1%                      | -6.4%                        |
| Toms River Township             | 156                               | 17.9%                      | -15.7%                       |
| Brick Township                  | 61                                | 7.0%                       | -29.1%                       |
| Passaic County                  | 2,233                             | 9.2%                       | -3.0%                        |
| Paterson City                   | 1180                              | 52.8%                      | 1.1%                         |
| Passaic City                    | 465                               | 20.8%                      | -2.9%                        |
| Clifton City                    | 313                               | 14.0%                      | -11.6%                       |
| Salem County                    | 55                                | 0.2%                       | -8.3%                        |
| Salem City                      | 14                                | 25.5%                      | 7.7%                         |
| Carneys Point Township          | 12                                | 21.8%                      | -7.7%                        |
| Pennsville Township             | 7                                 | 12.7%                      | 40.0%                        |
| Somerset County                 | 418                               | 1.7%                       | -12.4%                       |
| Franklin Township (Somerset Co) | 75                                | 17.9%                      | -11.8%                       |
| North Plainfield Borough        | 73                                | 17.5%                      | -15.1%                       |
| Somerville Borough              | 46                                | 11.0%                      | -4.2%                        |

|                           | PEDESTRIAN CRASHES<br>2014 - 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |
|---------------------------|-----------------------------------|----------------------------|------------------------------|
| Sussex County             | 80                                | 0.3%                       | -3.6%                        |
| Newton Town               | 26                                | 32.5%                      | 0.0%                         |
| Sparta Township           | 8                                 | 10.0%                      | 0.0%                         |
| Hardyston Township        | 5                                 | 6.3%                       | 0.0%                         |
| Union County              | 1,637                             | 6.8%                       | -1.9%                        |
| Elizabeth City            | 519                               | 31.7%                      | 15.1%                        |
| Plainfield City           | 180                               | 11.0%                      | -12.6%                       |
| Union Township (Union Co) | 171                               | 10.4%                      | -10.5%                       |
| Warren County             | 107                               | 0.4%                       | -7.0%                        |
| Phillipsburg Town         | 42                                | 39.3%                      | 7.7%                         |
| Hackettstown Town         | 18                                | 16.8%                      | -30.8%                       |
| Washington Borough        | 15                                | 14.0%                      | 15.4%                        |

## 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 last 5 years (2015-2019), there have been a total of 79 bicyclist fatalities in the State. Bicycle fatalities represented 2 percent of total roadway fatalities in 2019, the lowest since 2014. As indicated in the chart, the number of bicyclist fatalities has remained rather consistent over the last several years, despite there being a concerted effort throughout New Jersey to enhance bicycle safety and awareness. New Jersey has identified helmet use as an important factor, as each year the majority of bicyclists fatally injured were not wearing a helmet during the crash.

## BICYCLIST FATALITIES AND UNHELMETED FATALITIES, ANNUAL AND 5-YEAR MOVING AVERAGE



In 2018, bicycles were involved in 0.6 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. In 2018, the non-fatal injury rate fell to the lowest levels since 2014 (14.48 non-fatal injuries per 100,000 population). However, the fatal injury rate in 2018 is higher than the 5-year average (0.19 fatal injuries per 100,000 population vs 0.18).

| BICYCLIST INJURIES BY SEVERITY, 2014 - 2018  |       |       |       |       |       |         |  |  |
|--|-------|-------|-------|-------|-------|---------|--|--|
|  | 2014  | 2015  | 2016  | 2017  | 2018  | AVERAGE |  |  |
| KILLED                                       | 11    | 18    | 17    | 16    | 17    | 16      |  |  |
| TOTAL INJURED                                | 1,148 | 1,372 | 1,469 | 1,501 | 1,287 | 1,355   |  |  |
| SUSPECTED SERIOUS INJURY (A)                 | 26    | 33    | 38    | 27    | 47    | 34      |  |  |
| SUSPECTED MINOR INJURY (B)                   | 437   | 499   | 554   | 515   | 471   | 495     |  |  |
| POSSIBLE INJURY (C)                          | 685   | 840   | 877   | 959   | 769   | 826     |  |  |
| NO APPARENT INJURY                           | 741   | 565   | 483   | 481   | 480   | 550     |  |  |
| FATALITY RATE PER 100,000 POPULATION         | 0.12  | 0.20  | 0.19  | 0.18  | 0.19  | 0.18    |  |  |
| NON-FATAL INJURY RATE PER 100,000 POPULATION | 12.88 | 15.48 | 16.57 | 16.92 | 14.48 | 15.27   |  |  |
| TOTAL BICYCLE CRASHES                        | 1,863 | 1,959 | 1,923 | 1,931 | 1,718 | 1,879   |  |  |

Most crashes with bicyclists had one or more contributing factors reported for each cyclist involved. The most common contributing factor for cyclists involved in crashes from 2014-2018 was *None* (*Pedalcyclist*) (3,386 or 34.5%) followed by *Driver Inattention* (1,676 or 17.1%). *Other Driver/Pedalcyclist Action* was cited next most frequently (1,331 or 13.6%), followed by *Failure to Yield the Right of Way to Vehicle/Pedestrian* (675 or 6.9%).

| BICYCLIST CONTRIBUT                                | ING CIRCUMSTANCES, 2014 - 2 | 2018                       |
|--|-----------------------------|----------------------------|
| CONTRIBUTING CIRCUMSTANCE                          | BICYCLISTS CITED            | % OF BICYCLISTS IN CRASHES |
| DRIVER INATTENTION                                 | 1,676                       | 17.1%                      |
| FAILED TO YIELD RIGHT OF WAY TO VEHICLE/PEDESTRIAN | 675                         | 6.9%                       |
| WRONG WAY  | 523                         | 5.3%                       |
| FAILED TO OBEY TRAFFIC CONTROL DEVICE              | 366                         | 3.7%                       |
| FAILURE TO KEEP RIGHT                              | 307                         | 3.1%                       |
| FAILED TO OBEY TRAFFIC SIGNAL                      | 174                         | 1.8%                       |
| IMPROPER USE/NO LIGHTS                             | 104                         | 1.1%                       |
| BRAKES   | 102                         | 1.0%                       |
| IMPROPER PASSING                                   | 99                          | 1.0%                       |
| UNSAFE SPEED                                       | 96                          | 1.0%                       |
| IMPROPER TURNING                                   | 79                          | 0.8%                       |
| FAILED TO OBEY STOP SIGN                           | 66                          | 0.7%                       |
| IMPROPER LANE CHANGE                               | 60                          | 0.6%                       |
| NONE   | 3,386                       | 34.5%                      |
| OTHER DRIVER/PEDALCYCLIST ACTION                   | 1,331                       | 13.6%                      |
| UNKNOWN  | 456                         | 4.6%                       |
| TOTAL BICYCLISTS INVOLVED IN CRASHES               | 9,813                       | 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 below. From 2014-2018, 3.5 percent of bicyclist involved crashes also involved drugs or alcohol impairment. Older drivers were involved in 14 percent of crashes involving bicyclists, 4.9 percent involved a younger driver and 34.6 percent involved a distracted driver.

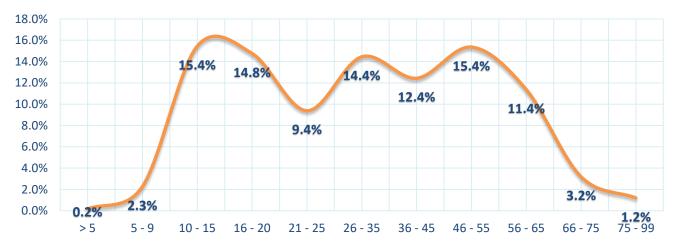
| BICYC                          | BICYCLE CRASHES BY PERFORMANCE AREA, 2014 – 2018 |       |       |       |       |       |          |           |  |  |  |
|--------------------------------|--|-------|-------|-------|-------|-------|----------|-----------|--|--|--|
| BICYCLES AND                   | 2014   | 2015  | 2016  | 2017  | 2018  | TOTAL | 5 YR AVG | % OF 5 YR |  |  |  |
| ALCOHOL INVOLVEMENT            | 69   | 73    | 67    | 70    | 49    | 328   | 66       | 3.5%      |  |  |  |
| DRUG INVOLVEMENT               | 2  | 3     | 1     | 2     | 2     | 10    | 2        | 0.1%      |  |  |  |
| DISTRACTED DRIVING             | 641  | 706   | 650   | 665   | 580   | 3,242 | 648      | 34.6%     |  |  |  |
| UNSAFE SPEED                   | 20   | 13    | 22    | 14    | 21    | 90    | 18       | 1.0%      |  |  |  |
| YOUNG DRIVERS                  | 88   | 90    | 90    | 110   | 78    | 456   | 91       | 4.9%      |  |  |  |
| OLDER DRIVERS                  | 265  | 273   | 273   | 253   | 245   | 1,309 | 262      | 14.0%     |  |  |  |
| MOTORCYCLES                    | 11   | 9     | 8     | 6     | 5     | 39    | 8        | 0.4%      |  |  |  |
| TOTAL BICYCLE INVOLVED CRASHES | 1,843  | 1,959 | 1,923 | 1,931 | 1,718 | 9,374 | 1,875    | 100.0%    |  |  |  |

## Bicycle Safety • Analysis of Age

Crashes involving bicycles continue to be a concern for riders between the ages of 10 to 15 and 46 to 55, making up 30.8% of all riders involved (15.4% each). Meanwhile, the 16-20-year-old rider accounted for the second largest age group, at 14.8 percent. A breakdown of bicyclists by age group as a percent of total involved is depicted below.

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.

#### BICYCLIST CRASH % BY AGE GROUP, 2014 - 2018

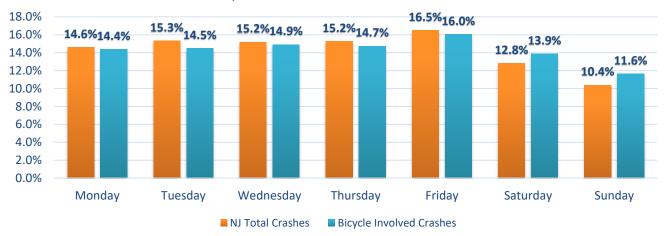


\*Excludes NULL/Unknown values

## Bicycle Safety • Analysis of Occurrence

The occurrence of crashes involving bicycles by season and Day of Week provide insight as to when crashes involving cyclists is most likely to happen. During the period from 2014-2018, according to the data, the Day of Week occurrence does not vary greatly from the typical day-to-day distribution of all crashes, although weekends have higher rates of occurrence.

#### BICYCLIST CRASH % BY DAY OF WEEK, 2014 - 2018



During the period from 2014-2018, the months that experienced the highest volume of bicycle crashes were August and July with 1,367 and 1,342 crashes, respectively. July and August respectively accounted for 14 and 15 percent 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 64 percent of all crashes that occurred.

#### BICYCLIST INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN       | FEB       | MAR       | APR       | MAY        | JUN          | JUL          | AUG          | SEPT         | OCT        | NOV       | DEC       | TOT   | AL   |
|----------------------|-----------|-----------|-----------|-----------|------------|--------------|--------------|--------------|--------------|------------|-----------|-----------|-------|------|
| Midnight to 2:59AM   | 3         | 7         | 5         | 9         | 23         | 23           | 30           | 35           | 25           | 19         | 8         | 9         | 196   | 2%   |
| 3:00AM to<br>5:59AM  | 2         | 2         | 6         | 14        | 9          | 3            | 11           | 15           | 14           | 6          | 8         | 8         | 98    | 1%   |
| 6:00AM to<br>8:59AM  | 31        | 24        | 45        | 52        | 82         | 106          | 98           | 119          | 135          | 133        | 62        | 56        | 943   | 10%  |
| 9:00AM to<br>11:59AM | 26        | 32        | 41        | 66        | 120        | 150          | 222          | 208          | 152          | 94         | 75        | 60        | 1,246 | 13%  |
| Noon to<br>2:59PM    | 38        | 40        | 55        | 101       | 148        | 219          | 256          | 242          | 184          | 158        | 109       | 62        | 1,612 | 17%  |
| 3:00PM to<br>5:59PM  | 80        | 65        | 92        | 174       | 294        | 321          | 334          | 344          | 326          | 278        | 198       | 136       | 2,642 | 28%  |
| 6:00PM to<br>8:59PM  | 53        | 46        | 81        | 123       | 210        | 243          | 246          | 296          | 237          | 166        | 100       | 87        | 1,888 | 20%  |
| 9:00PM to<br>11:59PM | 15        | 18        | 16        | 54        | 82         | 109          | 145          | 108          | 92           | 52         | 40        | 38        | 769   | 8%   |
| TOTAL                | 248<br>3% | 234<br>2% | 341<br>4% | 593<br>6% | 968<br>10% | 1,174<br>12% | 1,342<br>14% | 1,367<br>15% | 1,165<br>12% | 906<br>10% | 600<br>6% | 456<br>5% | 9,394 | 100% |

## Bicycle Safety • Analysis of Location

The top ten municipalities have been identified where crashes have occurred over the last five years. There is a strong correlation between higher population and a higher number of bicycle crashes occurring in each municipality. Lakewood Township is the only suburban area that made the top ten list. Over the last five years, 5.9 percent of all crashes involving cyclists in the State occurred in Jersey City, followed by Newark (4.26%) and Camden (2.24%).

|      | BICYCLIST INVOLVED | CRASHES, TO | P 10 MUNICIPA | LITIES AND TOP 10 COU | NTIES, 2014 - 2 | 2018       |
|------|--------------------|-------------|---------------|-----------------------|-----------------|------------|
| RANK | MUNICIPALITY       | CRASHES     | % OF TOTAL    | COUNTY                | CRASHES         | % OF TOTAL |
| 1    | Jersey City        | 554         | 5.90%         | Hudson                | 1,209           | 12.87%     |
| 2    | Newark City        | 400         | 4.26%         | Bergen                | 1,065           | 11.34%     |
| 3    | Camden City        | 210         | 2.24%         | Essex                 | 863             | 9.19%      |
| 4    | Paterson City      | 208         | 2.21%         | Monmouth              | 769             | 8.19%      |
| 5    | Lakewood Township  | 180         | 1.92%         | Ocean                 | 662             | 7.05%      |
| 6    | Union City         | 152         | 1.62%         | Union                 | 615             | 6.55%      |
| 7    | Elizabeth City     | 150         | 1.60%         | Middlesex             | 606             | 6.45%      |
| 8    | Passaic City       | 135         | 1.44%         | Camden                | 580             | 6.17%      |
| 9    | Hoboken City       | 124         | 1.32%         | Passaic               | 553             | 5.89%      |
| 10   | Atlantic City      | 138         | 1.47%         | Atlantic              | 403             | 4.29%      |

Hudson County (1,209 crashes) had the highest five-year total of bicycle crashes in the State making up 12.87 percent of all bicycle crashes over the past five years. Bergen County had the second highest number of bicycle crashes over the past five years (1,065) accounting for 11.34 percent of all bicycle crashes.

Of the 21 counties in New Jersey, 15 experienced a decrease in bicyclist crashes when comparing the 5-year periods of 2013-2017 to 2014-2018. Further education and bicycle awareness efforts should be enhanced to improve roadway safety for this vulnerable group, continue the decrease in bicyclist crashes overall, and avert future cyclist fatalities.

| BICYCLE CRASHES, TOP 3 MUNICIPALITIES BY COUNTY |                               |                            |                              |  |  |  |  |  |
|---|-------------------------------|----------------------------|------------------------------|--|--|--|--|--|
|   | BICYCLE CRASHES<br>2014- 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |  |  |  |  |  |
| Atlantic County                                 | 403                           | 4.3%                       | -2.2%                        |  |  |  |  |  |
| Atlantic City                                   | 118                           | 29.3%                      | -14.5%                       |  |  |  |  |  |
| Egg Harbor Township                             | 60                            | 14.9%                      | 5.3%                         |  |  |  |  |  |
| Ventnor City                                    | 34                            | 8.4%                       | 9.7%                         |  |  |  |  |  |
| Bergen County                                   | 1,065                         | 11.4%                      | -2.9%                        |  |  |  |  |  |
| Hackensack City                                 | 81                            | 7.6%                       | -12.0%                       |  |  |  |  |  |
| Fort Lee Borough                                | 76                            | 7.1%                       | 0.0%                         |  |  |  |  |  |
| Englewood City                                  | 61                            | 5.7%                       | 7.0%                         |  |  |  |  |  |
| Burlington County                               | 302                           | 3.2%                       | 1.3%                         |  |  |  |  |  |
| Pemberton Township                              | 32                            | 10.6%                      | 28.0%                        |  |  |  |  |  |
| Willingboro Township                            | 30                            | 9.9%                       | 3.4%                         |  |  |  |  |  |
| Mount Laurel Township                           | 27                            | 8.9%                       | 0.0%                         |  |  |  |  |  |
| Camden County                                   | 580                           | 6.2%                       | -1.9%                        |  |  |  |  |  |
| Camden City                                     | 210                           | 36.2%                      | -0.5%                        |  |  |  |  |  |
| Cherry Hill Township                            | 65                            | 11.2%                      | 3.2%                         |  |  |  |  |  |
| Gloucester Township                             | 31                            | 5.3%                       | 47.6%                        |  |  |  |  |  |
| Cape May County                                 | 324                           | 3.5%                       | -6.6%                        |  |  |  |  |  |
| Ocean City                                      | 74                            | 22.8%                      | 5.7%                         |  |  |  |  |  |
| Wildwood City                                   | 65                            | 20.1%                      | -7.1%                        |  |  |  |  |  |
| Lower Township                                  | 34                            | 10.5%                      | -17.1%                       |  |  |  |  |  |
| Cumberland County                               | 169                           | 1.8%                       | -14.2%                       |  |  |  |  |  |
| Vineland City                                   | 78                            | 46.2%                      | -22.8%                       |  |  |  |  |  |
| Millville City                                  | 46                            | 27.2%                      | -4.2%                        |  |  |  |  |  |
| Bridgeton City                                  | 26                            | 15.4%                      | -16.1%                       |  |  |  |  |  |
| Essex County                                    | 863                           | 9.2%                       | 0.6%                         |  |  |  |  |  |
| Newark City                                     | 400                           | 46.3%                      | -0.5%                        |  |  |  |  |  |
| East Orange City                                | 67                            | 7.8%                       | -5.6%                        |  |  |  |  |  |
| Irvington Township                              | 58                            | 6.7%                       | 16.0%                        |  |  |  |  |  |
| Gloucester County                               | 206                           | 2.2%                       | -1.4%                        |  |  |  |  |  |
| Monroe Township (Gloucester Co)                 | 34                            | 16.5%                      | 13.3%                        |  |  |  |  |  |
| Glassboro Borough                               | 32                            | 15.5%                      | -8.6%                        |  |  |  |  |  |
| Deptford Township                               | 21                            | 10.2%                      | 40.0%                        |  |  |  |  |  |

|                                | BICYCLE CRASHES<br>2014- 2018 | PERCENT OF COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |  |
|--------------------------------|-------------------------------|-------------------------|------------------------------|--|
| Hudson County                  | 1,209                         | 12.9%                   | 0.2%                         |  |
| Jersey City                    | 554                           | 45.8%                   | -0.2%                        |  |
| Union City                     | 152                           | 12.6%                   | -1.3%                        |  |
| Hoboken City                   | 124                           | 10.3%                   | 4.2%                         |  |
| Hunterdon County               | 63                            | 0.7%                    | 1.6%                         |  |
| Flemington Borough             | 16                            | 25.4%                   | 23.1%                        |  |
| Raritan Township               | 13                            | 20.6%                   | -13.3%                       |  |
| Clinton Township               | 5                             | 7.9%                    | 0.0%                         |  |
| Mercer County                  | 337                           | 3.6%                    | -10.8%                       |  |
| Trenton City                   | 96                            | 28.5%                   | -4.0%                        |  |
| Hamilton Township (Mercer Co)  | 57                            | 16.9%                   | -17.4%                       |  |
| Princeton Township             | 50                            | 14.8%                   | -20.6%                       |  |
| Middlesex County               | 606                           | 6.5%                    | -8.0%                        |  |
| New Brunswick City             | 104                           | 17.2%                   | 3.0%                         |  |
| Edison Township                | 70                            | 11.6%                   | -12.5%                       |  |
| Woodbridge Township            | 68                            | 11.2%                   | -5.6%                        |  |
| Monmouth County                | 769                           | 8.2%                    | -1.8%                        |  |
| Neptune Township               | 83                            | 10.8%                   | -4.6%                        |  |
| Asbury Park City               | 82                            | 10.7%                   | -8.9%                        |  |
| Middletown Township            | 51                            | 6.6%                    | -7.3%                        |  |
| Morris County                  | 297                           | 3.2%                    | -4.5%                        |  |
| Morristown Town                | 46                            | 15.5%                   | 12.2%                        |  |
| Madison Borough                | 25                            | 8.4% 4.2%               |                              |  |
| Parsippany-Troy Hills Township | 19                            | 6.4% 0.0%               |                              |  |
| Ocean County                   | 662                           | 7.1%                    | -5.2%                        |  |
| Lakewood Township              | 180                           | 27.2%                   | -9.5%                        |  |
| Toms River Township            | 86                            | 13.0%                   | 6.2%                         |  |
| Brick Township                 | 70                            | 10.6%                   | -16.7%                       |  |
| Passaic County                 | 553                           | 5.9%                    | 0.2%                         |  |
| Paterson City                  | 208                           | 37.6%                   | 9.5%                         |  |
| Passaic City                   | 135                           | 24.4%                   | -4.3%                        |  |
| Clifton City                   | 99                            | 17.9%                   | -6.6%                        |  |
| Salem County                   | 37                            | 0.4%                    | -9.8%                        |  |
| Pennsville Township            | 12                            | 32.4%                   | 9.1%                         |  |
| Salem City                     | 7                             | 18.9%                   | 16.7%                        |  |
| Woodstown Borough              | 5                             | 13.5%                   | 0.0%                         |  |

|                                 | BICYCLE CRASHES<br>2014- 2018 | PERCENT OF<br>COUNTY TOTAL | % CHANGE FROM<br>2013 - 2017 |  |
|---------------------------------|-------------------------------|----------------------------|------------------------------|--|
| Somerset County                 | 244                           | 2.6%                       | -13.2%                       |  |
| Franklin Township (Somerset Co) | 63                            | 25.8%                      | -14.9%                       |  |
| Bridgewater Township            | 33                            | 13.5%                      | 0.0%                         |  |
| North Plainfield Borough        | 20                            | 8.2%                       | -16.7%                       |  |
| Sussex County                   | 34                            | 0.4%                       | -19.0%                       |  |
| Hopatcong Borough               | 5                             | 14.7%                      | 0.0%                         |  |
| Sparta Township                 | 4                             | 11.8%                      | -42.9%                       |  |
| Franklin Borough                | 3                             | 8.8%                       | 0.0%                         |  |
| Union County                    | 615                           | 6.6%                       | 2.2%                         |  |
| Elizabeth City                  | 150                           | 24.4%                      | 7.9%                         |  |
| Plainfield City                 | 92                            | 15.0%                      | -8.0%                        |  |
| Union Township (Union Co)       | 53                            | 8.6%                       | 0.0%                         |  |
| Warren County                   | 56                            | 0.6%                       | -9.7%                        |  |
| Phillipsburg Town               | 17                            | 30.4%                      | 0.0%                         |  |
| Hackettstown Town               | 14                            | 25.0%                      | -12.5%                       |  |
| Mansfield Township (Warren Co)  | 5                             | 8.9%                       | 0.0%                         |  |

# Countermeasure Strategies in Program Area

| Countermeasure Strategy                  |  |  |
|--|--|--|
| Highway Safety Office Program Management |  |  |
| Targeted Enforcement and Education       |  |  |
| Elementary-age Child Bicyclist Training  |  |  |

#### Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** Reduce the five-year rolling average of pedestrian and bicyclist fatalities by 10%, serious injuries by 5%, and total injuries by 5%, over the period from 2018 to 2023.

#### Strategies in 2020 Strategic Highway Safety Plan

Provide recommendations to enhance of expand the "Street Smart NJ" program to additional municipalities in the state.

Provide recommendations for a program to perform quick response Road Safety Audits immediately following pedestrian and bicycle crashes.

Develop a plan to improve integration of pedestrian and bicyclist safety concerns in the DHTS HSP.

Increase pedestrian and bicyclist safety enforcement in school zones and high-volume crosswalk locations with recurring crash trends.

#### **Associated Performance Measures**

| Fiscal Year | Performance measure name               | <b>Target End Year</b> | <b>Target Period</b> | Target Value |
|-------------|--|------------------------|----------------------|--------------|
| 2021        | Number of pedestrian fatalities (FARS) | 2021                   | 5 Year               | 180.7        |
| 2021        | Number of bicyclists fatalities (FARS) | 2021                   | 5 Year               | 13.1         |

#### Countermeasure Strategy: Highway Safety Office Program Management

Project Name: PEDESTRIAN/BICYCLE SAFETY PROGRAM MANAGEMENT

Sub-Recipient: DIVISION OF HIGHWAY TRAFFIC SAFETY

Total Project Amount: \$250,000

**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 \$200,000 of the budgeted amount and another \$50,000 is budgeted for travel and other miscellaneous expenditures.

Funding Source: SECTION 402 Local Benefit: 0

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#### **Countermeasure Strategy: Targeted Enforcement/Education**

## Effectiveness of Countermeasure

A coordinated program of targeted enforcement should involve a range of support activities and partners, such as communication and outreach to notify the public of the campaign, training law enforcement officers on enforcement procedures and pedestrian and crosswalk laws, and educating prosecutors and judges so they understand the purpose of the campaign and are prepared for the increase in citations that the campaign will produce (NHTSA, 2014).

A carefully done before/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, FL (e.g., flyers given to stopped drivers, information sent home with school children, 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 1-year study period, which included four, two-week waves of enforcement, along with the other activities. Four of the six enforcement sites observed significant increases in yielding at the end of the period with a fifth experiencing a positive trend. Yielding also increased at the comparison sites, although not by the same degree. Driver awareness of the enforcement, especially awareness of the enforcement-related feedback signs, also increased to a high level (from 13% at baseline to 78% at the end of the year).

A follow up study, four years after the high-visibility enforcement program ended, found that yielding behavior actually increased at both the enforcement and comparison sites after the program had ceased despite there being no additional enforcement efforts (Van Houten, Malenfant, Blomberg, & Huitema, 2017). This suggests that there was a sustained change in the driving culture of the area.

In a NHTSA study by Savolainen, Gates, and Datta (2011), law enforcement officials in Detroit, MI implemented two pedestrian-oriented enforcement campaigns at Wayne State University aiming to educate campus pedestrians on proper use of crosswalks and the importance of obeying signals through the issuance of warnings. The study saw pedestrian violations (walking outside the crosswalk or against the signal) reduced 17% to 27% immediately after the campaign, with sustained reductions of 8% to 10% several weeks after active enforcement ceased. (Countermeasures That Work, 9th Edition, 2017).

In terms of bicycle riding, the State Highway Safety Office can help ensure safe bicycle operations 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, 9th Edition, 2017).

#### Assessment of Safety Impacts

Reducing pedestrian crashes, fatalities and injuries continues to be a challenge, as there are many side issues that have an impact. Older pedestrians face increased risk due to age-related physical changes that may lead to walking

more slowly, difficulty in crossing curbs, difficulty judging the speed of oncoming vehicles, and possible confusion about pedestrian signals (Dommes, Cavallo, Vienne, & Aillerie, 2012; Holland and Hill, 2010, Coffan & Morrall, 1995). Some studies attribute higher pedestrian crashes among minorities to potential inequities in how pedestrian facilities are distributed (Kravetz & Noland, 2012) while others show that elevated crash figures for more recent immigrants may relate to differing social-behavior mechanisms and "safety cultures" (Chen, Lin, & Loo, 2011).

Efforts to promote pedestrian friendly safe driving as well as the use and practice of safe walking in and around the State will be continued, with a special emphasis on the more at-risk segments of the population. We know that these efforts can be effective. Police agencies in New Jersey that have conducted comprehensive pedestrian safety programs have seen reductions in pedestrian crashes. In Jersey City, which has been conducting targeted grant funded pedestrian enforcement for 15 years, pedestrian crashes declined to an all-time recorded low (264) in 2017.

The "Street Smart NJ" comprehensive pedestrian safety educational and awareness program, adopted by DHTS in partnership with the North Jersey TPA, has been proven effective, as well. Pre- and post-campaign surveys were conducted in seven New Jersey communities that piloted the "Street Smart NJ" program. The study found statistically significant improvements in terms of self-reported pedestrian behaviors (i.e., crossing against the signal or outside the crosswalk), driver behaviors (e.g., drivers not stopping for pedestrians in crosswalk), pedestrian safety messaging, and "Street Smart NJ" campaign signs awareness (i.e., Wait for the Walk, Obey Speed Limits, Heads Up Phones Down, Stop for Pedestrians, and Use Crosswalk) following the "Street Smart NJ" campaign (Street Smart New Jersey Behavioral Pedestrian Safety Survey: Final Report. June, 2019).

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, within the context of the HSP and the SHSP.

#### 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 30 percent of fatalities are pedestrian related. Pedestrian crashes represent the second largest category of motor vehicle fatalities and injuries in the State. Pedestrian fatalities decreased in 2018 by 4 percent, however, pedestrian fatalities made up 31 percent of total fatalities compared to 29 percent in 2017 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 is also an important, but often overlooked task as it relates to police departments. A one-day training program has been developed in NJ ("Title 39: A Bike Eye's View") that instructs law enforcement in ways to enhance the safety of bicyclists, and feedback to this program has been positive.

Project Name: PEDESTRIAN ENFORCEMENT/EDUCATION PROGRAMS
Sub-Recipients: MUNICIPAL LAW ENFORCEMENT AGENCIES

Total Project Amount: \$1,300,000

**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 for printed materials to reinforce safety messages and campaign themes.

DHTS will utilize a data driven approach to allocate its pedestrian safety related funding. The process begins with the list of the top 100 municipalities in NJ that experienced the highest number of pedestrian crashes over the last five-year period. As per the Evidenced Based Enforcement section of this HSP, pedestrian crash weighting factors will also be considered to target pedestrian safety enforcement and educational grant programs. And the Crash Analysis Tool will assist in further pinpointing and directing our efforts.

Grant funds will be targeted into appropriate municipalities, in a team approach leveraging other programmatic resources and statewide partners who can assist in the effort. Concerted outreach will be made to engage as many of these high pedestrian crash jurisdictions as possible in yearlong sustained enforcement efforts, understanding that not every agency will be willing or able to participate. For FY2021 renewed outreach will be made to Top 10 pedestrian crash agencies that have either not participated or participated with poor performance in recent years. It is also the plan of DHTS in FY2021 to mobilize several of the largest pedestrian safety grantee cities into a targeted enforcement blitz using the HVE model, to maximize our efforts and raise as much awareness as possible.

To further highlight the importance of this issue, pedestrian safety will be the primary theme of a Statewide Traffic Safety Symposium scheduled for October 2020 (originally planned for April 2020). The symposium will focus on innovative tools for municipal planners, officials and law enforcement to combat this issue in their jurisdictions.

Many of the grant funded law enforcement agencies will continue to utilize the Pedestrian Decoy enforcement program to apprehend drivers who fail to stop for pedestrians at intersections and crosswalks. Police officers in plain clothes will pose as pedestrians in marked crosswalks, while other officers watch for violations. Drivers failing to stop will be issued a citation. Officers involved in the enforcement effort will also educate drivers about current pedestrian laws, 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. This program will be expanded and refined in FY2021 with revised and updated training tools for our enforcement partners.

In terms of partnerships, many statewide agencies have a stake in the pedestrian safety issue. 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" awareness program in communities that receive funding. The "Street Smart NJ" educational campaign will be the primary messaging to raise awareness for both pedestrians and motorists of the major rules for pedestrian safety. Grantees will also use earned and social media to promote the program.

In addition, 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. The Brain Injury Alliance of New Jersey will also receive funding from DHTS for its statewide pedestrian safety efforts which have included awareness campaigns relating to pedestrian safety around the annual "Put the Brakes on Fatalities Day".

Other resources include the NJ Department of Transportation's Pedestrian Safety Improvement, Complete Streets, Local Aid, and Safe Routes to Schools programs that also identify and provide support to high risk locations. These programs provide for the development and implementation of pedestrian safety elements at locations based on the frequency and severity of crashes. The safety improvements include engineering countermeasures such as crosswalks, sidewalks, and high intensity activated crosswalk beacons. It is critical that the DHTS coordinate with DOT on these efforts by offering assistance to implement enforcement and education countermeasures in concert with the DOT projects.

The pedestrian safety enforcement and educational initiatives undertaken by DHTS will be supplemented in a critical way by the State Pedestrian Safety Enforcement and Education Fund. Under this 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. The State Pedestrian Safety Enforcement and Education Fund monies are an important matching component of the DHTS pedestrian safety program efforts. In recent years the Fund has provided vital grants to agencies in the Central and South Regions of the state, while grants to the North Region of the state are awarded with federal funds. This approach will continue in FY2021.

Pedestrian and Bicycle Safety is one of the six Emphasis Areas of the 2020 Strategic Highway Safety Plan. Many of the goals enumerated in the plan fall under the purview of NJDOT such as enhancing land use legislation, improving design guidance, and updated trail plans and access. DHTS will make it a priority to assist in implementing the strategies of the plan in which it can play a role, such as coordinating more effectively with DOT in the HSP relating to bicycle and pedestrian safety.

Funding Source: SECTION 405(h) Local Benefit: \$1,300,000

Additional Funding Source: \$475,000 (Pedestrian Safety, Enforcement and Education Fund)

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## Countermeasure Strategy: Elementary age - Child Bicyclist Training

### Effectiveness of Countermeasure

As with pedestrians, bicyclists come in all ages with many levels of knowledge, skill, perception, and judgement. Thus, educational and enforcement programs must take these factors into account and be designed to target age specific and socio-economic considerations. Several studies have identified demographic differences in injury risk, amount of bicycle riding, and helmet use. Davidson et al. (2013) found that being male and being a recent immigrant were both associated with increased bicycle injury risk among Canadian youth.

Wearing a helmet while riding has a proven effect on safety. In a study by Bambach et al. (2013) the protective benefit of helmet use was found to be 50% for moderate injury, 62% for serious injury and 75% for severe head injury.

To that end, 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). One program of comprehensive education for preschool children and their parents, that included a skills and safety rodeo, led to a doubling of helmet use (Britt, Silver, & Rivara, 1998; Rivara & Metrik, 1998).

A school-based injury-reduction program targeting 13- and 14-year-olds incorporating opportunities for instruction, demonstration, rehearsal, feedback, social reinforcement and practice was associated with a 20% increase in observed rate of helmet use among this challenging target age group at 6 months follow-up (Buckley et al., 2009). In France, voluntary helmet use increased from 7.3% in 2000 to 22% in 2010. During that time period, national public awareness and informational campaigns were initiated and carried out promoting helmet use among youth, adults with children, and the general population (Richard, Thélot, & Beck, 2013).

A Canadian program, Operation Headway, involving enforcement of bike helmet legislation, education, rewards for wearing and economic penalties for non-wearing, and provision of helmets to low-income groups was evaluated by Lockhart, Fenerty, and Walling (2010). The researchers found the program increased wearing rates (based on observations pre- and post-intervention), increased knowledge and commitment to wearing a helmet, saw greater public awareness of the law through media tracking, and improved relationships between police and the public (based on anecdotal evidence).

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). Furthermore, bicycle safety general education programs, bike rodeos, and special events have proven successful in increasing children's knowledge of laws and safe behaviors, however a direct link to crash reduction is inconclusive.

An emerging issue, which will require further study in the years ahead, relates to rider distraction while on a bicycle. A recent survey of bicyclist attitudes and behaviors indicates that 21% of bicyclists use an electronic device on some of their bicycle trips while 9% indicate they use a device on nearly all of their trips (Schroeder & Wilbur, 2013).

## 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 parental role modeling and social media. Bike fairs, rodeos and skills training will make riders more aware of safe cycling behavior and encourage helmet usage.

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.

Many resources have provided evidence of the role of the transportation environment in bicycle safety. Adopting and implementing *Complete Streets* policies have been identified as a lower cost and effective strategy for improving the condition for bicyclists. (Countermeasures That Work, 9th Edition, 2017).

### Linkage between Problem Identification and Performance Targets

The overall number of bicycle fatalities in the state increased by one in 2018 to 17, representing 3 percent of total fatalities. Riders in the age group 0-15 years of age accounted for 17.9 percent of all bicycle related crashes from 2014-2018, the largest percentage of all age groups. 45 percent of fatally injured bicyclists were not wearing a helmet in 2019, down from 70.6 percent in 2018.

Project Name: BICYCLE ENFORCEMENT/EDUCATION LOCAL PROGRAMS
Sub-Recipients: MUNICIPAL AND STATE LAW ENFORCEMENT AGENCIES

Total Project Amount: \$200,000

**Project Description:** 

Funds will be provided to educate bicyclists about the dangers associated with not wearing a helmet while riding. Those under the age of 17 will be targeted through community wide education programs. Education and information will also be provided to bicyclists riding between the hours of sunset and sunrise when they are not conspicuous to motorists, as well as to at-risk new immigrant populations in certain communities.

NJ State Police, AAA, and the state's TMA's will carry out bicycle safety programs and messaging targeting the youth cycling age group. Social media and public information campaigns will coincide with bicycle safety events and clinics in which properly sized and fitted bicycle helmets will be promoted. 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: \$100,000

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#### OCCUPANT PROTECTION

#### 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 2018, New Jersey experienced nearly 3,500 crashes where an occupant was not wearing his or her seat belt, resulting in 126 fatalities.





Although final fatal counts are not available at this time, projections estimate 122 people died in motor vehicle crashes that were not wearing their seat belt in 2019, representing 42.5 percent of all motor vehicle occupant fatalities that occurred in the State. Although this represents an increase from 2018 when 39.6 percent of fatally injured occupants were unbuckled, There was a 9.7 percent reduction in overall occupant (drivers and passengers) fatalities.

#### PROPORTION OF UNRESTRAINED OCCUPANT FATALITIES VERSUS TOTAL OCCUPANT FATALITIES



# Analysis of Usage

According to the 2019 Seat Belt Usage Study conducted by the New Jersey Institute of Technology, the 2019 front-seat seat belt usage rate was 90.23 percent.

|      | F                        | RONT-SEAT SAF        | ETY BELT USAG           | E RATE, 2007 - 2         | 019                  |                         |  |  |  |
|------|--------------------------|----------------------|-------------------------|--------------------------|----------------------|-------------------------|--|--|--|
|      |                          | - NEW JERSEY -       |                         | UNITED STATES            |                      |                         |  |  |  |
| YEAR | Front-Seat<br>Usage Rate | Percentage<br>Change | Reduction in<br>Non-Use | Front-Seat<br>Usage Rate | Percentage<br>Change | Reduction in<br>Non-Use |  |  |  |
| 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%                   | 90%                      | 0%                   | -4%                     |  |  |  |
| 2018 | 94.46%                   | + 0.39%              | 6.6%                    | 90%                      | 0%                   | -1%                     |  |  |  |
| 2019 | 90.23%                   | - 4.23%              | -76.4%                  |                          | •                    | •                       |  |  |  |

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 93.47 percent, followed by passenger cars which shared a usage rate of 91.04 percent. Similar to national trends, pickup trucks had the lowest usage rate of 83.79 percent.

|                                | S               | URVEY DA            | TA FOR DR              | IVER AND F            | PASSENGE                   | R SAFETY E     | BELT USAG         | E, 2017 - 20   | 19 CAMPAI         | GNS    |
|--------------------------------|-----------------|---------------------|------------------------|-----------------------|----------------------------|----------------|-------------------|----------------|-------------------|--------|
|                                | Vehicle<br>Type | USING SAF<br>Driver | ETY BELTS<br>Passenger | NOT USING S<br>Driver | AFETY BELTS -<br>Passenger | UNKN<br>Driver | NOWN<br>Passenger | % US<br>Driver | SAGE<br>Passenger | TOTAL  |
| z _                            | PC <sup>4</sup> | 18,523              | 4,235                  | 1,753                 | 487                        | 157            | 6                 | 91.35%         | 89.69%            | 91.04% |
| PAIG<br>2019)                  | PUT⁵            | 2,853               | 641                    | 569                   | 107                        | 73             | 1                 | 83.37%         | 85.70%            | 83.79% |
| AMF<br>EY (                    | SUV             | 19,279              | 5,475                  | 1,320                 | 408                        | 139            | 10                | 93.59%         | 93.06%            | 93.47% |
| POST-CAMPAIGN<br>SURVEY (2019) | VAN             | 2,921               | 931                    | 290                   | 93                         | 21             | 4                 | 90.97%         | 90.92%            | 90.96% |
| S<br>S                         | TOTAL           | 43,576              | 11,282                 | 3,932                 | 1,095                      | 390            | 21                | 91.72%         | 91.15%            | 91.61% |
| z                              | PC              | 20,260              | 3,979                  | 1,062                 | 260                        | 79             | 5                 | 95.02%         | 93.87%            | 94.83% |
| PAIG<br>2018)                  | PUT             | 3,182               | 588                    | 251                   | 48                         | 33             | 5                 | 92.69%         | 92.45%            | 92.65% |
| AMF<br>EY (2                   | SUV             | 17,511              | 4,245                  | 647                   | 189                        | 84             | 9                 | 96.44%         | 95.74%            | 96.30% |
| POST-CAMPAIGN<br>SURVEY (2018) | VAN             | 3,391               | 943                    | 155                   | 84                         | 16             | 0                 | 95.63%         | 91.82%            | 94.77% |
| S<br>S                         | TOTAL           | 44,344              | 9,755                  | 2,115                 | 581                        | 212            | 19                | 95.45%         | 94.38%            | 95.25% |
| z                              | PC              | 24,789              | 4,963                  | 1,146                 | 431                        | 325            | 111               | 95.58%         | 92.01%            | 94.97% |
| PAIG<br>2017)                  | PUT             | 3,682               | 694                    | 341                   | 118                        | 567            | 1                 | 91.52%         | 85.47%            | 90.51% |
| AMF<br>EY (2                   | SUV             | 19,111              | 4,854                  | 745                   | 333                        | 191            | 4                 | 96.25%         | 93.58%            | 95.70% |
| POST-CAMPAIGN<br>SURVEY (2017) | VAN             | 4,258               | 1,273                  | 183                   | 110                        | 100            | 2                 | 95.88%         | 92.05%            | 94.97% |
| S<br>S                         | TOTAL           | 51,840              | 11,784                 | 2,415                 | 992                        | 1183           | 118               | 95.55%         | 92.24%            | 94.92% |

 $<sup>^4</sup>PC$  — passenger car,  $^5PUT$  — Pick-up Truck

According to the American Association of Pediatrics (AAP), infants and toddlers should ride in a rear-facing car safety seat as long as possible, until they reach the highest weight or height allowed by their seat. Most convertible seats have limits that will allow children to ride rear facing for 2 years or more.

Once they are facing forward, children should use a forward-facing car safety seat with a harness for as long as possible, until they reach the height and weight limits for their seats. Many seats can accommodate children up to 65 pounds or more. When children exceed these limits, they should use a belt-positioning booster seat until the vehicle's lap and shoulder seat belt fits properly. This is often when they have reached at least 4 feet 9 inches in height and are 8 to 12 years old.

In 2017, New Jersey updated its Police Accident Report (PAR) per MMUCC recommendations to identify specific child restraint systems being used by our younger passengers. As indicated in the chart below, from 2014-2016, the PAR only had one safety equipment field dedicated to young passengers which was updated to three – Rear Facing, Forward Facing and Booster Seat. Over the next few years, NJDHTS hopes to better understand the usage statistics for one of our most vulnerable passengers with the continued use of these new fields.

CHILD RESTRAINT USE IN CRASHES 2014 - 2018, GROUPED BY AGE

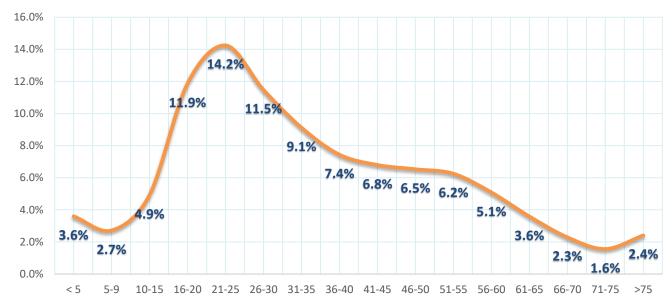
| CHILD RESTRAINT - ALL | 2014             | 2015            | 2016                     | 2017      | 2018  |
|-----------------------|------------------|-----------------|--------------------------|-----------|-------|
| >1                    | 1,632            | 2,296           | 2,277                    | -         | -     |
| Age 1-4               | 10,618           | 10,057          | 10,331                   | -         | -     |
| Age 5-8               | 5,633            | 5,423           | 5,530                    | -         | -     |
| Age 9-12              | 415              | 423             | 489                      | -         | -     |
|                       | REAR FACING – RE | COMMENDED FOR   | <b>BRITH TO 2-4 YEAF</b> | RS OF AGE |       |
| >1                    | -                | -               | -                        | 1,133     | 1,078 |
| Age 1-4               | -                | -               | -                        | 2,219     | 2,189 |
| Age 5-8               | -                | -               | -                        | 99        | 71    |
| Age 9-12              | -                | -               | -                        | 20        | 11    |
|                       | FORWARD FACI     | NG – RECOMMENDE | ED FOR 4-7 YEARS         | OF AGE    |       |
| >1                    | -                | -               | -                        | 266       | 191   |
| Age 1-4               | -                | -               | -                        | 7,061     | 7,096 |
| Age 5-8               | -                | -               | -                        | 3,047     | 3,010 |
| Age 9-12              | -                | -               | -                        | 223       | 210   |
|                       | BOOSTER SEAT     | - RECOMMENDED   | FOR 8-12 YEARS C         | F AGE     |       |
| >1                    | -                | -               | -                        | 21        | 18    |
| Age 1-4               | -                | -               | -                        | 834       | 805   |
| Age 5-8               | -                | -               | -                        | 2,461     | 2,289 |
| Age 9-12              | -                | -               | -                        | 243       | 242   |

#### Analysis of Age/Gender

An analysis of age and gender revels the 21 - 25-year-old age group made up over 14 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. Approximately 62 percent of those unbelted in a motor vehicle crash over the past five years were male.

#### PROPORTION OF UNRESTRAINED OCCUPANTS BY AGE GROUP 2014-2018



# Analysis of Occurrence

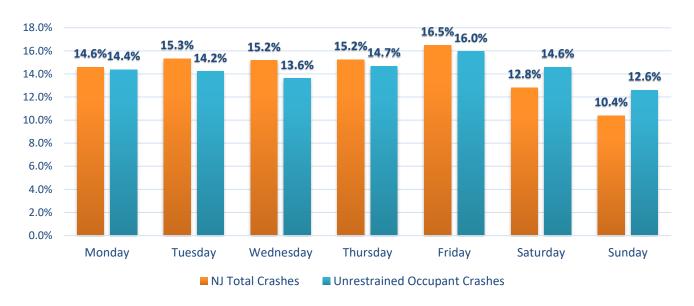
During the period from 2014-2018, the months that experienced the highest volume of crashes involving unrestrained passengers were the summer months of May, June, July and August. Those four months accounted for 36 percent of all crashes involving and unrestrained passenger.

UNRESTRAINED OCCUPANT INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN         | FEB         | MAR         | APR         | MAY         | JUN         | JUL         | AUG         | SEPT        | OCT         | NOV         | DEC         | TOT    | AL   |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|------|
| Midnight to 2:59AM   | 109         | 95          | 96          | 86          | 130         | 120         | 130         | 124         | 102         | 113         | 117         | 132         | 1,354  | 7%   |
| 3:00AM to<br>5:59AM  | 59          | 61          | 76          | 75          | 58          | 57          | 74          | 73          | 71          | 53          | 70          | 73          | 800    | 4%   |
| 6:00AM to<br>8:59AM  | 219         | 177         | 187         | 178         | 181         | 157         | 160         | 147         | 196         | 195         | 167         | 165         | 2,129  | 11%  |
| 9:00AM to<br>11:59AM | 228         | 207         | 204         | 224         | 233         | 232         | 231         | 263         | 201         | 218         | 210         | 202         | 2,653  | 14%  |
| Noon to<br>2:59PM    | 261         | 232         | 262         | 273         | 318         | 346         | 321         | 308         | 282         | 284         | 288         | 265         | 3,440  | 18%  |
| 3:00PM to<br>5:59PM  | 283         | 272         | 304         | 342         | 374         | 355         | 352         | 343         | 326         | 319         | 290         | 269         | 3,829  | 20%  |
| 6:00PM to<br>8:59PM  | 201         | 228         | 219         | 204         | 266         | 243         | 248         | 234         | 219         | 252         | 232         | 208         | 2,754  | 15%  |
| 9:00PM to<br>11:59PM | 104         | 111         | 153         | 140         | 158         | 166         | 191         | 180         | 150         | 149         | 150         | 136         | 1,788  | 10%  |
| TOTAL                | 1,464<br>8% | 1,383<br>7% | 1,501<br>8% | 1,522<br>8% | 1,718<br>9% | 1,676<br>9% | 1,707<br>9% | 1,672<br>9% | 1,547<br>8% | 1,583<br>8% | 1,524<br>8% | 1,450<br>8% | 18,747 | 100% |

Crashes involving an unrestrained occupant are relatively evenly distributed by weekday. Over the past five years (2014-2018), 16 percent of total unrestrained crashes occurred on a Friday, followed by Thursday with 14.7 percent.

# UNRESTRAINED CRASH % VERSUS NJ CRASH % BY DAY OF WEEK, 2014 - 2018



#### Analysis of Location

Camden and Ocean Counties had the most unrestrained fatalities in the State (15) accounting for 50 percent and 54 percent of the county total of occupant fatalities in 2018, respectively. Hudson County had the highest rate of fatally injured occupants that were unbelted at 62.5 percent of the county's occupant fatalities.

|            | OCCUPANT                      | FATALITIES VER | SUS UNRES         | TRAINED FAT | ALITIES BY CO          | OUNTY, 2018             |                   |
|------------|-------------------------------|----------------|-------------------|-------------|------------------------|-------------------------|-------------------|
| COUNTY     | COUNTY OCCUPANT UI FATALITIES |                | COUNTY<br>TOTAL % | COUNTY      | OCCUPANT<br>FATALITIES | UNRESTRAINED FATALITIES | COUNTY<br>TOTAL % |
| ATLANTIC   | 18                            | 10             | 55.6%             | MIDDLESEX   | 30                     | 11                      | 36.7%             |
| BERGEN     | 8                             | 2              | 25.0%             | MONMOUTH    | 18                     | 9                       | 50.0%             |
| BURLINGTON | 27                            | 6              | 22.2%             | MORRIS      | 20                     | 3                       | 15.0%             |
| CAMDEN     | 30                            | 15             | 50.0%             | OCEAN       | 28                     | 15                      | 53.6%             |
| CAPE MAY   | 8                             | 4              | 50.0%             | PASSAIC     | 9                      | 4                       | 44.4%             |
| CUMBERLAND | 15                            | 8              | 53.3%             | SALEM       | 9                      | 4                       | 44.4%             |
| ESSEX      | 15                            | 5              | 33.3%             | SOMERSET    | 11                     | 2                       | 18.2%             |
| GLOUCESTER | 28                            | 13             | 46.4%             | SUSSEX      | 8                      | 4                       | 50.0%             |
| HUDSON     | 8                             | 5              | 62.5%             | UNION       | 9                      | 3                       | 33.3%             |
| HUNTERDON  | 2                             | 0              | 0.0%              | WARREN      | 6                      | 1                       | 16.7%             |
| MERCER     | 11                            | 2              | 18.2%             |             |                        |                         |                   |

Data compiled from the 2019 seat belt survey conducted by the New Jersey Institute of Technology revealed an overall usage rate of 90.23 percent. Morris County had the highest front seat occupant and driver seatbelt usage rates (94.02%) followed by Atlantic County with a rate of 93.04 percent (following page). The lowest front seat occupant usage rate occurred in Somerset County with a rate of 85.70 percent, down from 94 percent in 2018.

|                     |           | FRONT-       | SEAT REST  | RAINT USE | % BY COU     | NTY, 2018 & | 2019                            |        |          |  |
|---------------------|-----------|--------------|------------|-----------|--------------|-------------|---------------------------------|--------|----------|--|
|                     | FRONT SEA | T OCCUPANT I | JSAGE RATE | DR        | IVER USAGE I | RATE        | FRONT SEAT PASSENGER USAGE RATE |        |          |  |
|                     | 2018      | 2019         | % Change   | 2018      | 2019         | % Change    | 2018                            | 2019   | % Change |  |
| ATLANTIC            | 93.32%    | 93.04%       | -0.28%     | 92.91%    | 92.86%       | -0.05%      | 95.65%                          | 93.82% | -1.83%   |  |
| BERGEN              | 91.38%    | 87.95%       | -3.43%     | 90.39%    | 87.44%       | -2.95%      | 96.10%                          | 89.55% | -6.55%   |  |
| BURLINGTON          | 96.86%    | 87.11%       | -9.75%     | 96.88%    | 86.98%       | -9.90%      | 96.78%                          | 87.68% | -9.10%   |  |
| CAMDEN              | 94.76%    | 90.13%       | -4.63%     | 94.85%    | 89.73%       | -5.12%      | 94.19%                          | 91.27% | -2.92%   |  |
| ESSEX               | 87.71%    | 87.15%       | -0.56%     | 87.58%    | 86.47%       | -1.11%      | 88.29%                          | 89.33% | 1.04%    |  |
| GLOUCESTER          | 94.82%    | 87.32%       | -7.50%     | 94.81%    | 88.58%       | -6.23%      | 94.84%                          | 83.41% | -11.43%  |  |
| HUDSON              | 94.37%    | 89.55%       | -4.82%     | 94.97%    | 89.54%       | -5.43%      | 92.21%                          | 89.57% | -2.64%   |  |
| MERCER              | 92.05%    | 89.44%       | -2.61%     | 92.64%    | 89.79%       | -2.85%      | 89.56%                          | 88.18% | -1.38%   |  |
| MIDDLESEX           | 94.21%    | 91.03%       | -3.18%     | 93.93%    | 91.38%       | -2.55%      | 95.51%                          | 89.76% | -5.75%   |  |
| MONMOUTH            | 97.44%    | 90.62%       | -6.82%     | 97.60%    | 90.55%       | -7.05%      | 96.91%                          | 90.93% | -5.98%   |  |
| MORRIS              | 95.67%    | 94.02%       | -1.65%     | 96.00%    | 93.76%       | -2.24%      | 93.94%                          | 95.59% | 1.65%    |  |
| OCEAN               | 93.66%    | 91.53%       | -2.13%     | 93.82%    | 92.26%       | -1.56%      | 92.91%                          | 87.80% | -5.11%   |  |
| PASSAIC             | 97.77%    | 90.31%       | -7.46%     | 97.56%    | 90.45%       | -7.11%      | 99.01%                          | 89.45% | -9.56%   |  |
| SOMERSET            | 94.00%    | 85.70%       | -8.30%     | 93.67%    | 87.54%       | -6.13%      | 95.34%                          | 79.61% | -18.73%  |  |
| UNION               | 92.95%    | 89.04%       | -3.91%     | 93.71%    | 90.19%       | -3.52%      | 88.84%                          | 84.32% | -4.52%   |  |
| STATE<br>USAGE RATE | 94.46%    | 90.23%       | -4.23%     | 94.46%    | 90.41%       | -4.05%      | 94.47%                          | 89.41% | -5.06%   |  |

# **Countermeasure Strategies in Program Area**

| Countermeasure Strategy                      |
|--|
| Highway Safety Office Program Management     |
| Observational Survey                         |
| Supporting Enforcement                       |
| Child Restraint System Inspection Station(s) |

#### Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** Reduce the five-year rolling average of unbelted driver and occupant fatalities by 23%, serious injuries by 18%, and total injuries by 18%, over the period from 2018 to 2023.

#### **Strategies in 2020 Strategic Highway Safety Plan**

Review rear occupant seat belt compliance education and enforcement efforts and make recommendations for improvements.

Review NJ Title 39 and recommend changes to strengthen language related to driver behavior.

Create a safety culture in NJ by reviewing existing educational programs led by government, schools, insurance industry, health industry, and non-profit advocacy organizations. Make recommendations to strengthen partnering and messaging to reach target audiences.

Initiate a study to evaluate the efficacy of various driver behavior modification approaches.

#### **Associated Performance Measures**

| Fiscal | Performance measure name  | Target End | Target | Target |
|--------|---|------------|--------|--------|
| Year   |   | Year       | Period | Value  |
| 2021   | Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS) | 2021       | 5 Year | 120.5  |
| 2021   | Observed seat belt use for passenger vehicles, front seat outboard occupants (survey)   | 2021       | 5 Year | 91.67  |

#### Countermeasure Strategy: Highway Safety Office Program Management

Project Name: OCCUPANT PROTECTION PROGRAM MANAGEMENT Sub-Recipient: DIVISION OF HIGHWAY TRAFFIC SAFETY

Total Project Amount: \$300,000

**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 \$225,000 of the budgeted amount and another \$75,000 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). New Jersey's seat belt use rate (based on the most recent approved survey, 2019) is 90.23%. For the five-year period 2015-2019, the state's average annual belt usage rate was 92.69%.

# Assessment of Safety Impacts

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

#### Linkage between Problem Identification and Performance Targets

The State's front-seat belt usage rate in 2019 was observed at 90.23 percent compared to 94.46 percent in 2018. For the five-year period 2015-2019, the state's average annual belt usage rate was 92.69%. For 2019, Morris County had the highest front-seat belt usage rate at 94.02 percent while Somerset County had the lowest rate at 85.50 percent. Due to the challenging nature of collecting rear seat belt usage data and the resultant unreliability of the data, rear seat belt usage was not surveyed in 2019.

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 annual statewide seat belt observation survey to determine the front seat occupant seat belt usage rate for the State, as per the approved methodology contained in the survey protocol.

The survey will be conducted by researchers from the New Jersey Institute of Technology during the spring and summer of calendar year 2021. Section 402 funds will be used to pay salaries and wages to conduct the survey and prepare the report for submittal to NHTSA. As per the SHSP, the possibility of reinstituting the rear seat belt survey will be investigated in the context of new methodologies that might be available using enhanced technology to capture the data.

Funding Source: SECTION 402 Local Benefit: 0

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# 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 and/or ongoing 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).

It has been shown the strong messaging in support of seat belt enforcement is critical. 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).

The most important factor though, remains strong, dedicated enforcement. 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.

CDC's systematic review observed that short-term, high-visibility enforcement campaigns also increased belt use more among traditionally lower-belt-use groups, including young drivers, rural drivers, males, African Americans, and Hispanics (Shults et al., 2004).

Seat belt enforcement efforts should not be mobilization "blitz" efforts only. 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, which all utilize sustained seat belt 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).

The effectiveness of high visibility enforcement has been demonstrated repeatedly both in the United States and abroad. The strategies three components, laws, enforcement, and publicity cannot be separated. Effectiveness decreases if one of the components is weak or missing (Nichols & Ledingham, 2008; Tison & Williams, 2010).

#### 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 sustain if they are not wearing the device. Lap and shoulder combination seat belts, when used, reduce the risk of fatal injury to front seat car occupants by 45% and the risk of moderate to critical injury by 50%. (Countermeasures That Work, 9th Edition, 2017). Although the State's seat belt usage rate

is 92.69% over the last five-year average, additional rounds of sustained high visibility enforcement backed up by public education are needed to increase seat belt use awareness and compliance.

# Linkage between Problem Identification and Performance Targets

It is projected that 122 people died in motor vehicle crashes in 2019 that were not wearing their seat belt, representing 42 percent of all motor vehicle occupant fatalities that occurred in the State. NHTSA estimates that in 2017, the lives of 241 motor vehicle occupants in New Jersey were saved because of seat belt use at the time of the crash. It is also estimated that if every occupant within a motor vehicle was using belts at the time of the crash, 23 additional lives would have been saved in 2017.

Project Name: SEAT BELT ENFORCEMENT/EDUCATION

Sub-Recipients: STATE AND MUNICIPAL LAW ENFORCEMENT AGENCIES

Total Project Amount: \$1,300,000

**Project Description:** 

For FY2021, a comprehensive and data-driven approach to seat belt enforcement will be undertaken utilizing a combination of sustained enforcement and mobilization crackdowns. Based on a systematic review of unrestrained crashes in the state for the years 2014-2018, a ranking list of high crash municipalities and counties was developed. During FY2021 as many of the Top 25 municipal agencies and Top 5 counties as possible from the list will receive grant funding for sustained seat belt enforcement efforts. In the effort to develop and fund these programs there must also be the realization of the challenges involved, which begin with the willingness or ability of the particular agency to participate. In addition, many of the agencies with high rates of unrestrained crashes also show up on other priority area lists such as pedestrian safety, impaired driving, and distracted driving. It is unrealistic to expect ongoing sustained enforcement in all of these areas within these agencies, so priorities will have to be set.

In terms of sustained seat belt enforcement for FY2021, many of the high-ranking municipal and county agencies for unrestrained crashes will be offered multi-faceted enforcement grants that will include funding for seat belt enforcement and one or more additional priority areas such as distracted driving or impaired driving. The Division of State Police will also receive grant funding to allow it, on an ongoing basis, to schedule personnel to patrol major New Jersey highways as well as service areas and toll plazas. 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.

For the seat belt mobilizations in the upcoming year, *Click It or Ticket* campaigns will be conducted from November 16-29, 2020 (rescheduled from May, 2020) and May 24-June 6, 2021 to increase seat belt use and educate the public about the impact belt use has on reducing injuries and fatalities in motor vehicle crashes. Approximately 125 state, county and municipal police departments will receive funds to participate in the spring 2021 enforcement effort. The list of municipalities throughout the State that have a high percentage of unrestrained motor vehicle crashes will be utilized to select 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. DHTS will rank and prioritize potential grantees based on the above-mentioned criteria (ex. Unrestrained crashes, low surveyed belt use, etc.) and will target these agencies, by invitation, to participate in the campaign.

All education-related occupant protection initiatives conducted at the local level will utilize DHTS' *Buckle Up* — *Everyone*, *Every Ride* material. Grant funded agencies will be asked to put special emphasis on rear seat belt usage and nighttime seat belt usage, if possible.

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. Media activities will also be conducted specific to this program.

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

Driver Behavior is one of the six Emphasis Areas of the 2020 Strategic Highway Safety Plan, and the issues relating to occupant protection fall within this area. DHTS will make it a priority to assist in implementing the strategies of the plan in which it can play a role, such as enhancing enforcement and educational efforts relating to rear seat belt use and educating young drivers on the importance of buckling up.

Within this planned activity, the approximate breakdown for FY2021 funding will be:

\$750,000 for *Click It or Ticket* (Municipalities will be offered funding based upon data driven considerations). \$150,000 to New Jersey State Police for *Click It or Ticket*.

\$150,000 to New Jersey State Police for Sustained Seat Belt Enforcement.

\$150,000 to select counties for *Click It or Ticket* flow through grants to municipal agencies.

(NOTE: Sustained seat belt grants to Top 25 municipal and Top 5 county agencies will utilize Sec. 402 funds in the Police Traffic Services area as they will include additional enforcement in other priority programs).

Funding Source: SECTION 402 - \$800,000 SECTION 405(b) - \$500,000 Local Benefit: \$950,000

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# 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).

Inspection stations in urban communities may be effective in reaching households that improperly use child restraints. One study conducted in Los Angeles that reached out to parents and caregivers using advertisements found that vehicles visiting the inspection stations had a rate of child restrain misuse of 96.2% (Bachman et al., 2016). The Los Angeles inspection station study found that factors such as child age, child weight, and vehicle year led to systematic instances of child restraint misuse and should be considered when conducting inspections and addressing deficiencies in restraint use.

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 elsewhere (Brown, Finch, Hatfield, & Bilston, 2011).

#### Assessment of Safety Impacts

Children from 0-15 years of age account for approximately 10 percent of unrestrained occupants involved in a crash. Child restraints reduce fatalities by 71% for infants under one year of age, and by 54% for children ages 1-4. Children's Hospital of Philadelphia found that belt-positioning booster seats reduce the risk of crash injury to children 4-8 years of age by 45% when compared to seat belts alone (Arbogast, Jermakian, Kallan, & Durbin, 2009).

The challenge is to ensure that these restraints, whether a car seat or booster seat, are installed in a proper manner. Misuse is a chronic issue. Overall misuse nationally was estimated at 46% in one study. Misuse varied by seat type and position, with the highest misuse rate being 61% for forward facing child seats. In order to combat this misuse, programs have been implemented to provide hands on assistance to parents and caregivers in proper child restraint use. Currently there are more than 39,000 certified Child Passenger Safety technicians and instructors nationally (Safe Kids Worldwide, 2016) and 4,900 inspection stations registered with NHTSA.

# 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 New Jersey is as high as 80 percent. Occupants required to be secured in car or booster seats have a non-compliance rate of approximately 10 percent based on recent observational surveys.

Project Name: CHILD PASSENGER SAFETY ENFORCEMENT/EDUCATION/TRAINING

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

AND NON-PROFIT ORGANIZATIONS

Total Project Amount: \$900,000

**Project Description:** 

The Child Passenger Safety (CPS) program, funded through the Division of Highway Traffic Safety (DHTS), will continue its efforts at reducing child 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 2020, grants were provided directly to agencies for CPS programs, technician training, retraining and program development. These grantees have directly worked one-on-one with over 28,000 parents and children and reached another several hundred children with the booster seat education program. Grants will continue to be awarded in FY2021 to approximately 20 state, county, and local entities 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 targeting parents and students, and technician training and re-certification. Parent (or caregiver) education programs are typically conducted at a community event or fixed, regularly-scheduled location, 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.

Enhancing the number and quality of trained New Jersey CPS Technicians begins with offering initial certification courses. In FY2020 as an example, 18 child passenger safety technician courses were held at which 312 new technicians were trained. As of April 2020, there were 1,191 total technicians in the state working in the law enforcement, medical, and injury prevention realms.

Continuing education for existing technicians is critical. Ongoing (CEU's) for recertification as well as LATCH manual updates (Lower Anchors and Tethers for Children) and regular opportunities for instructors to evaluate the skills of technicians are all part of this effort. To that end, a statewide Child Passenger Safety Technician Conference is planned for October 2020 (rescheduled from spring, 2020).

# **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. The DHTS website, which can be found at <a href="https://www.njsaferoads.com">www.njsaferoads.com</a>, 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 exist for each county in New Jersey. They are listed on the DHTS website. 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 routinely updated list of regularly scheduled Child Safety Seat Inspection and Education activities listed by region and county. There are also three regional Child Passenger Safety Stations which are operated by the New Jersey State Police. 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 can be found on the DHTS website.

Funds for personal services will be used to conduct child safety seat checks at these state, county and municipal programs. 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 to provide correct 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.

#### 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 1,191 individuals trained as certified technicians in the State working in public safety, health and injury prevention programs that remain certified. Forty of the technicians are certified as CPS instructors. In 2021, ten CPS training courses are expected to be held.

In FY2021, DHTS will host a statewide one-day workshop (rescheduled from spring 2020) for all New Jersey CPS technicians, to provide technical updates and CEU's for recertification. Unlike the Regional CPS Conferences that were held in previous years, these workshops will be open only to New Jersey technicians.

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 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.

#### Check to Protect

As an added benefit to the public, attendees at some New Jersey Child Passenger Safety permanent fitting stations will receive important vehicle recall information as part of the *Check to Protect* program. The program was developed by the Governor's Highway Safety Association (GHSA) to help address the more than 63 million unreported vehicle recalls in the United States. The initiative calls for CPS technicians to carry out vehicle recall checks at child passenger safety stations and for police officers to do the checks during routine traffic stops.

*Check to Protect* kits were provided to nine New Jersey agencies for a spring 2020 pilot program. The rollout, though slowed by the 2020 public health emergency, will continue and be monitored for effectiveness in FY2021.

Within the CPS planned activity, the approximate breakdown for FY2021 funding will be:

\$750,000 for seat check events and fitting station operational grants directly to State, County, and Municipal agencies, as well as integrated into several County CTSP grants.

\$150,000 for primarily education-related CPS grants such as the Central Jersey Family Health Consortium (Safe Kids) and the New Jersey Dept. of Child and Family Services.

Funding Source: SECTION 405(b) Local Benefit: \$600,000

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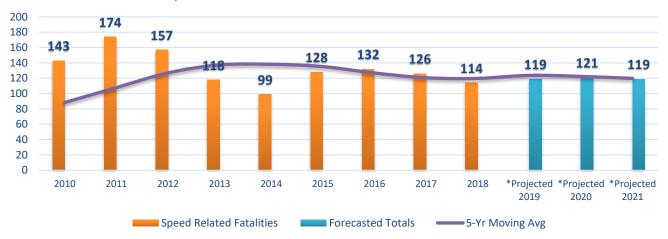
#### POLICE TRAFFIC SERVICES (SPEEDING AND DISTRACTED DRIVING)

#### 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. 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. The State saw its second consecutive year decrease in speed involved fatalities in 2018.

#### SPEED RELATED FATALITIES, ANNUAL AND 5-YEAR MOVING AVERAGE



Driver inattention has remained the most frequently cited cause of fatal and incapacitating crashes, over seven times higher than the total crashes cited for unsafe speed over the past five years (2014-2018). Unsafe speed was the contributing circumstance in 6 percent of all crashes in 2018, a slight increase from 5.8 percent in 2017. Driver inattention was a contributing circumstance in 50 percent of crashes in 2018, down from 51 percent in 2017.

#### 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.

Between 2014 and 2018, overall distracted driving crashes decreased 7 percent with the biggest decrease seen in combination with pedestrian crashes (-23%). Overall crashes involving speeding decreased 3.5 percent with a large decrease (-12%) in young driver involved as a combining factor.

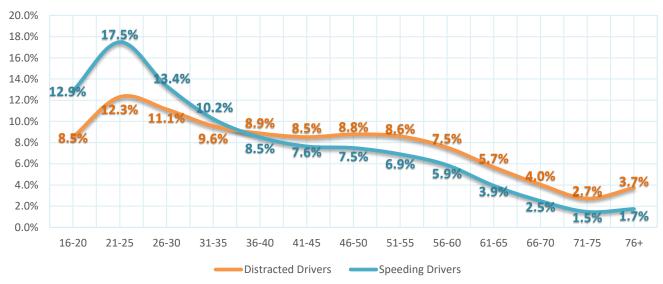
| DISTRACTED DRIVING CRASHES BY PERFORMANCE AREA, 2014 – 2018 |         |         |         |         |         |         |          |                  |  |  |  |  |
|---|---------|---------|---------|---------|---------|---------|----------|------------------|--|--|--|--|
| DISTRACTED DRIVING AND                                      | 2014    | 2015    | 2016    | 2017    | 2018    | TOTAL   | 5 YR AVG | % OF 5 YR<br>TOT |  |  |  |  |
| ALCOHOL INVOLVEMENT   | 5,004   | 4,741   | 4,732   | 4,693   | 4,556   | 24,378  | 4,876    | 3.4%             |  |  |  |  |
| DRUG INVOLVEMENT  | 674     | 744     | 761     | 1,052   | 1,099   | 3,908   | 782      | 0.5%             |  |  |  |  |
| PEDESTRIANS   | 2,378   | 2,018   | 2,107   | 2,208   | 1,812   | 11,234  | 2,247    | 1.6%             |  |  |  |  |
| UNSAFE SPEED  | 4,904   | 4,892   | 5,145   | 4,673   | 4,441   | 24,892  | 4,978    | 3.4%             |  |  |  |  |
| YOUNG DRIVERS   | 20,405  | 20,313  | 20,818  | 19,094  | 18,648  | 101,756 | 20,351   | 14.1%            |  |  |  |  |
| OLDER DRIVERS   | 27,323  | 24,811  | 26,141  | 25,783  | 26,345  | 131,089 | 26,218   | 18.1%            |  |  |  |  |
| MOTORCYCLES   | 940     | 985     | 945     | 939     | 840     | 4,825   | 965      | 0.7%             |  |  |  |  |
| TOTAL DISTRACTED INVOLVED CRASHES                           | 151,034 | 142,107 | 147,572 | 142,036 | 140,227 | 722,976 | 144,595  | 100.0%           |  |  |  |  |

| UNSAFE SPEED CRASHES BY PERFORMANCE AREA, 2014 – 2018 |        |        |        |        |        |        |          |                  |  |  |  |  |
|---|--------|--------|--------|--------|--------|--------|----------|------------------|--|--|--|--|
| UNSAFE SPEED AND                                      | 2014   | 2015   | 2016   | 2017   | 2018   | TOTAL  | 5 YR AVG | % OF 5 YR<br>TOT |  |  |  |  |
| ALCOHOL INVOLVEMENT                                   | 1,330  | 1,263  | 1,117  | 1,079  | 1,094  | 5,883  | 1,177    | 7.0%             |  |  |  |  |
| DRUG INVOLVEMENT                                      | 97     | 144    | 132    | 183    | 221    | 777    | 155      | 0.9%             |  |  |  |  |
| DISTRACTED DRIVING                                    | 4,904  | 4,892  | 5,145  | 4,647  | 4,441  | 24,029 | 4,806    | 28.6%            |  |  |  |  |
| PEDESTRIANS   | 149    | 141    | 122    | 178    | 79     | 669    | 134      | 0.8%             |  |  |  |  |
| YOUNG DRIVERS   | 3,034  | 3,137  | 2,911  | 2,822  | 2,682  | 14,586 | 2,917    | 17.4%            |  |  |  |  |
| OLDER DRIVERS   | 1,410  | 1,322  | 1,314  | 1,390  | 1,563  | 6,999  | 1,400    | 8.3%             |  |  |  |  |
| MOTORCYCLES   | 281    | 320    | 330    | 294    | 273    | 1,498  | 300      | 1.8%             |  |  |  |  |
| TOTAL UNSAFE SPEED CRASHES                            | 17,549 | 17,610 | 15,884 | 16,060 | 16,931 | 84,034 | 16,807   | 100.0%           |  |  |  |  |

# Analysis of Age

The most prominent age group that operated a vehicle at unsafe speed and/or while distracted 21-30 years of age. A 10-year sliding analysis of age finds drivers between the ages of 18 and 27 made up the largest group of distracted drivers (24%) and speeders (34%) over the last 5 years (2014-2018).

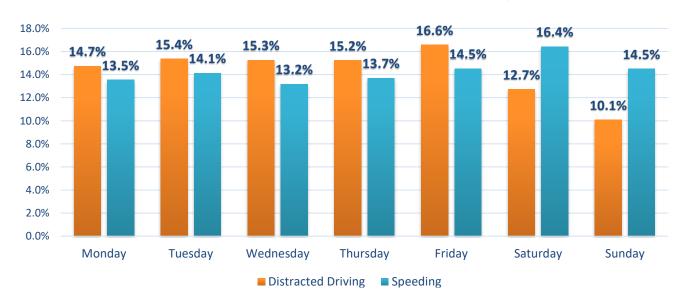
#### DISTRACTED AND SPEEDING DRIVERS % BY AGE GROUP, 2014 - 2018



# 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. Over the last 5 years, most of the crashes where unsafe speed was a contributing circumstance occurred on weekends (31%). Saturday accounted for 16.4 percent and Sunday 14.5 percent of all fatal unsafe speed related crashes. Distracted driving was a contributing circumstance in a similar patter to that of all crashes in New Jersey. Weekdays, especially Friday (16.6%), had the higher occurrences of distracted behavior in crashes.

#### DISTRACTED DRIVING AND SPEEDING INVOLVEMENT IN CRASHES % DAY OF WEEK, 2014 - 2018



During the period from 2014-2018, the months that experienced the highest volume of crashes involving a distracted driver were June and October. For unsafe speed, the most prevalent months were January and February.

# DISTRACTED DRIVING INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN          | FEB          | MAR          | APR          | MAY          | JUN          | JUL          | AUG          | SEPT         | ОСТ          | NOV          | DEC          | TOT       | AL   |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|------|
| Midnight to 2:59AM   | 1,944        | 1,837        | 1,971        | 2,057        | 2,374        | 2,322        | 2,485        | 2,325        | 2,034        | 2,177        | 2,236        | 2,298        | 26,060    | 4%   |
| 3:00AM to<br>5:59AM  | 1,322        | 1,304        | 1,439        | 1,375        | 1,502        | 1,429        | 1,474        | 1,484        | 1,394        | 1,564        | 1,531        | 1,484        | 17,302    | 2%   |
| 6:00AM to<br>8:59AM  | 8,458        | 7,854        | 7,773        | 7,436        | 8,345        | 8,129        | 6,716        | 6,385        | 8,931        | 9,723        | 8,375        | 7,706        | 95,831    | 13%  |
| 9:00AM to<br>11:59AM | 8,567        | 8,503        | 8,605        | 8,580        | 9,382        | 10,087       | 10,061       | 9,849        | 9,067        | 9,642        | 8,995        | 9,183        | 110,521   | 15%  |
| Noon to<br>2:59PM    | 10,770       | 10,376       | 11,641       | 11,242       | 12,735       | 13,235       | 13,170       | 12,864       | 11,841       | 12,522       | 12,197       | 12,418       | 145,011   | 20%  |
| 3:00PM to<br>5:59PM  | 12,575       | 11,908       | 14,237       | 14,406       | 16,721       | 16,813       | 15,491       | 15,079       | 15,035       | 15,514       | 15,212       | 16,252       | 179,243   | 25%  |
| 6:00PM to<br>8:59PM  | 7,511        | 7,427        | 7,599        | 7,490        | 8,404        | 8,651        | 8,715        | 8,611        | 8,324        | 9,626        | 9,248        | 9,827        | 101,433   | 14%  |
| 9:00PM to<br>11:59PM | 2,986        | 3,076        | 3,576        | 3,815        | 4,485        | 4,617        | 5,097        | 4,538        | 3,735        | 3,819        | 3,676        | 4,155        | 47,575    | 7%   |
| TOTAL                | 54,133<br>7% | 52,285<br>7% | 56,841<br>8% | 56,401<br>8% | 63,948<br>9% | 65,283<br>9% | 63,209<br>9% | 61,135<br>8% | 60,361<br>8% | 64,587<br>9% | 61,470<br>9% | 63,323<br>9% | - 722,976 | 100% |

# UNSAFE SPEED INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN           | FEB          | MAR          | APR         | MAY         | JUN         | JUL         | AUG         | SEPT        | OCT         | NOV         | DEC          | TOT    | AL   |
|----------------------|---------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------|------|
| Midnight to 2:59AM   | 700           | 673          | 544          | 515         | 583         | 515         | 571         | 567         | 559         | 531         | 595         | 656          | 7,009  | 8%   |
| 3:00AM to<br>5:59AM  | 513           | 570          | 446          | 317         | 379         | 378         | 394         | 390         | 378         | 383         | 436         | 504          | 5,088  | 6%   |
| 6:00AM to<br>8:59AM  | 2,022         | 1,902        | 1,154        | 800         | 853         | 785         | 736         | 684         | 911         | 914         | 926         | 1,183        | 12,870 | 15%  |
| 9:00AM to<br>11:59AM | 1,762         | 1,347        | 1,008        | 619         | 706         | 611         | 647         | 632         | 777         | 904         | 907         | 1,193        | 11,113 | 13%  |
| Noon to<br>2:59PM    | 1,678         | 1,174        | 1,446        | 757         | 958         | 786         | 851         | 778         | 932         | 1066        | 1,375       | 1,344        | 13,145 | 16%  |
| 3:00PM to<br>5:59PM  | 1,527         | 1,311        | 1,715        | 951         | 1,172       | 1,089       | 1,155       | 1,080       | 1,241       | 1,205       | 1,285       | 1,462        | 15,193 | 18%  |
| 6:00PM to<br>8:59PM  | 1,087         | 1,032        | 998          | 686         | 915         | 887         | 987         | 848         | 815         | 816         | 857         | 1,021        | 10,949 | 13%  |
| 9:00PM to<br>11:59PM | 910           | 847          | 697          | 585         | 638         | 663         | 778         | 631         | 640         | 653         | 797         | 901          | 8,740  | 10%  |
| TOTAL                | 10,199<br>12% | 8,856<br>11% | 8,008<br>10% | 5,230<br>6% | 6,204<br>7% | 5,714<br>7% | 6,119<br>7% | 5,610<br>7% | 6,253<br>7% | 6,472<br>8% | 7,178<br>9% | 8,264<br>10% | 84,107 | 100% |

# 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.

Over the last 5 years (2014-2018), Bergen County experienced the highest number of distracted driving crashes by county, with 80,260 or 11 percent. Middlesex County (77,828 or 10.8%) and Essex County (65,202, 9.0%) had the next highest frequency of distracted driving crashes by county. During that same period, Essex County experienced the highest number of unsafe speed related crashes with 8,812 crashes or 10.5 percent of the total.

| DISTRACTED DRIVING AND UNSAFE SPEED CRASHES BY COUNTY, 2014 – 2018 |                    |                    |                               |            |  |  |
|--|--------------------|--------------------|-------------------------------|------------|--|--|
|  | 2014-2018 DISTRACT | ED DRIVING CRASHES | 2014-2018 UNSAFE SPEED CRASHI |            |  |  |
| COUNTY   | Total              | % of Total         | Total                         | % of Total |  |  |
| ATLANTIC   | 22,675             | 3.1%               | 3,851                         | 4.6%       |  |  |
| BERGEN   | 80,260             | 11.1%              | 5,114                         | 6.1%       |  |  |
| BURLINGTON   | 33,045             | 4.6%               | 5,788                         | 6.9%       |  |  |
| CAMDEN   | 37,299             | 5.2%               | 6,142                         | 7.3%       |  |  |
| CAPE MAY   | 7,403              | 1.0%               | 795                           | 0.9%       |  |  |
| CUMBERLAND   | 9,616              | 1.3%               | 1,906                         | 2.3%       |  |  |
| ESSEX  | 65,202             | 9.0%               | 8,812                         | 10.5%      |  |  |
| GLOUCESTER   | 18,408             | 2.5%               | 3,368                         | 4.0%       |  |  |
| HUDSON   | 55,148             | 7.6%               | 2,771                         | 3.3%       |  |  |
| HUNTERDON  | 9,066              | 1.3%               | 1,269                         | 1.5%       |  |  |
| MERCER   | 27,855             | 3.9%               | 5,223                         | 6.2%       |  |  |
| MIDDLESEX  | 77,828             | 10.8%              | 8,269                         | 9.8%       |  |  |
| MONMOUTH   | 51,342             | 7.1%               | 7,104                         | 8.4%       |  |  |
| MORRIS   | 36,685             | 5.1%               | 4,101                         | 4.9%       |  |  |
| OCEAN  | 39,019             | 5.4%               | 4,776                         | 5.7%       |  |  |
| PASSAIC  | 56,937             | 7.9%               | 4,239                         | 5.0%       |  |  |
| SALEM  | 3,370              | 0.5%               | 1,001                         | 1.2%       |  |  |
| SOMERSET   | 23,853             | 3.3%               | 2,603                         | 3.1%       |  |  |
| SUSSEX   | 7,765              | 1.1%               | 1,366                         | 1.6%       |  |  |
| UNION  | 51,795             | 7.2%               | 4,337                         | 5.2%       |  |  |
| WARREN   | 8,405              | 1.2%               | 1,272                         | 1.5%       |  |  |

#### **Countermeasure Strategies in Program Area**

| Countermeasure Strategy                                     |
|---|
| Highway Safety Office Program Management                    |
| Speed and Distracted Driving Enforcement                    |
| Equipment   |
| Traffic Safety Resource Prosecutor                          |
| Law Enforcement Training                                    |
| Data Driven Approaches to Crime and Traffic Safety (DDACTS) |
| Law Enforcement Liaison (LEL)                               |

# Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** Reduce the five-year rolling average of drowsy/distracted driving and aggressive driving related fatalities by 10%, serious injuries by 5%, and total injuries by 5%, over the period from 2018 to 2023.

#### Strategies in 2020 Strategic Highway Safety Plan

Review the Safe Corridors Program and make recommendations to improve efficiency. Monitor aggressive and distracted driving of commercial vehicles in high risk locations.

Discuss opportunities with the Administrative Office of the Courts to limit plea bargaining for aggressive, drowsy and distracted driving.

Create a safety culture in NJ by reviewing existing educational programs led by government, schools, insurance industry, health industry, and non-profit advocacy organizations. Make recommendations to strengthen partnering and messaging to reach target audiences.

Initiate a study to evaluate the efficacy of various driver behavior modification approaches.

#### **Associated Performance Measures**

| Fiscal<br>Year | Performance measure name                           | Target End<br>Year | Target<br>Period | Target<br>Value |
|----------------|--|--------------------|------------------|-----------------|
| 2021           | Number of Distracted Driving Related<br>Fatalities | 2021               | 5 Year           | 99.0            |
| 2021           | Number of Distracted Driving Related Crashes       | 2021               | 5 Year           | 138,927         |
| 2021           | Number of Speed Related Crashes                    | 2021               | 5 Year           | 16,126.8        |
| 2021           | Number of speeding-related fatalities (FARS)       | 2021               | 5 Year           | 119.8           |

Project Name: POLICE TRAFFIC SERVICES PROGRAM MANAGEMENT

Sub-Recipient: DIVISION OF HIGHWAY TRAFFIC SAFETY

Total Project Amount: \$400,000

**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 \$365,000 of the budgeted amount and another \$35,000 is budgeted for travel and other miscellaneous expenditures.

In all, six current program staff members are provided partial salary funding in this grant, as well as a public information assistant who carries out media activities relating to speed and distracted driving. In addition, partial salaries for three new program staffers slated to be hired in FY2021 are included.

Activities carried out by the staff members funded through this grant include all of the countermeasures in the police traffic services program area, with the majority of work hours taking place managing new and continuation sustained enforcement grants as well as large enforcement mobilizations relating to driver distraction.

Funding Source: SECTION 402 Local Benefit: 0

# Countermeasure Strategy: Speeding and Distracted Driving Enforcement

# Effectiveness of Countermeasure

High-visibility enforcement campaigns have been used to deter speeding, aggressive driving, and driver inattention through specific and general deterrence. In the high-visibility enforcement model, law enforcement target certain high-crash or high-violation geographical areas using either expanded regular patrols or designated aggressive

driving patrols. The objective is to convince the public that speeding, aggressive driving, and distracted driving actions are likely to be detected and that offenders will be arrested and punished (Countermeasures that Work, 9<sup>th</sup> Edition., 2017).

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.

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). Effective, high visibility communications and outreach are an essential part of successful speed and aggressive-driving enforcement programs (Neuman et al., 2003: NHTSA, 2000).

Recently, NHTSA has examined whether the HVE model could be effective in reducing hand-held cell phone use and texting among drivers. Results from the NHTSA HVE program suggest hand-held cell phone use among drivers dropped 57% in Hartford and 32% in Syracuse (Chaudhary et al., 2014). The percentage of drivers observed manipulating a phone (e.g., texting or dialing) also declined. Public awareness of distracted driving was already high before the program, but surveys suggest awareness of the program and enforcement activity increased in both Hartford and Syracuse. Surveys also showed most motorists supported the enforcement activity. In California and Delaware, similar reductions in cell phone use were observed following the campaign, although decreases were also noted in comparison communities (Schick et al., 2014).

#### Assessment of Safety Impacts

Noncompliance with traffic laws pertaining to speed and distracted driving cause many thousands of crashes annually. Nationally, in 2017 speeding killed more than 9,700 people, accounting for 26% of all traffic fatalities. Despite being more difficult to prove from an evidentiary standpoint, there were 3,197 distracted driving related fatal crashes in 2014 (NCSA, 2016). The effectiveness of enforcement in reducing these crashes stems from the basic premise that drivers will adjust their behavior if they 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 been noteworthy concerns over the past five years. Speed and distracted driving crashes account for nearly 6 percent and 51 percent of all crashes respectively. There is an over-representation of speed and distracted driving crashes in Bergen, Essex, Middlesex, and Monmouth 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.

Any measures that can achieve reductions in average operating speeds, including lower speed limits, enhanced enforcement, and communication campaigns, as well as engineering measures are expected to reduce fatal and injury crashes. Even small changes in average speed have a substantive impact. A reduction of 3 mph in average speed on a road with a baseline average operating speed of 30 mph is expected to produce a reduction of 27% in injury crashes and 49% in fatal crashes (AASHTO, 2010).

**Project Name: ENFORCEMENT PROGRAMS** 

Sub-Recipients: STATE AND MUNICIPAL LAW ENFORCEMENT AGENCIES

Total Project Amount: \$4,800,000

**Project Description:** 

Funds will be provided to allow municipal, county, and State law enforcement agencies to participate in high visibility enforcement efforts designed to deter speeding, aggressive driving, and distracted driving. Saturation patrols will concentrate on problem roadways and locations as identified through a data driven approach and analysis. As with other priority program areas (alcohol and seat belts), ranking lists are generated for distracted driving and speed related crashes, which will allow for targeted programmatic efforts.

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. Municipal and county law enforcement agencies will also be considered for speed enforcement grant funding in combination with other priority program areas.

On an overtime basis, funds will also be provided to police agencies to conduct special enforcement patrols targeting distracted drivers not complying with the state's cell phone/texting law. Driver distraction is a major contributing cause for crashes in the state, and as one of only a handful of states to qualify for Sec. 405e funding, New Jersey has the available resources to aggressively attack this issue from an enforcement and public awareness standpoint.

For FY2021, DHTS will employ a comprehensive data-driven approach to speed, aggressive driving, and distracted driving utilizing a combination of sustained and targeted mobilization enforcement.

Crash ranking lists of these crash types represent the starting point for our efforts. Based on the data included in these rankings, local and county agencies will be selected and offered sustained grants covering two or more priority areas (ex. Speed and Distractions) as well as grants for the scheduled national mobilizations. Every effort is made to engage police agencies in these high crash areas in our grant programs, but there is no guarantee that all agencies will be willing or able to participate. In fact, it has been our experience that many are not. Nonetheless, DHTS will make every effort to engage these agencies to carry forward the most data driven enforcement effort possible in these areas. In addition, many of the agencies with high rates of one type of crash, such as speed-related, also show up on other priority area lists such as pedestrian safety, impaired driving, and distracted driving. It is unrealistic to expect ongoing sustained enforcement in all of these areas by these agencies, so priorities will have to be set.

Specifically, for the FY2021 mobilizations, a statewide list detailing the occurrence of crashes involving distracted driving will be updated and analyzed to assist in determining grantee participation in the annual *UDrive. 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. Grant funding for the mobilization will be offered based on the rankings list, and in scaled amounts as much as possible, to focus available funding into the places of greatest need.

To support the mobilization and raise awareness about the critical issue of driver distraction, DHTS will work with the NJ OAG Communications Office to develop and carry out a multi-faceted paid media program during the spring and summer of 2021.

Driver Behavior is one of the six Emphasis Areas of the 2020 Strategic Highway Safety Plan, and the issue of speeding and driver distraction fall within this area. DHTS will make it a priority to assist in implementing the strategies of the plan in which it can play a role, such as engaging the Traffic Safety Resource Prosecutor to train local prosecutors on the importance of safe driving behaviors and to work with the Administrative Office of the Courts to limit plea-bargaining for dangerous driving violations.

It is anticipated that (as in FY2019 and FY2020) approximately \$1.2 million in Section 405(e) funding will be flexed into the Alcohol Enforcement program area for FY2021 to support New Jersey's participation in the national impaired driving crackdowns.

Funding Source: SECTION 405(e) - \$3,800,000 (after \$1.2 million flexed out) • SECTION 402 - \$1,000,000

Local Benefit: \$3,600,000 (SECTION 405(e)), \$800,000 (SECTION 402)

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# **Countermeasure Strategy: Equipment**

# Effectiveness of Countermeasure

The investigation of traffic crashes using advanced technology equipment provides a substantial improvement over traditional procedure. 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 Research Report, 1994).

#### Assessment of Safety Impacts

Technology today is constantly changing. Technology in regard 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 used in crash investigation and crime scene processing routinely updates and changes to reflect the latest investigative techniques. Keeping the FAIU equipment current will allow personnel to effectively process crash scenes in a timely manner, which ultimately leads to better fatal crash-related data.

**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.

Proper documentation of crash scenes is a vital part of any investigation and is critical to the successful prosecution of any charges that result. There are many other benefits that result from the work of the FAIU, including better FARS reports and crash data, and enhancements to the overall Crash Investigation program in the state.

The FAIU and its operations are funded almost entirely through state monies, with many hundreds of thousands of dollars allocated each year for the team and its operations. DHTS grant funding for FY2021 will support the purchase of equipment and software that will allow trained FAIU team members to ensure a complete investigation and assist them in completing reconstructions of serious and fatal motor vehicle crashes. DHTS recognizes the critically important work done by the FAIU and supports this work as part of a team effort with a fairly nominal grant allocation of federal funds when compared to the overall budget of the unit.

Funding Source: SECTION 402 Local Benefit: 0

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# Countermeasure Strategy: Traffic Safety Resource Prosecutor

# Effectiveness of Countermeasure

Traffic Safety Resource Prosecutors facilitate a coordinated, multidisciplinary approach to the prosecution of impaired driving and other traffic offenses.

TSRP's are typically current or former prosecutors who provide training, education, and technical support to local and county prosecutors and law enforcement personnel throughout their states. Traffic crimes and safety issues include alcohol and/or drug impaired driving, distracted driving, vehicular homicide, occupant restraint, and other highway safety issues. Each TSRP must assess the needs and demands unique to his or her own state and work in conjunction with many agencies to meet these needs. The National Highway Traffic Safety Administration, law enforcement agencies, judicial organizations, crime laboratories (including forensic toxicologists), medical examiners, local media, Governor's Highway Safety Offices, victim advocate groups, and resources available from the National District Attorneys Association's National Traffic Law Center should all be used to facilitate services to prosecutors and law enforcement. (NHTSA, *Traffic Safety Resource Prosecutor Manual*, 2nd Edition, 2016).

#### Assessment of Safety Impacts

The TSRP provides training, education and technical support to prosecutors and law enforcement agencies throughout the State, as well as critical legal and programmatic advice to the highway safety office. 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 impaired driving offenses (alcohol and drugs). 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 began rolling out a new DWI chemical breath test instrument in FY2020. The TSRP will play an integral part in facilitating this roll out into FY2021 and defending against any court challenges that occur.

Project Name: TRAFFIC SAFETY RESOURCE PROSECUTOR Sub-Recipients: DIVISION OF CRIMINAL JUSTICE

Total Project Amount: \$400,000

**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 and drugged driving enforcement in the State and as such there needs to be a uniform response taken by the many prosecutors throughout the State to these matters.

Funds will be used to pay the partial salaries (75%, 75%, 50%) of three DAG's as well as travel expenses of these Traffic Safety Resource Prosecutors. These TSRP's will deal with major legal issues relating to traffic safety in the state while also assisting DHTS with more routine inquiries relating to traffic safety laws and programs. The approximate budget breakdown within this project is: \$300,000 for salaries and fringe benefits, \$80,000 for expert testimony expenses for the DRE Frye hearing, and \$20,000 for miscellaneous expenses such as travel for the three TSRP's to traffic safety related conferences.

In FY2021, the TSRP's will be facilitating three major court cases in the state, all of which will require extensive work: the *Cassidy* case, in which several thousand DUI convictions could potentially be overturned; the planned rollout and eventual validity hearing for the state's new evidentiary alcohol blood testing unit; and the ongoing, labor intensive legal challenge to the validity of New Jersey's drugged driving enforcement and detection programs (DRE).

In addition to being very involved in these 3 large projects/litigations, all 3 TSRPs conduct trainings for prosecutors and law enforcement officers (e.g. Prosecutor Alcotest Training, Prosecuting the Drug-Impaired Driver, Cops in Court for DREs, Legal Block at DRE School, Radar Instructor Re-certification). The 3 attorneys also assist municipal and assistant prosecutors with issues they face in municipal court and on appeal; maintain a brief bank to help prosecutors reply to motions and appeals; and maintain files with information/ transcripts of many of the defense experts who appear in NJ's Municipal and Superior Courts.

Funding Source: SECTION 402 Local Benefit: \$400,000

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#### **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* (2003), 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. In the report it notes that both the public and the police agency itself are better served when officers are trained in the most up to date technologies and tools.

# 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. There are a number of other key traffic safety functions that also benefit from ongoing, enhanced training, such as Child Passenger Safety and Impaired Driving detection and apprehension.

# Linkage between Problem Identification and Performance Targets

Traffic crashes can be extremely complicated events as they involve both human and mechanical factors. How they occur, who or what caused them, and why they occurred are facts that police must determine. Law enforcement officers generally get some degree of initial training in crash investigation while attending the police academy. This level of training is not 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 is needed to properly equip police officers with the needed training. Ongoing training and refresher courses are beneficial in many other traffic safety areas as well. More complete and successful crash investigations result in better crash data, which is a critical tool for traffic safety programmatic decision makers.

Project Name: CRASH INVESTIGATION AND SPECIALIZED TRAINING PROGRAMS

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

HIGHWAY TRAFFIC SAFETY
Total Project Amount: \$1,450,000

**Project Description:** 

Basic crash investigation courses and crash data retrieval technician training (through grants with New Jersey State Police and Kean University) 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 topics including Traffic Crash Reconstruction, Pedestrian/Bicycle Crash Investigation and Motorcycle Crash Investigation and Event Data Recorder Use in Crash Reconstruction.

This task also provides for 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.

The State Police liaisons whose responsibilities include administering crash training programs and interfacing with DHTS program staff are also funded in this area. The liaisons are responsible for helping to monitor the numerous annual traffic safety grants that HTS awards to NJSP. HTS funds will be used for salaries of these 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.

Rutgers University will receive funding for its comprehensive law enforcement training grant which includes ongoing training programs relating to Work Zone Safety, NJTR-1 Crash Reporting, a new software reporting program for New Jersey DRE's, and a pilot program utilizing the emerging technology of Unmanned Aircraft Systems (drones) for crash investigation scene mapping.

In FY2021 new training initiatives will be developed through Rutgers to assist local police agencies in crash data analysis (Crash Analysis Tool training) and traffic safety data and enforcement countermeasures, with the ultimate goal of improving the quality of traffic safety grant submittals to HTS.

Funding Source: SECTION 402 Local Benefit: \$845,000

# 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. A shortage of law enforcement resources is likely to continue, so finding innovative and cost-effective approaches to improving traffic safety in communities will remain a priority.

**Project Name: DDACTS** 

Sub-Recipients: COUNTY AND MUNICIPAL POLICE AGENCIES

Total Project Amount: \$100,000

**Project Description:** 

Funds will be used to implement the DDACTS crime and traffic safety 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 relevant crime and crash data. 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 with the goal of reducing instances of crime and motor vehicle crashes.

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

#### **Countermeasure Strategy: Law Enforcement Liaison (LEL)**

#### Effectiveness of Countermeasure

Law enforcement is at the center of our work in traffic safety, playing a critical role in the effort to reduce crashes, injuries, and fatalities on the roadways of New Jersey. The National Law Enforcement Liaison Program was created by NHTSA and the Governors Highway Safety Association to create State and regional LELs who can provide technical assistance, communication, motivation, and coordination to the local law enforcement community.

#### Assessment of Safety Impacts

New Jersey's LEL serves as a bridge between HTS 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 HTS 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 help to increase the number of law enforcement agencies participating in traffic safety activities, and to increase the effectiveness of work they do, which will contribute to crash reductions.

Project Name: LAW ENFORCEMENT LIAISON

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 will be funded from a grant to the New Jersey State Association of Chiefs of Police and will solicit and support law enforcement participation in the drunk driving, distracted driving and seat belt mobilizations, child passenger safety 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, such as travel and materials.

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

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#### COMMUNITY TRAFFIC SAFETY PROGRAMS

#### General Overview

In 2019, pedestrian fatalities were the most prevalent in Camden County (24) accounting for 13 percent of all pedestrians killed in the State. The County with the highest number of motor vehicle fatalities (48) was Middlesex County and comprised mostly driver fatalities followed by passengers. The most bicycle fatalities (2) occurred in Hudson, Middlesex, and Passaic Counties. Atlantic, Burlington and Monmouth Counties had the highest number of motorcycle fatalities in 2019 (9).

|                 |        | 2019 VICTII | VI CLASSIFICATION | ON BY COUNTY |              |       |                    |
|-----------------|--------|-------------|-------------------|--------------|--------------|-------|--------------------|
|                 | DRIVER | PASSENGER   | PEDESTRIAN        | BICYCLIST    | MOTORCYCLIST | TOTAL | % CHANGE from 2018 |
| ATLANTIC        | 7      | 4           | 12                | 0            | 9            | 32    | 6.7%               |
| BERGEN          | 12     | 5           | 18                | 1            | 4            | 40    | 25.0%              |
| BURLINGTON      | 12     | 4           | 8                 | 0            | 9            | 33    | -25.0%             |
| CAMDEN          | 14     | 4           | 24                | 0            | 4            | 46    | 0.0%               |
| CAPE MAY        | 5      | 0           | 3                 | 1            | 4            | 13    | 30.0%              |
| CUMBERLAND      | 12     | 1           | 4                 | 0            | 3            | 20    | 5.3%               |
| ESSEX           | 8      | 2           | 19                | 0            | 7            | 36    | -20.0%             |
| GLOUCESTER      | 22     | 7           | 10                | 1            | 2            | 42    | 10.5%              |
| HUDSON          | 5      | 4           | 5                 | 2            | 3            | 19    | -13.6%             |
| HUNTERDON       | 3      | 1           | 1                 | 0            | 1            | 6     | 100.0%             |
| MERCER          | 8      | 2           | 9                 | 1            | 1            | 21    | -27.6%             |
| MIDDLESEX       | 23     | 10          | 9                 | 2            | 4            | 48    | -4.0%              |
| MONMOUTH        | 12     | 3           | 11                | 1            | 9            | 36    | 24.1%              |
| MORRIS          | 11     | 9           | 7                 | 0            | 3            | 30    | 7.1%               |
| OCEAN           | 21     | 5           | 10                | 0            | 4            | 40    | 2.6%               |
| PASSAIC         | 11     | 2           | 10                | 2            | 6            | 31    | 47.6%              |
| SALEM           | 5      | 1           | 1                 | 0            | 2            | 9     | 0.0%               |
| SOMERSET        | 5      | 2           | 4                 | 0            | 0            | 11    | -52.2%             |
| SUSSEX          | 9      | 2           | 1                 | 0            | 2            | 14    | 16.7%              |
| UNION           | 6      | 5           | 11                | 0            | 1            | 23    | -14.8%             |
| WARREN          | 2      | 1           | 2                 | 0            | 5            | 10    | 42.9%              |
| NJ STATE TOTALS | 213    | 74          | 179               | 11           | 83           | 560   |                    |

For Driver Actions, *Driver Inattention* is cited as the State's largest contributing circumstance in crashes annually and was a cited reason in 25.6 percent of all vehicles involved in 2018, down from 26.3 percent in 2017. However, DI is cited in 49.6 percent of all crash events in 2018, down from 51.2 percent in 2017.

*Driver Inattention* can consist of several 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, 2014 – 2018 |         |         |         |         |         |         |  |  |
|---|---------|---------|---------|---------|---------|---------|--|--|
| DRIVER CONTRIBUTING ACTION                              | 2014    | 2015    | 2016    | 2017    | 2018    | TOTAL   |  |  |
| Driver Inattention                                      | 151,034 | 142,107 | 147,572 | 138,618 | 137,024 | 716,355 |  |  |
| Following Too Closely                                   | 30,783  | 32,518  | 37,402  | 38,299  | 38,842  | 177,844 |  |  |
| Failed to Yield Right of Way to Vehicle/Pedestrian      | 21,522  | 21,851  | 24,027  | 24,177  | 24,895  | 116,472 |  |  |
| Unsafe Speed  | 17,549  | 17,610  | 15,884  | 16,126  | 16,931  | 84,100  |  |  |
| Improper Lane Change                                    | 12,568  | 14,026  | 15,589  | 16,572  | 17,023  | 75,778  |  |  |
| Backing Unsafely  | 19,572  | 10,360  | 10,853  | 10,667  | 10,807  | 62,259  |  |  |
| Improper Turning  | 8,914   | 8,396   | 9,353   | 9,205   | 9,315   | 45,183  |  |  |
| Other Driver Action                                     | 10,440  | 9,839   | 9,730   | 7,833   | 7,146   | 44,988  |  |  |
| Improper Passing  | 5,817   | 5,913   | 6,525   | 6,584   | 6,699   | 31,538  |  |  |
| Failed to Obey Traffic Control Device                   | 8,793   | 9,165   | 8,843   | 0       | 0       | 26,801  |  |  |
| Failed to Obey Traffic Signal                           | 0       | 0       | 0       | 6,624   | 6,297   | 12,921  |  |  |
| Improper Parking  | 3,458   | 2,014   | 2,187   | 2,085   | 2,152   | 11,896  |  |  |
| Failure To Keep Right                                   | 2,380   | 2,189   | 2,354   | 2,185   | 2,231   | 11,339  |  |  |
| Failed to Obey Stop Sign                                | 0       | 0       | 0       | 4,102   | 4,578   | 8,680   |  |  |
| Other Distraction Inside Vehicle                        | 0       | 0       | 0       | 2,502   | 2,381   | 4,883   |  |  |
| Other Distraction Outside Vehicle                       | 0       | 0       | 0       | 1,565   | 1,492   | 3,057   |  |  |
| Wrong Way   | 612     | 581     | 605     | 619     | 602     | 3,019   |  |  |
| Distracted - Hand Held Electronic Device                | 0       | 0       | 0       | 1,148   | 1,008   | 2,156   |  |  |
| Improper Use/Failed to Use Turn Signal                  | 448     | 427     | 444     | 444     | 380     | 2,143   |  |  |
| Distracted by Passenger                                 | 0       | 0       | 0       | 404     | 356     | 760     |  |  |
| Distracted - Hands Free Electronic Device               | 0       | 0       | 0       | 365     | 375     | 740     |  |  |
| Improper Use/No Lights                                  | 142     | 121     | 140     | 122     | 134     | 659     |  |  |

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, 2014 - 2018 |         |         |         |         |         |           |  |  |
|---|---------|---------|---------|---------|---------|-----------|--|--|
| CRASH RECORD TOTALS                     | 2014    | 2015    | 2016    | 2017    | 2018    | TOTAL     |  |  |
| TOTAL CRASH RECORDS                     | 289,873 | 271,445 | 279,874 | 277,664 | 282,590 | 1,401,446 |  |  |
| TOTAL VEHICLES INVOLVED IN CRASHES      | 546,459 | 512,773 | 532,054 | 527,040 | 535,266 | 2,653,592 |  |  |
| TOTAL DRIVERS INVOLVED IN CRASHES       | 546,459 | 512,773 | 532,054 | 527,040 | 535,266 | 2,653,592 |  |  |
| TOTAL OCCUPANTS INVOLVED IN CRASHES     | 643,233 | 624,252 | 642,800 | 639,602 | 645,010 | 3,194,897 |  |  |
| TOTAL PEDESTRIANS INVOLVED IN CRASHES   | 7,775   | 7,303   | 7,334   | 7,255   | 7,082   | 36,749    |  |  |

| MOTOR VEHICLE CRASH TRENDS, 2014 – 2018 (CONTINUED) |         |         |         |         |         |         |  |
|---|---------|---------|---------|---------|---------|---------|--|
| PROGRAM AREA  | 2014    | 2015    | 2016    | 2017    | 2018    | TOTAL   |  |
| Distracted Driving Crashes                          | 151,034 | 142,107 | 147,572 | 142,036 | 140,227 | 722,976 |  |
| Single Vehicle Crashes                              | 54,246  | 51,844  | 50,588  | 50,549  | 52,268  | 259,495 |  |
| Older Driver Involved Crashes                       | 47,779  | 43,729  | 46,265  | 46,614  | 48,619  | 233,006 |  |
| Young Driver Involved Crashes                       | 36,040  | 35,942  | 36,352  | 34,501  | 34,338  | 177,173 |  |
| Curve Related Crashes                               | 26,703  | 26,004  | 25,542  | 26,261  | 26,463  | 130,973 |  |
| Run Off Road Crashes                                | 22,468  | 23,465  | 21,837  | 21,768  | 22,109  | 111,647 |  |
| Unsafe Speed Involved Crashes                       | 17,549  | 17,610  | 15,884  | 16,133  | 16,931  | 84,107  |  |
| Live Animal Crashes                                 | 10,274  | 10,114  | 11,270  | 10,883  | 11,306  | 53,847  |  |
| Alcohol Involved Crashes                            | 7,595   | 7,101   | 7,007   | 7,215   | 7,061   | 35,979  |  |
| Head-On Collision Crashes                           | 7,475   | 6,976   | 6,984   | 6,620   | 6,838   | 34,893  |  |
| Work Zone Related Crashes                           | 6,594   | 5,221   | 4,454   | 4,054   | 4,091   | 24,414  |  |
| Pedestrian Involved Crashes                         | 5,214   | 4,709   | 4,840   | 4,997   | 4,393   | 24,153  |  |
| Unrestrained Crashes                                | 4,376   | 3,741   | 3,661   | 3,474   | 3,495   | 18,747  |  |
| Drowsy Driving Crashes                              | 2,740   | 2,753   | 2,834   | 3,382   | 3,101   | 14,810  |  |
| Motorcycle Involved Crashes                         | 2,193   | 2,300   | 2,188   | 2,186   | 1,989   | 10,856  |  |
| Bicyclists Involved Crashes                         | 1,863   | 1,959   | 1,923   | 1,931   | 1,718   | 9,394   |  |
| Drugged Driving Crashes                             | 988     | 1,119   | 1,129   | 1,610   | 1,668   | 6,514   |  |

# **Countermeasure Strategies in Program Area**

#### **Countermeasure Strategy**

Community Programs and Outreach

#### Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** See other program areas. This program area is encompassed in all others.

#### Strategies in 2020 Strategic Highway Safety Plan

Initiate a study to evaluate the efficacy of various driver behavior modification approaches.

Provide recommendations to enhance of expand the "Street Smart NJ" program to additional municipalities in the state.

Provide recommendations for a program to perform quick response Road Safety Audits immediately following pedestrian and bicycle crashes.

Review rear occupant seat belt compliance education and enforcement efforts and make recommendations for improvements.

Create a safety culture in NJ by reviewing existing educational programs led by government, schools, insurance industry, health industry, and non-profit advocacy organizations. Make recommendations to strengthen partnering and messaging to reach target audiences.

Implement or improve education/training for workers on the roads and drivers travelling through school zones or work zones.

#### **Associated Performance Measures**

| Fiscal Year | Performance measure name              | Target End Year | <b>Target Period</b> | Target Value |
|-------------|---------------------------------------|-----------------|----------------------|--------------|
| 2021        | Number of Counties Supported in CTSPs | 2021            | Annual               | 21.00        |

# Countermeasure Strategy: Community Programs and Outreach

#### Effectiveness of Countermeasure

Community Traffic Safety Programs (CTSPs) are local, county, or regional groups of highway safety advocates who are committed to solving traffic safety problems through a comprehensive, multi-jurisdictional, multi-disciplinary approach. Members include city, county, state and occasionally federal agencies, as well as private industry representatives and local citizens. The boundaries of the project area are up to the individuals comprising the team, and can be a city, a county, a region consisting of multiple counties, or any other jurisdictional arrangement.

The individuals and organizations involved in these projects work together toward a common goal of improving traffic safety in their community by utilizing the 3 "E" disciplines that work in highway safety, which are Engineering, Enforcement, and Education (public information). By bringing together interested citizens and other traffic safety advocates within their communities, the CTSPs help to solve local traffic safety problems related to the driver, other roadway users, and the roadway. A common goal of each Community Traffic Safety Program is to reduce the number and severity of traffic crashes within their community.

The effectiveness of the Seminole County Florida Community Traffic Safety Team (*Best Practices, Florida Community Safety Teams*) effort was 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 task force brought 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 HTS. CTSP's serve as "satellite offices" for HTS, in a sense, as they help disseminate important traffic safety educational materials and deliver grass roots programming.

# Linkage between Problem Identification and Performance Targets

An analysis identifying those counties and regions 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, driver distraction, child passenger safety, occupant protection and pedestrian safety. Community Traffic Safety Programs will also be considered in jurisdictions where there is strong local support and desire for change on the part of the elected and traffic safety communities.

Project Name: COMMUNITY TRAFFIC SAFETY PROGRAMS AND OTHER STATEWIDE INITIATIVES

Sub-Recipients: DHTS, COUNTY AGENCIES, TMA'S AND NON-PROFIT ORGANIZATIONS

Total Project Amount: \$2,400,000

**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, Burlington, Camden, Essex, Gloucester, Hudson, Middlesex, Morris (with Sussex and Warren), Ocean, Monmouth, Somerset (with Hunterdon), and Union. 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 costs, program related expenses, printing of educational materials, enforcement activities, Project Coordinator expenses, and public outreach initiatives.

The Brain Injury Alliance of New Jersey (BIANJ) will advance important traffic safety messages through the use of community outreach, safety coalitions, media and technology. Education is delivered through in person presentations, participation in community events and conferences, and via website and multiple social media platforms, including Facebook, Twitter and Instagram. Its programs will target pedestrian, bike, motorcycle, teens and all aspects of driving safety in regions of the State that have been identified as having high crash and fatality rates. BIANJ will continue its community outreach by providing a minimum of 150 transportation safety related traveling workshops focused on helmet use, pedestrian safety, and programs for school age children, parents, seniors, other at-risk populations and the general public. These presentations are also available in Spanish. In an effort to continue to engage new drivers in safe driving practices, BIANJ will continue its work with high schools across the State as part of the U Got Brains Champion Schools program. BIANJ will host a statewide Pedestrian/Bicycle Safety Coalition and Motorcycle Safety Coalition, to facilitate a fresh look at these stubborn issues. In the area of motorcycle safety, BIANJ will plan for and host annual statewide trainings for Motorcycle Rider Coaches and oversee the MSF Quality Assurance Specialist Program for Rider Coaches. BIANJ's transportation safety website, Jersey Drives.com, will be updated in an engaging and informative format to serve as a resource for drivers, parents and educators. The Alliance will also continue to lead the state effort to promote NHTSA's priorities and messaging through a multimedia campaign that includes billboards, radio PSAs, advertising on bus shelters and at high profile events across the state, and through social media.

New Jersey'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 through promotion of the "Street Smart NJ" program in local communities while bicycle safety for recreational riders as well as bicycle commuters will be covered with grass roots programming emphasizing techniques for safely sharing the road. Funds will also be used to raise awareness of the rules of the road. Laws pertaining to occupant protection, ice and snow removal, pedestrian safety, and the use of handheld devices will also 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, motorcycle safety, and general awareness of highway safety. AAA will carry out paid advertising relating to several priority traffic safety programs via signage on commuter buses and at major highway rest areas. Materials will also be printed for distribution. AAA will deliver grass roots bicycle safety programs focusing on helmet use and safe riding practices. *Dare to Prepare* teen driving seminars will be offered for parents and teens at high schools, PTA/PTO meetings, community gatherings, and health fairs. Senior drivers will be reached through the *Car-Fit* program.

Safe Kids New Jersey (through the Central Jersey Family Health Consortium) 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 occupant protection and vehicle safety to children, parents and other caregivers, will be continued. Safe Kids New Jersey will also support the child passenger safety certification process including recertification and Senior Checker monitoring. 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 incidents, Safe Kids New Jersey will incorporate this topic in all of the information sessions, publications and outreach activities.

New Jersey Transit will receive funding to promote priority traffic safety messages statewide through its rail and bus system and to conduct grade crossing enforcement at targeted high-risk locations to reduce instances of train/vehicle or train/pedestrian collisions.

Funds within this task (through the DHTS Training Grant) will be used for in-house staff training and travel, as well as the DHTS Traffic Safety Symposium to be held in the fall of 2020 (originally scheduled for the spring of 2020). The event will offer educational and training tracks that will focus on the priority program area of Pedestrian Safety. A separate, one day Child Passenger Safety Technical Update Conference for New Jersey CPS Technicians will be held jointly with the Symposium. DHTS also plans to offer (through the DHTS Training Grant) ongoing Regional Grantee Workshops in FY2021, as needed, to train new and existing grantees in project development, application submittal, and reporting.

The "Community Traffic Safety Programs" area of the FY2021 HSP encompasses several emphasis areas from the 2020 Strategic Highway Safety Plan, including Driver Behavior, Other Vulnerable Road Users, and Pedestrians and Bicyclists. DHTS will make it a priority to assist in implementing the strategies of the SHSP in which it can play a role, such as furthering efforts to enforce and educate rear seat belt use, enhance child passenger safety activities, and develop a performance-based implementation plan for the "Street Smart NJ" program.

Within this planned activity, the approximate breakdown for FY2021 funding will be:

\$1.25 million to County CTSPs. \$900,000 to non-profit CTSP grants (AAA, BIANJ, TransOptions/TMA's, Safe Kids).

Funding Source: **SECTION 402** Local Benefit: \$2,300,000

#### PUBLIC INFORMATION AND PAID MEDIA

#### General Overview

Public information is the cornerstone of our work in highway traffic 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.

| TRAFFIC RELATED FATALITIES BY RACE AND HISAPANIC ORIGIN, 2018 |              |          |         |       |  |  |
|---|--------------|----------|---------|-------|--|--|
|   | NON-HISPANIC | HISPANIC | UNKNOWN | TOTAL |  |  |
| WHITE   | 311          | 89       | 1       | 401   |  |  |
| BLACK   | 106          | 5        | 0       | 111   |  |  |
| AMERICAN INDIAN   | 0            | 0        | 0       | 0     |  |  |
| ASIAN   | 33           | 0        | 0       | 33    |  |  |
| PACIFIC ISLANDER  | 0            | 0        | 0       | 0     |  |  |
| MIXED RACE  | 2            | 3        | 0       | 5     |  |  |
| ALL OTHER RACES   | 0            | 6        | 0       | 6     |  |  |
| UNKNOWN   | 0            | 3        | 5       | 8     |  |  |
| TOTAL   | 452          | 106      | 6       | 564   |  |  |

For FY2021, public information/paid media efforts in general will follow the NHTSA Communications calendar and timeline. In addition to that, two major awareness efforts are planned: Fall 2020 Graduated Driver Licensing; Spring 2021 Distracted Driving.

# **Countermeasure Strategies in Program Area**

| Countermeasure Strategy |
|-------------------------|
| Public Outreach         |

#### Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** See other program areas. This program area is encompassed in all others.

# Strategies in 2020 Strategic Highway Safety Plan

Implement educational campaigns to improve mature driver, younger driver, motorcyclist, and work zone workers safety.

Review current educational campaigns and make recommendations to improve quality and consistency across the state.

Initiate a study to evaluate the efficacy of various driver behavior modification approaches.

Review rear occupant seat belt compliance education and enforcement efforts and make recommendations for improvements.

Create a safety culture in NJ by reviewing existing educational programs led by government, schools, insurance industry, health industry, and non-profit advocacy organizations. Make recommendations to strengthen partnering and messaging to reach target audiences.

#### **Associated Performance Measures**

| Fiscal Year | Performance measure name           | Target End Year | <b>Target Period</b> | Target Value |
|-------------|------------------------------------|-----------------|----------------------|--------------|
| 2021        | Number of Social Media Engagements | 2021            | Annual               | 200.00       |

# **Countermeasure Strategy: Public Outreach**

# Effectiveness of Countermeasure

Public information/education projects should be designed and executed to support specific enforcement activities. In the High Visibility Enforcement model (HVE), the enforcement and public information/education portions of a project are planned and coordinated at the same time, so they are mutually supportive. By conducting enforcement and public information/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 same beneficial effect. Likewise, ongoing and sustained public information activities help to reinforce important messages relating to the priority traffic safety issues facing the state.

#### 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 essential that public information and education be provided in support of major traffic safety law enforcement programs and on an ongoing basis throughout the year to promote and reinforce major safety issues.

# 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, distracted riving, and seat belt use as well as other traffic safety related areas such as pedestrian safety and the state's teen driver laws. Outreach efforts will include a special emphasis on the Hispanic community. According to U.S. Census Bureau population estimates as of 2018, approximately 1.8 million Hispanics reside in the State which represents 20 percent of the population in New Jersey. In 2018, minority populations made up approximately 45 percent of all motor vehicle fatalities. In addition, Black and Hispanic populations represent nearly 40 of all pedestrian fatalities and 44 percent of all bicyclist fatalities. The Hispanic community in the state is at a distinct disadvantage in terms of traffic safety knowledge due to the language barrier. Therefore, HTS paid media activities will include a Spanish-language component in terms of any paid or earned advertising carried out or materials produced.

Project Name: PUBLIC INFORMATION/PAID MEDIA

Sub-Recipients: DHTS

Total Project Amount: \$400,000

**Project Description:** 

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, impaired driving and motorcycle safety. Funds will be used to print the various publications provided by 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. Spanish language materials will be printed when feasible and appropriate.

DHTS will continue its robust social media presence as another critical tool to further the mission of the division and impart important traffic safety messages out to all segments of the community. Twitter, Facebook and Instagram pages will be used in such a way that the public will be engaged and informed about the division's campaigns and programs.

The major traffic safety enforcement mobilizations in FY2021 will be augmented by targeted paid and earned media support, as per the proven High Visibility Enforcement model (HVE). Of special note, it is anticipated that a major paid media campaign will be carried out statewide in the spring of 2021 in support of the national distracted driving crackdown, *UDrive. UText. UPay*.

A number of initiatives are planned for FY2021 relating to anniversaries in New Jersey's Graduated Driver Licensing laws. Some of these special events, which include the release of study reports, press events, teen video contests, and a paid advertising push, were postponed from the spring of 2020 and will be instead carried out in FY2021.

In FY2021 DHTS will look to renew its contract with the *FDU-Public Mind Poll*, after a hiatus of several years. Through this contract the polling institute will conduct an attitudes and awareness survey to gage the current level of awareness of New Jersey motorists of traffic safety issues in the state and to see what are the main traffic safety concerns being felt by the motoring public.

The "Public Information and Paid Media" area of the FY2021 HSP encompasses several emphasis areas from the 2020 Strategic Highway Safety Plan, including Driver Behavior and Other Vulnerable Road Users. DHTS will make it a priority to assist in implementing the strategies of the SHSP in which it can play a role, such as making recommendations for new media campaigns related to aggressive driving and assessing best practices for educating teen drivers and seat belt use.

Funding Source: SECTION 402 Local Benefit: 0

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#### OTHER VULNERABLE ROAD USERS

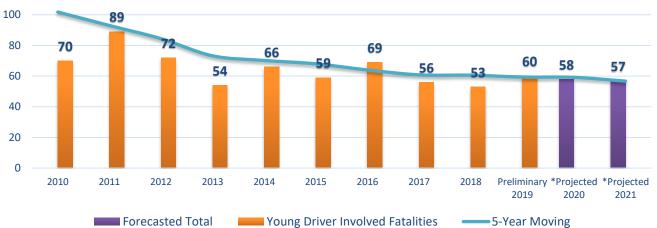
### (YOUNGER DRIVERS, OLDER DRIVERS, MOTORCYCLISTS, WORK ZONE SAFETY)

# 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 (2009-2018), there were 648 total fatalities in crashes that involved a younger driver behind the wheel. Preliminary 2019 figures show younger drivers were involved in 10.7 percent of total motor vehicle fatalities (60 out of 560), up from 9.4 percent in 2018.

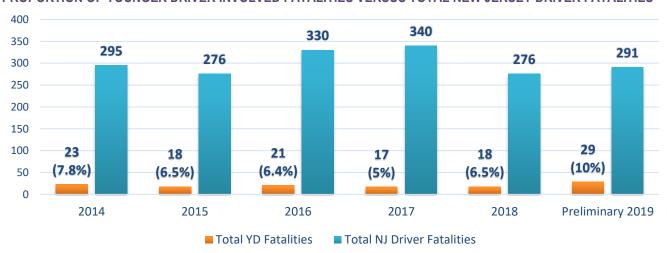
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TOTAL FATALITIES IN CRASHES INVOLVING YOUNGER DRIVERS, ANNUAL AND 5-YEAR MOVING AVERAGE



A total of 29 drivers between the ages of 16-20 died on the State's roadways in 2019 a 61 percent increase from 2018. Younger driver fatalities in 2019 accounted for 10 percent of total drivers killed, up from 6.5 percent in 2018 and up from 5 percent in 2017. 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 INVOLVED FATALITIES VERSUS TOTAL NEW JERSEY DRIVER FATALITIES



Despite an increase in younger drivers involved in fatal crashes in 2019, they were involved in 12.2 percent of all crashes statewide, down from 12.4 percent in 2017. Compared to all drivers involved in crashes, younger drivers represented 6.8 percent of all drivers involved, down from 6.9 percent in 2017.

| YOUNG DRIVER CRA                         | ASHES VEF | RSUS ALL ( | CRASHES I | BY YEAR, 2 | 2012 – 2018 |         |         |
|--|-----------|------------|-----------|------------|-------------|---------|---------|
|  | 2012      | 2013       | 2014      | 2015       | 2016        | 2017    | 2018    |
| ALL CRASHES                              | 284,064   | 289,304    | 289,873   | 271,445    | 279,874     | 277,664 | 282,590 |
| 16-20 YO DRIVER INVOLVED CRASHES         | 38,951    | 37,959     | 36,040    | 35,942     | 36,352      | 34,501  | 34,338  |
| YOUNG DRIVER CRASHES VS ALL CRASHES*     | 13.7%     | 13.1%      | 12.4%     | 13.2%      | 13.0%       | 12.4%   | 12.2%   |
| DRIVERS INVOLVED IN ALL CRASHES          | 535,626   | 545,659    | 546,459   | 512,773    | 532,054     | 527,040 | 535,266 |
| 16-20 YO DRIVERS INVOLVED IN CRASHES     | 41,316    | 40,173     | 38,019    | 37,986     | 38,353      | 36,363  | 36,203  |
| YOUNG DRIVERS VS ALL DRIVERS IN CRASHES* | 7.7%      | 7.4%       | 7.0%      | 7.4%       | 7.2%        | 6.9%    | 6.8%    |

<sup>\*</sup> Excludes undefined driver age.

Between 2014 and 2018, there were a total of 505,679 contributing circumstances cited for young drivers, the most common factor was *Driver Inattention* (104,024 or 20.6%), followed by Following Too Closely (30,838 or 6.1%).

| TOP 10 CONTRIBUTING CIRCUM  | TOP 10 CONTRIBUTING CIRCUMSTANCES IN CRASHES INVOLVING YOUNG DRIVERS, 2014 - 2018 |        |        |        |        |         |  |  |  |  |  |  |  |
|---|---|--------|--------|--------|--------|---------|--|--|--|--|--|--|--|
| CONTRIBUTING CIRCUMSTANCE   | 2014  | 2015   | 2016   | 2017   | 2018   | TOTAL   |  |  |  |  |  |  |  |
| Driver Inattention  | 21,556  | 21,557 | 22,005 | 19,666 | 19,240 | 104,024 |  |  |  |  |  |  |  |
| Following Too Closely   | 5,451   | 5,776  | 6,574  | 6,416  | 6,621  | 30,838  |  |  |  |  |  |  |  |
| Failed to Yield Right of Way to Vehicle/Pedestrian                  | 4,484   | 4,647  | 4,927  | 4,774  | 4,908  | 23,740  |  |  |  |  |  |  |  |
| Unsafe Speed  | 3,154   | 3,258  | 2,998  | 2,938  | 2,790  | 15,138  |  |  |  |  |  |  |  |
| Improper Lane Change  | 1,714   | 1,909  | 1,977  | 2,023  | 1,964  | 9,200   |  |  |  |  |  |  |  |
| Failed to Obey Traffic Control Device (Traffic Signal or Stop Sign) | 1,522   | 1,664  | 1,900  | 1,889  | 1,871  | 8,846   |  |  |  |  |  |  |  |
| Road Surface Condition  | 1,955   | 1,680  | 1,370  | 1,457  | 1,525  | 7,987   |  |  |  |  |  |  |  |
| Improper Turning  | 1,465   | 1,395  | 1,581  | 1,410  | 1,428  | 7,279   |  |  |  |  |  |  |  |
| Backing Unsafely  | 2,009   | 1,126  | 1,159  | 1,136  | 138    | 5,568   |  |  |  |  |  |  |  |
| Improper Passing  | 775   | 800    | 760    | 856    | 833    | 4,024   |  |  |  |  |  |  |  |

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 2014-2018, 8 percent of crashes involving a young driver also involved one or more drivers being cited for unsafe speed, 10 percent also involved an older driver and over 56 percent involved driver inattention.

| YOUNGER DRIVER INVOLVEMENT IN CRASHES BY PERFORMANCE AREA, 2014 – 2018 |        |        |        |        |        |         |          |                  |  |  |  |  |
|--|--------|--------|--------|--------|--------|---------|----------|------------------|--|--|--|--|
| YOUNG DRIVERS AND  | 2014   | 2015   | 2016   | 2017   | 2018   | TOTAL   | 5 YR AVG | % OF 5 YR<br>TOT |  |  |  |  |
| ALCOHOL INVOLVEMENT  | 526    | 504    | 467    | 396    | 333    | 2,226   | 445      | 1.26%            |  |  |  |  |
| DRUG INVOLVEMENT   | 87     | 91     | 94     | 103    | 99     | 474     | 95       | 0.27%            |  |  |  |  |
| DISTRACTED DRIVING   | 20,405 | 20,313 | 20,818 | 19,094 | 18,648 | 99,278  | 19,856   | 56.03%           |  |  |  |  |
| UNSAFE SPEED   | 3,034  | 3,137  | 2,911  | 2,841  | 2,682  | 14,605  | 2,921    | 8.24%            |  |  |  |  |
| OLDER DRIVERS  | 3,307  | 3,401  | 3,441  | 3,504  | 3,561  | 17,214  | 3,443    | 9.72%            |  |  |  |  |
| PEDESTRIANS  | 257    | 201    | 186    | 229    | 164    | 1,037   | 207      | 0.59%            |  |  |  |  |
| UNRESTRAINED PASSENGERS  | 540    | 434    | 452    | 365    | 357    | 2,148   | 430      | 1.21%            |  |  |  |  |
| TOTAL YOUNG DRIVER CRASHES   | 36,040 | 35,942 | 36,352 | 34,501 | 34,338 | 177,173 | 35,435   | 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 45 percent. Drivers between the ages of 16 and 20 accounted for 6.8 percent of all drivers involved in crashes in 2018.

| %            | % OF YOUNG DRIVERS INVOLVED IN CRASHES BY AGE AND GENDER, 2014 - 2018 |       |        |         |         |  |  |  |  |  |  |  |
|--------------|---|-------|--------|---------|---------|--|--|--|--|--|--|--|
| AGE          | % OF 16-20 AGE GROUP  | MALE  | FEMALE | UNKNOWN | TOTAL   |  |  |  |  |  |  |  |
| 16 YEARS OLD | 0.7%  | 0.4%  | 0.4%   | 0.0%    | 1,385   |  |  |  |  |  |  |  |
| 17 YEARS OLD | 14.0%   | 7.2%  | 6.8%   | 0.0%    | 26,195  |  |  |  |  |  |  |  |
| 18 YEARS OLD | 28.4%   | 15.2% | 13.1%  | 0.1%    | 53,071  |  |  |  |  |  |  |  |
| 19 YEARS OLD | 28.5%   | 15.7% | 12.6%  | 0.1%    | 53,188  |  |  |  |  |  |  |  |
| 20 YEARS OLD | 28.4%   | 15.7% | 12.6%  | 0.1%    | 53,085  |  |  |  |  |  |  |  |
| TOTAL        | 100.0%  | 54.2% | 45.4%  | 0.3%    | 186,924 |  |  |  |  |  |  |  |

# Younger Drivers • Analysis of Occurrence

Between 2014 and 2018, about half of all crashes involving younger drivers occur between Noon and 5:59PM (49%). December had the highest volume of crashes accounting for 10 percent. The occurrence of crashes involving a younger driver helps decision makers in addressing the specific concerns that are facing inexperienced users of the roadways.

| YOUNGER DRIVER INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018 |
|---|
|---|

|                      | JAN          | FEB          | MAR          | APR          | MAY          | JUN          | JUL          | AUG          | SEPT         | OCT          | NOV          | DEC           | TOT     | AL   |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------|------|
| Midnight to 2:59AM   | 307          | 305          | 321          | 319          | 476          | 487          | 570          | 483          | 378          | 470          | 506          | 514           | 5,136   | 3%   |
| 3:00AM to<br>5:59AM  | 136          | 119          | 149          | 132          | 154          | 208          | 208          | 210          | 180          | 230          | 219          | 241           | 2,186   | 1%   |
| 6:00AM to<br>8:59AM  | 1,675        | 1,612        | 1,404        | 1,433        | 1,593        | 1,579        | 1,218        | 1,092        | 2,053        | 2,143        | 1,832        | 1,634         | 19,268  | 11%  |
| 9:00AM to<br>11:59AM | 1,466        | 1,263        | 1,326        | 1,317        | 1,643        | 1,967        | 2,183        | 2,067        | 1,743        | 1,958        | 1,833        | 1,918         | 20,684  | 12%  |
| Noon to<br>2:59PM    | 2,504        | 2,126        | 2,616        | 2,432        | 3,276        | 3,586        | 3,374        | 3,292        | 2,957        | 3,167        | 3,576        | 3,509         | 36,415  | 21%  |
| 3:00PM to<br>5:59PM  | 3,040        | 2,715        | 3,534        | 3,514        | 4,760        | 4,825        | 4,547        | 4,197        | 3,984        | 4,288        | 4,418        | 4,948         | 48,770  | 28%  |
| 6:00PM to<br>8:59PM  | 1,895        | 1,897        | 2,022        | 2,065        | 2,472        | 2,566        | 2,601        | 2,500        | 2,331        | 2,951        | 2,681        | 3,092         | 29,073  | 16%  |
| 9:00PM to<br>11:59PM | 986          | 930          | 1,009        | 1,032        | 1,405        | 1,566        | 1,812        | 1,514        | 1,141        | 1,382        | 1,352        | 1,512         | 15,641  | 9%   |
| TOTAL                | 12,009<br>7% | 10,967<br>6% | 12,381<br>7% | 12,244<br>7% | 15,779<br>9% | 16,784<br>9% | 16,513<br>9% | 15,355<br>9% | 14,767<br>8% | 16,589<br>9% | 16,417<br>9% | 17,368<br>10% | 177,173 | 100% |

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 and recently celebrated its 10-year anniversary. 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.

| YOUN                      | KYLEIGH'S LAW EFFECTS<br>YOUNG DRIVER CRASHES BY YEAR<br>AND TIME PERIOD, 2014 - 2018 |        |        |  |  |  |  |  |  |  |  |
|---------------------------|---|--------|--------|--|--|--|--|--|--|--|--|
| YEAR                      | YEAR 11:01PM - 4:59AM 5AM - 11PM TOTAL  |        |        |  |  |  |  |  |  |  |  |
| 2014                      | 2,146   | 33,894 | 36,040 |  |  |  |  |  |  |  |  |
| 2015                      | 2,118   | 33,824 | 35,942 |  |  |  |  |  |  |  |  |
| 2016                      | 2,150   | 34,202 | 36,352 |  |  |  |  |  |  |  |  |
| 2017                      | 1,917   | 32,584 | 34,501 |  |  |  |  |  |  |  |  |
| 2018                      | 1,789   | 32,549 | 34,338 |  |  |  |  |  |  |  |  |
| 2014 - 2018<br>Difference | -16.64%   | -3.97% | -4.72% |  |  |  |  |  |  |  |  |

There has been nearly a 5 percent reduction in crashes involving younger drivers from 2014 (36,040) to 2018 (34,338). Since 2010 when Kyleigh's Law became effective, there has been a 32 percent reduction in young driver involved crashes. Crashes during the permissible driving hours for a young driver possessing a probationary driver license (5am – 11pm) declined 4 percent from 2014 to 2018. More importantly, crashes during the restricted driving hours for a young driver possessing a probationary driver license (11:01pm – 4:59am) fell nearly 17 percent over the same time period. Not only are the number of crashes involving young drivers declining, but the crashes taking place during the restricted time-period are declining exponentially.

# Younger Drivers • Analysis of Location

Over the past 5 years (2014-2018), Hamilton Township (Mercer) had the largest decrease of crashes involving younger drivers with a 25.8 percent reduction, followed by Paramus Borough with 25.1 percent. Lakewood Township stands out as having the largest increase in the number of younger drivers involved crashes with a 23 percent total increase from 2014 to 2018, which included three consecutive years of increases.

| TOP 15                        | TOP 15 MUNICIPALITIES WITH CRASHES INVOLVING YOUNG DRIVERS, 2014 - 2018 |        |        |        |        |         |                          |                     |  |  |  |  |  |
|-------------------------------|---|--------|--------|--------|--------|---------|--------------------------|---------------------|--|--|--|--|--|
| MUNICIPALITY                  | 2014  | 2015   | 2016   | 2017   | 2018   | TOTAL   | 2014-2018<br>%<br>CHANGE | % OF STATE<br>TOTAL |  |  |  |  |  |
| Toms River Township           | 849   | 765    | 676    | 564    | 649    | 3,503   | -23.6%                   | 2.0%                |  |  |  |  |  |
| Woodbridge Township           | 661   | 651    | 642    | 603    | 664    | 3,221   | 0.5%                     | 1.8%                |  |  |  |  |  |
| Edison Township               | 637   | 658    | 596    | 554    | 606    | 3,051   | -4.9%                    | 1.7%                |  |  |  |  |  |
| Paterson City                 | 535   | 572    | 654    | 653    | 588    | 3,002   | 9.9%                     | 1.7%                |  |  |  |  |  |
| Newark City                   | 572   | 556    | 585    | 651    | 624    | 2,988   | 9.1%                     | 1.7%                |  |  |  |  |  |
| Clifton City                  | 533   | 493    | 504    | 515    | 501    | 2,546   | -6.0%                    | 1.4%                |  |  |  |  |  |
| Paramus Borough               | 557   | 533    | 534    | 488    | 417    | 2,529   | -25.1%                   | 1.4%                |  |  |  |  |  |
| Hamilton Township (Mercer Co) | 507   | 470    | 466    | 415    | 376    | 2,234   | -25.8%                   | 1.3%                |  |  |  |  |  |
| Lakewood Township             | 405   | 376    | 426    | 457    | 498    | 2,162   | 23.0%                    | 1.2%                |  |  |  |  |  |
| Jersey City                   | 364   | 439    | 494    | 418    | 408    | 2,123   | 12.1%                    | 1.2%                |  |  |  |  |  |
| Cherry Hill Township          | 440   | 381    | 462    | 390    | 385    | 2,058   | -12.5%                   | 1.2%                |  |  |  |  |  |
| Wayne Township                | 411   | 385    | 423    | 425    | 381    | 2,025   | -7.3%                    | 1.1%                |  |  |  |  |  |
| Union Township (Union Co)     | 381   | 397    | 417    | 433    | 386    | 2,014   | 1.3%                     | 1.1%                |  |  |  |  |  |
| Elizabeth City                | 385   | 405    | 457    | 381    | 376    | 2,004   | -2.3%                    | 1.1%                |  |  |  |  |  |
| Bridgewater Township          | 397   | 348    | 341    | 339    | 328    | 1,753   | -17.4%                   | 1.0%                |  |  |  |  |  |
| NJ TOTAL                      | 36,040  | 35,942 | 36,352 | 34,501 | 34,338 | 177,173 | -4.7%                    | 100.0%              |  |  |  |  |  |

#### Older Drivers • General Overview

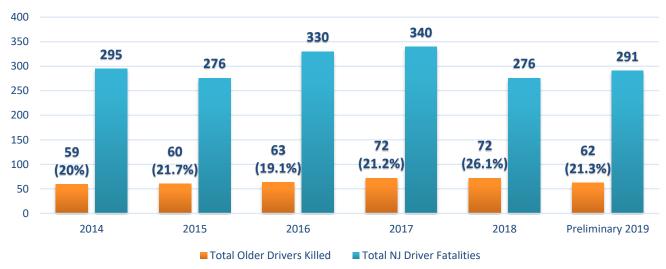
An older driver is defined as an operator of a motor vehicle or motorcycle who is 65 years of age and older. During the last ten years (2010–2019), there were 659 older driver (65+) fatalities, down from 671 between 2009-2018. In 2019, 62 drivers age 65 or older were killed compared to 72 in 2018.

## OLDER DRIVER FATALITIES, ANNUAL AND 5-YEAR MOVING AVERAGE



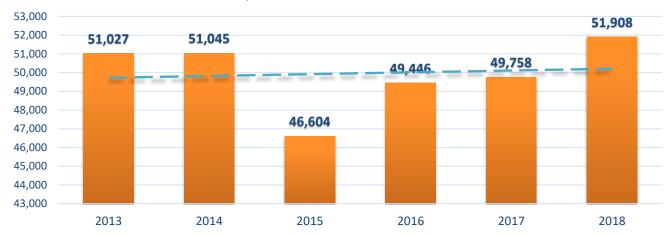
The population of New Jersey increases every year as does the number of residents over the age of 65. Our older drivers make up a large portion of our overall licensed drivers and can be considered a higher-risk population on the roadways. In 2018, there were 48,619 crashes involving 51,908 older drivers. This was the highest volume of older drivers involved in crashes since 2006. In 2019, older drivers accounted for 21.3 percent of all driver fatalities in the State and were involved in 17.2 percent of all crashes. 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



Overall crashes involving older drivers has maintained an increasing trend. There was a 4.3 percent increase in crashes involving older drivers from 2017 (49,758) to 2018 (51,908). Older drivers, once involved in 13 percent of all crashes in 2006, now account for 17.2 percent in 2018, a 0.4 percent increase from 2017.

## **OLDER DRIVERS INVOLVED IN CRASHES, 2013 – 2018**



From 2014-2018 the most common factor for crashes involving older drivers was *Driver Inattention* (138,531 or 20.7%), followed by *Failure to Yield Right of Way to Another Vehicle or Pedestrian* (34,347 or 5.1%).

| TOP 10 CONTRIBUTING CIRCUMSTANCES IN CRASHES INVOLVING OLDER DRIVERS, 2014 - 2018 |        |        |        |        |        |         |  |  |  |  |  |  |
|---|--------|--------|--------|--------|--------|---------|--|--|--|--|--|--|
| CONTRIBUTING CIRCUMSTANCE   | 2014   | 2015   | 2016   | 2017   | 2018   | TOTAL   |  |  |  |  |  |  |
| Driver Inattention  | 29,226 | 26,476 | 28,039 | 27,068 | 27,722 | 138,531 |  |  |  |  |  |  |
| Failed to Yield Right of Way to Vehicle/Pedestrian                                | 6,334  | 6,322  | 7,137  | 7,146  | 7,408  | 34,347  |  |  |  |  |  |  |
| Following Too Closely   | 5,295  | 5,628  | 6,467  | 6,778  | 7,137  | 31,305  |  |  |  |  |  |  |
| Improper Lane Change  | 2,527  | 2,977  | 3,309  | 2,027  | 3,857  | 14,697  |  |  |  |  |  |  |
| Failed to Obey Traffic Control Device   | 2,417  | 2,493  | 2,835  | 3,049  | 3,123  | 13,917  |  |  |  |  |  |  |
| Backing Unsafely  | 4,493  | 1,922  | 2,050  | 2,004  | 2,153  | 12,622  |  |  |  |  |  |  |
| Improper Turning  | 2,200  | 2,009  | 2,369  | 2,251  | 2,401  | 11,230  |  |  |  |  |  |  |
| Unsafe Speed  | 1,475  | 1,380  | 1,368  | 1,460  | 1,655  | 7,338   |  |  |  |  |  |  |
| Improper Passing  | 1,135  | 1,106  | 1,389  | 1,392  | 1,460  | 6,482   |  |  |  |  |  |  |
| Road Surface Condition  | 1,169  | 978    | 607    | 732    | 894    | 4,380   |  |  |  |  |  |  |

Below is a representation of crashes involving older drivers and how they relate to other performance areas. From 2014-2018, 3 percent of crashes involving an older driver also involved one or more drivers being cited for unsafe speed, 7.4 percent also involved a young driver (16-20) and 56 percent involved driver inattention.

| OLDER DRIVER INVO          | OLDER DRIVER INVOLVEMENT IN CRASHES BY PERFORMANCE AREA, 2014 – 2018 |        |        |        |        |         |          |                  |  |  |  |  |  |
|----------------------------|--|--------|--------|--------|--------|---------|----------|------------------|--|--|--|--|--|
| OLDER DRIVERS AND          | 2014   | 2015   | 2016   | 2017   | 2018   | TOTAL   | 5 YR AVG | % OF 5 YR<br>TOT |  |  |  |  |  |
| ALCOHOL INVOLVEMENT        | 518  | 505    | 480    | 544    | 630    | 2,677   | 532.3    | 1.1%             |  |  |  |  |  |
| DRUG INVOLVEMENT           | 98   | 107    | 87     | 180    | 164    | 636     | 124.3    | 0.3%             |  |  |  |  |  |
| DISTRACTED DRIVING         | 27,323   | 24,811 | 26,141 | 25,783 | 26,345 | 130,403 | 26239.0  | 56.0%            |  |  |  |  |  |
| UNSAFE SPEED               | 1,410  | 1,322  | 1,314  | 1,395  | 1,563  | 7,004   | 1396.3   | 3.0%             |  |  |  |  |  |
| YOUNG DRIVERS              | 3,307  | 3,401  | 3,441  | 3,504  | 3,561  | 17,214  | 3448.3   | 7.4%             |  |  |  |  |  |
| PEDESTRIANS                | 756  | 643    | 705    | 691    | 629    | 3,424   | 700.0    | 1.5%             |  |  |  |  |  |
| TOTAL OLDER DRIVER CRASHES | 47,779   | 43,729 | 46,265 | 46,614 | 48,619 | 233,006 | 46793.8  | 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 58 percent of older drivers involved in crashes while females represented 42 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 38 percent of total older drivers involved, a slight increase from the previous 5-years (2013-2017 total).

| % OF O            | % OF OLDER DRIVERS INVOLVED IN CRASHES BY AGE AND GENDER, 2014 - 2018 |       |        |         |         |  |  |  |  |  |  |  |
|-------------------|---|-------|--------|---------|---------|--|--|--|--|--|--|--|
| AGE               | % OF 65 - 85+ AGE GROUP   | MALE  | FEMALE | UNKNOWN | TOTAL   |  |  |  |  |  |  |  |
| 65 - 69 YEARS OLD | 38.2%   | 22.8% | 15.2%  | 0.1%    | 94,972  |  |  |  |  |  |  |  |
| 70 - 74 YEARS OLD | 26.0%   | 15.2% | 10.7%  | 0.1%    | 64,711  |  |  |  |  |  |  |  |
| 75 - 79 YEARS OLD | 16.6%   | 9.5%  | 7.0%   | 0.1%    | 41,340  |  |  |  |  |  |  |  |
| 80 - 84 YEARS OLD | 10.4%   | 5.8%  | 4.6%   | 0.0%    | 25,975  |  |  |  |  |  |  |  |
| 85+ YEARS OLD     | 8.8%  | 4.9%  | 3.8%   | 0.0%    | 21,770  |  |  |  |  |  |  |  |
| TOTAL             | 100.0%  | 58.2% | 41.5%  | 0.3%    | 248,768 |  |  |  |  |  |  |  |

# Older Drivers • Analysis of Occurrence

Between 2014 and 2018, more than half of all crashes involving older drivers occur between Noon and 5:59PM (53%). October had the highest volume of crashes accounting for 9 percent. The occurrence of crashes involving an older driver helps decision makers in addressing the specific concerns that are facing more mature users of the roadways.

## OLDER DRIVER INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN          | FEB          | MAR          | APR          | MAY          | JUN          | JUL          | AUG          | SEPT         | OCT          | NOV          | DEC          | TOT     | AL   |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|------|
| Midnight to 2:59AM   | 194          | 166          | 152          | 179          | 210          | 197          | 207          | 180          | 156          | 206          | 174          | 187          | 2,208   | 1%   |
| 3:00AM to<br>5:59AM  | 163          | 154          | 177          | 174          | 157          | 186          | 144          | 132          | 177          | 203          | 208          | 175          | 2,050   | 1%   |
| 6:00AM to<br>8:59AM  | 2,271        | 1,916        | 1,890        | 1,796        | 1,955        | 1,981        | 1,591        | 1,514        | 2,046        | 2,449        | 2,044        | 1,760        | 23,213  | 10%  |
| 9:00AM to<br>11:59AM | 3,625        | 3,312        | 3,616        | 3,588        | 4,076        | 4,206        | 4,302        | 4,144        | 3,954        | 4,096        | 3,917        | 3,851        | 46,687  | 20%  |
| Noon to<br>2:59PM    | 4,694        | 4,243        | 4,929        | 4,854        | 5,485        | 5,732        | 5,500        | 5,567        | 4,928        | 5,308        | 5,343        | 5,398        | 61,981  | 27%  |
| 3:00PM to<br>5:59PM  | 4,537        | 3,942        | 4,648        | 4,660        | 5,703        | 5,632        | 5,106        | 5,032        | 4,995        | 5,264        | 5,816        | 6,023        | 61,358  | 26%  |
| 6:00PM to<br>8:59PM  | 2,121        | 2,052        | 2,017        | 1,879        | 2,033        | 2,107        | 2,086        | 2,177        | 2,237        | 2,865        | 2,761        | 2,780        | 27,115  | 12%  |
| 9:00PM to<br>11:59PM | 449          | 503          | 570          | 632          | 764          | 928          | 935          | 797          | 696          | 716          | 678          | 726          | 8,394   | 4%   |
| TOTAL                | 18,054<br>8% | 16,288<br>7% | 17,999<br>8% | 17,762<br>8% | 20,383<br>9% | 20,969<br>9% | 19,871<br>9% | 19,543<br>8% | 19,189<br>8% | 21,107<br>9% | 20,941<br>9% | 20,900<br>9% | 233,006 | 100% |

# Older Drivers • Analysis of Location

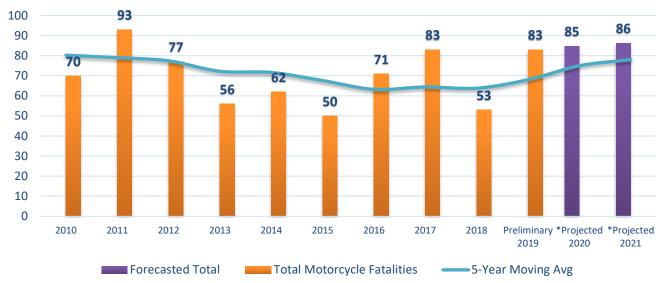
The chart below shows the Top 20 towns with the most older driver crashes over the last 5 years (2014-2018). The City of Newark surpassed Toms River Township for the number 1 position with 4,901 crashes, a 37 percent increase from 2014 to 2018. Brick Township experienced the largest decline in older driver crashes with a 27 percent decrease from 2014 to 2018, followed by Paramus Borough with a 23 percent decrease. The City of Paterson has seen the largest increase in older driver involved crashes, increasing 43 percent from 2014 to 2018.

| TOP 20 I              | MUNICIPA | ALITIES W | /ITH CRA | SHES INV | OLVING | OLDER D | RIVERS, 2014 - | 2018              |
|-----------------------|----------|-----------|----------|----------|--------|---------|----------------|-------------------|
| MUNICIPALITY          | 2014     | 2015      | 2016     | 2017     | 2018   | TOTAL   | 5-YEAR AVG.    | 2014-2018% CHANGE |
| Newark City           | 856      | 875       | 937      | 1064     | 1,169  | 4,901   | 980            | 36.6%             |
| Toms River Township   | 1,141    | 848       | 855      | 813      | 906    | 4,563   | 913            | -20.6%            |
| Jersey City           | 807      | 768       | 907      | 932      | 963    | 4,377   | 875            | 19.3%             |
| Woodbridge Township   | 744      | 665       | 814      | 689      | 812    | 3,724   | 745            | 9.1%              |
| Paterson City         | 550      | 610       | 706      | 721      | 785    | 3,372   | 674            | 42.7%             |
| Edison Township       | 679      | 587       | 643      | 624      | 680    | 3,213   | 643            | 0.1%              |
| Cherry Hill Township  | 656      | 583       | 615      | 620      | 650    | 3,124   | 625            | -0.9%             |
| Clifton City          | 645      | 595       | 563      | 637      | 668    | 3,108   | 622            | 3.6%              |
| Paramus Borough       | 636      | 527       | 600      | 605      | 490    | 2,858   | 572            | -23.0%            |
| Elizabeth City        | 527      | 508       | 622      | 574      | 599    | 2,830   | 566            | 13.7%             |
| Hamilton Township     | 556      | 509       | 511      | 535      | 469    | 2,580   | 516            | -15.6%            |
| Union Township (Union | 453      | 455       | 494      | 524      | 579    | 2,505   | 501            | 27.8%             |
| Brick Township        | 616      | 406       | 521      | 499      | 450    | 2,492   | 498            | -26.9%            |
| Hackensack City       | 504      | 392       | 456      | 475      | 490    | 2,317   | 463            | -2.8%             |
| Lakewood Township     | 431      | 401       | 450      | 456      | 505    | 2,243   | 449            | 17.2%             |
| Wayne Township        | 478      | 368       | 418      | 414      | 426    | 2,104   | 421            | -10.9%            |
| Teaneck Township      | 412      | 344       | 410      | 364      | 395    | 1,925   | 385            | -4.1%             |
| Parsippany-Troy Hills | 445      | 364       | 284      | 344      | 478    | 1,915   | 383            | 7.4%              |
| Vineland City         | 414      | 358       | 382      | 392      | 359    | 1,905   | 381            | -13.3%            |
| Fort Lee Borough      | 384      | 295       | 379      | 376      | 378    | 1,812   | 362            | -1.6%             |

# Motorcycle Safety • General Overview

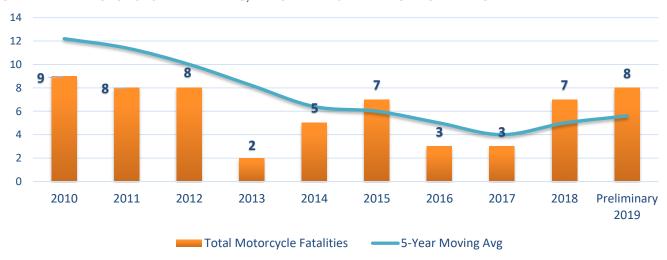
Motorcycle fatalities have varied over the ten-year period from 2010-2019. The highest number of fatalities (93) occurred in 2011 while the lowest number (50) occurred in 2015. The ten-year average (2010-2019) of motorcycle fatalities is 70 fatalities per year, up from the 2009-2018 average of 68. Based on data driven models, the number of motorcycle fatalities is expected to increase in future years.

## 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 8 motorcyclists died on the roadways in 2019 who were not wearing a helmet at the time of the crash, accounting for 10 percent of motorcyclist fatalities (drivers and riders).

### UNHELMETED MOTORCYCLE FATALITIES, ANNUAL AND 5-YEAR MOVING AVERAGE



NHTSA estimates that in 2017, 47 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.

Alcohol was involved in under 4 percent of all motorcycle crashes over the past five years and was a contributing circumstance in 3.5 percent of all crashes in 2018.

| ALCOHOL INVOLVEMENT IN MOTORCYCLE CRASHES, 2014 - 2018 |       |       |       |       |       |        |  |  |
|--|-------|-------|-------|-------|-------|--------|--|--|
| INVOLVEMENT  | 2014  | 2015  | 2016  | 2017  | 2018  | TOTAL  |  |  |
| NO INVOLVEMENT   | 2,114 | 2,217 | 2,115 | 2,096 | 1,918 | 10,460 |  |  |
| INVOLVEMENT  | 79    | 83    | 73    | 90    | 71    | 396    |  |  |
| TOTAL  | 2,193 | 2,300 | 2,188 | 2,186 | 1,989 | 10,856 |  |  |
| INVOLVEMENT PERCENT OF TOTAL                           | 3.60% | 3.61% | 3.34% | 4.12% | 3.57% | 3.65%  |  |  |

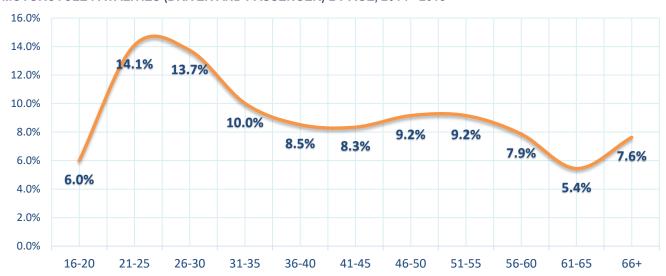
Below is a representation of crashes involving motorcyclists and how they relate to other performance areas. From 2014-2018, 14 percent of crashes involving a motorcyclist also involved one or more drivers being cited for unsafe speed, 12 percent also involved an older driver, 9 percent involved a younger driver and 43 percent involved distracted driving.

| MOTORCYCLE INVO                   | MOTORCYCLE INVOLVEMENT IN CRASHES BY PERFORMANCE AREA, 2014 – 2018 |       |       |       |       |        |          |                  |  |
|-----------------------------------|--|-------|-------|-------|-------|--------|----------|------------------|--|
| MOTORCYCLE INVOLVED AND           | 2014   | 2015  | 2016  | 2017  | 2018  | TOTAL  | 5 YR AVG | % OF 5 YR<br>TOT |  |
| Distracted Driving                | 940  | 985   | 945   | 936   | 840   | 4,646  | 929      | 42.8%            |  |
| Unsafe Speed                      | 281  | 320   | 330   | 296   | 273   | 1,500  | 300      | 13.8%            |  |
| Older Drivers                     | 252  | 272   | 250   | 280   | 274   | 1,328  | 266      | 12.2%            |  |
| Young Drivers                     | 166  | 204   | 193   | 193   | 196   | 952    | 190      | 8.8%             |  |
| Alcohol Involvement               | 79   | 83    | 73    | 90    | 71    | 396    | 79       | 3.6%             |  |
| Drug Involvement                  | 8  | 8     | 6     | 17    | 13    | 52     | 10       | 0.5%             |  |
| TOTAL MOTORCYCLE INVOLVED CRASHES | 2,193  | 2,300 | 2,188 | 2,186 | 1,989 | 10,856 | 2,171    | 100.0%           |  |

# Analysis of Age

The difference in age and gender was a factor in the likelihood of an individual being involved in motorcycle crashes. The 21-30-year-old rider accounted for 27.8 percent of all riders involved in motorcycle crashes and the majority of motorcycle riders involved in crashes were male riders, accounting for over 96 percent of total riders involved in crashes that occurred from 2014-2018.

# MOTORCYCLE FATALITIES (DRIVER AND PASSENGER) BY AGE, 2014 - 2018



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-eight (28%) percent of motorcyclists killed on the roadways in 2018 did not have the proper license endorsement to operate that class of vehicle.

| LICENSE COMPLIANCE IN FATAL CRASHES FOR MOTORCYCLE DRIVERS, 2016 - 2018 |            |            |                  |                   |                  |            |  |
|---|------------|------------|------------------|-------------------|------------------|------------|--|
|   | FATALITIES | % OF TOTAL | 20<br>FATALITIES | 017<br>% OF TOTAL | 20<br>FATALITIES | % OF TOTAL |  |
| NOT LICENSED  | 4          | 6%         | 6                | 7%                | 0                | 0%         |  |
| NO VALID M ENDORSEMENT  | 14         | 20%        | 22               | 27%               | 17               | 28%        |  |
| VALID ENDORSEMENT   | 48         | 68%        | 51               | 61%               | 34               | 57%        |  |
| UNKNOWN   | 2          | 3%         | 1                | 1%                | 0                | 0%         |  |

# Analysis of Occurrence

Motorcycle crashes are typically aligned with overall motor vehicle crash patterns, with the most dangerous hour of the day between 3pm and 5:59pm (2,865 or 26%) from 2014 to 2018. Motorcycle crashes are most likely to occur during the warmer months of the year and almost half of all motorcycle crashes happened between June and August (44%).

# MOTORCYCLE INVOLVED CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN       | FEB       | MAR       | APR       | MAY          | JUN          | JUL          | AUG          | SEPT         | OCT       | NOV       | DEC       | TOT    | AL   |
|----------------------|-----------|-----------|-----------|-----------|--------------|--------------|--------------|--------------|--------------|-----------|-----------|-----------|--------|------|
| Midnight to 2:59AM   | 6         | 6         | 10        | 22        | 60           | 71           | 81           | 80           | 69           | 31        | 11        | 9         | 456    | 4%   |
| 3:00AM to<br>5:59AM  | 0         | 1         | 1         | 6         | 10           | 24           | 25           | 31           | 29           | 16        | 8         | 7         | 158    | 1%   |
| 6:00AM to<br>8:59AM  | 13        | 12        | 18        | 42        | 85           | 110          | 82           | 105          | 115          | 70        | 34        | 13        | 699    | 6%   |
| 9:00AM to<br>11:59AM | 13        | 15        | 28        | 98        | 133          | 152          | 174          | 176          | 151          | 116       | 72        | 25        | 1,153  | 11%  |
| Noon to<br>2:59PM    | 30        | 56        | 63        | 207       | 272          | 309          | 281          | 300          | 263          | 182       | 130       | 72        | 2,165  | 20%  |
| 3:00PM to<br>5:59PM  | 31        | 66        | 123       | 290       | 351          | 416          | 349          | 390          | 346          | 250       | 170       | 83        | 2,865  | 26%  |
| 6:00PM to<br>8:59PM  | 13        | 36        | 55        | 234       | 323          | 366          | 347          | 360          | 250          | 184       | 72        | 36        | 2,276  | 21%  |
| 9:00PM to<br>11:59PM | 10        | 16        | 18        | 62        | 122          | 195          | 205          | 200          | 123          | 81        | 37        | 15        | 1,084  | 10%  |
| TOTAL                | 116<br>1% | 208<br>2% | 316<br>3% | 961<br>9% | 1,356<br>12% | 1,643<br>15% | 1,544<br>14% | 1,642<br>15% | 1,346<br>12% | 930<br>9% | 534<br>5% | 260<br>2% | 10,856 | 100% |

# Analysis of Location

An analysis of crashes by county over the past 5 years (2014-2018) shows an overall reduction of 9 percent. During that same period, Burlington (-32%), Hunterdon (-31%) and Mercer (-30%) Counties had the biggest reductions in motorcycle-involved crashes. Passaic (24%), Salem (21%) and Union (10%) experienced the biggest increases.

| MOTORCYCLE CRASHES BY COUNTY AND YEAR, 2014 - 2018 |       |       |       |       |       |        |  |  |  |
|--|-------|-------|-------|-------|-------|--------|--|--|--|
|  | 2014  | 2015  | 2016  | 2017  | 2018  | TOTAL  |  |  |  |
| ATLANTIC   | 74    | 82    | 82    | 68    | 64    | 370    |  |  |  |
| BERGEN   | 207   | 195   | 190   | 204   | 196   | 992    |  |  |  |
| BURLINGTON   | 136   | 130   | 126   | 123   | 92    | 607    |  |  |  |
| CAMDEN   | 122   | 118   | 100   | 129   | 107   | 576    |  |  |  |
| CAPE MAY   | 37    | 46    | 30    | 44    | 29    | 186    |  |  |  |
| CUMBERLAND   | 48    | 52    | 61    | 52    | 37    | 250    |  |  |  |
| ESSEX  | 197   | 219   | 169   | 202   | 172   | 959    |  |  |  |
| GLOUCESTER   | 66    | 58    | 74    | 79    | 55    | 332    |  |  |  |
| HUDSON   | 138   | 153   | 153   | 145   | 141   | 730    |  |  |  |
| HUNTERDON  | 52    | 63    | 51    | 45    | 36    | 247    |  |  |  |
| MERCER   | 91    | 71    | 76    | 74    | 64    | 376    |  |  |  |
| MIDDLESEX  | 163   | 169   | 186   | 173   | 174   | 865    |  |  |  |
| MONMOUTH   | 186   | 153   | 181   | 162   | 141   | 823    |  |  |  |
| MORRIS   | 117   | 123   | 108   | 91    | 113   | 552    |  |  |  |
| OCEAN  | 136   | 156   | 116   | 111   | 124   | 643    |  |  |  |
| PASSAIC  | 125   | 144   | 163   | 136   | 155   | 723    |  |  |  |
| SALEM  | 19    | 27    | 21    | 18    | 23    | 108    |  |  |  |
| SOMERSET   | 76    | 85    | 79    | 76    | 59    | 375    |  |  |  |
| SUSSEX   | 54    | 74    | 50    | 67    | 54    | 299    |  |  |  |
| UNION  | 108   | 137   | 133   | 145   | 119   | 642    |  |  |  |
| WARREN   | 41    | 45    | 39    | 42    | 34    | 201    |  |  |  |
| NJ STATE TOTALS                                    | 2,193 | 2,300 | 2,188 | 2,186 | 1,989 | 10,856 |  |  |  |

Work Zone Safety • General Overview

# **WORK ZONE CRASHES, 2009 - 2018**



The table reveals that Hudson County (1,698) had the highest number of work zone crashes over the past three years accounting for over 13 percent of total work zone crashes.

|            |               | WORK ZON   | E CRASHES E   | BY COUNTY  | AND YEAR, 2   | 016 - 2018 |                      |            |
|------------|---------------|------------|---------------|------------|---------------|------------|----------------------|------------|
| COUNTY     | 201           | 6          | 201           | 17         | 20°           | 18         | TOTA                 | ALS        |
| COUNTY     | Total Crashes | % of Total | Total Crashes | % of Total | Total Crashes | % of Total | <b>Total Crashes</b> | % of Total |
| ATLANTIC   | 386           | 8.67%      | 227           | 5.10%      | 99            | 2.42%      | 712                  | 5.65%      |
| BERGEN     | 350           | 7.86%      | 316           | 7.09%      | 328           | 8.02%      | 994                  | 7.89%      |
| BURLINGTON | 86            | 1.93%      | 133           | 2.99%      | 118           | 2.88%      | 337                  | 2.67%      |
| CAMDEN     | 584           | 13.11%     | 440           | 9.88%      | 449           | 10.98%     | 1,473                | 11.69%     |
| CAPE MAY   | 61            | 1.37%      | 22            | 0.49%      | 39            | 0.95%      | 122                  | 0.97%      |
| CUMBERLAN  | 28            | 0.63%      | 18            | 0.40%      | 22            | 0.54%      | 68                   | 0.54%      |
| ESSEX      | 589           | 13.22%     | 584           | 13.11%     | 453           | 11.07%     | 1,626                | 12.91%     |
| GLOUCESTER | 75            | 1.68%      | 74            | 1.66%      | 147           | 3.59%      | 296                  | 2.35%      |
| HUDSON     | 590           | 13.25%     | 566           | 12.71%     | 542           | 13.25%     | 1,698                | 13.48%     |
| HUNTERDON  | 159           | 3.57%      | 156           | 3.50%      | 62            | 1.52%      | 377                  | 2.99%      |
| MERCER     | 85            | 1.91%      | 158           | 3.55%      | 269           | 6.58%      | 512                  | 4.06%      |
| MIDDLESEX  | 476           | 10.69%     | 300           | 6.74%      | 304           | 7.43%      | 1,080                | 8.57%      |
| MONMOUTH   | 138           | 3.10%      | 127           | 2.85%      | 212           | 5.18%      | 477                  | 3.79%      |
| MORRIS     | 122           | 2.74%      | 134           | 3.01%      | 175           | 4.28%      | 431                  | 3.42%      |
| OCEAN      | 163           | 3.66%      | 218           | 4.89%      | 236           | 5.77%      | 617                  | 4.90%      |
| PASSAIC    | 194           | 4.36%      | 233           | 5.23%      | 238           | 5.82%      | 665                  | 5.28%      |
| SALEM      | 8             | 0.18%      | 16            | 0.36%      | 16            | 0.39%      | 40                   | 0.32%      |
| SOMERSET   | 73            | 1.64%      | 98            | 2.20%      | 155           | 3.79%      | 326                  | 2.59%      |
| SUSSEX     | 15            | 0.34%      | 8             | 0.18%      | 13            | 0.32%      | 36                   | 0.29%      |
| UNION      | 211           | 4.74%      | 183           | 4.11%      | 149           | 3.64%      | 543                  | 4.31%      |
| WARREN     | 61            | 1.37%      | 43            | 0.97%      | 65            | 1.59%      | 169                  | 1.34%      |
| TOTAL      | 4,454         |            | 4,054         |            | 4091          |            | 12,599               |            |

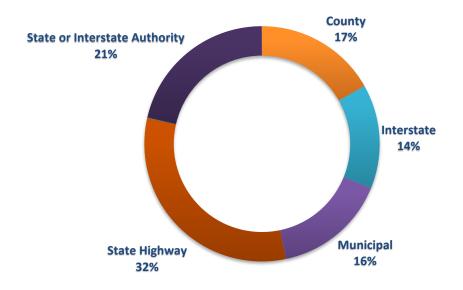
Over the last 5 years (2014-2018), the majority of work zone crashes occurred in the months of June, July and August (30%). During the same period, over 20 percent of all work zone crashes took place between Noon and 2:59PM.

WORK ZONE CRASHES TIME OF DAY, TIME OF YEAR 2014 - 2018

|                      | JAN         | FEB         | MAR         | APR         | MAY         | JUN          | JUL          | AUG          | SEPT        | OCT          | NOV         | DEC         | TOT    | AL   |
|----------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|--------------|-------------|-------------|--------|------|
| Midnight to 2:59AM   | 52          | 47          | 69          | 64          | 96          | 124          | 112          | 118          | 66          | 138          | 86          | 83          | 1,055  | 4%   |
| 3:00AM to<br>5:59AM  | 51          | 52          | 52          | 81          | 60          | 68           | 60           | 72           | 57          | 67           | 64          | 51          | 735    | 3%   |
| 6:00AM to<br>8:59AM  | 255         | 253         | 233         | 309         | 325         | 345          | 244          | 297          | 321         | 347          | 292         | 213         | 3,434  | 14%  |
| 9:00AM to<br>11:59AM | 316         | 281         | 292         | 381         | 444         | 445          | 424          | 467          | 435         | 430          | 389         | 299         | 4,603  | 19%  |
| Noon to<br>2:59PM    | 286         | 311         | 365         | 453         | 469         | 513          | 536          | 546          | 407         | 505          | 399         | 352         | 5,142  | 21%  |
| 3:00PM to<br>5:59PM  | 260         | 239         | 332         | 393         | 435         | 467          | 427          | 458          | 371         | 432          | 394         | 327         | 4,535  | 19%  |
| 6:00PM to<br>8:59PM  | 162         | 149         | 174         | 188         | 209         | 246          | 252          | 203          | 208         | 270          | 214         | 195         | 2,470  | 10%  |
| 9:00PM to<br>11:59PM | 105         | 94          | 137         | 203         | 257         | 266          | 291          | 279          | 228         | 239          | 194         | 147         | 2,440  | 10%  |
| TOTAL                | 1,487<br>6% | 1,426<br>6% | 1,654<br>7% | 2,072<br>8% | 2,295<br>9% | 2,474<br>10% | 2,346<br>10% | 2,440<br>10% | 2,093<br>9% | 2,428<br>10% | 2,032<br>8% | 1,667<br>7% | 24,414 | 100% |

Between 2014 and 2018, most work zone crashes took place on State roadways (32%) followed by State or Interstate Authority (21%).

WORK ZONE CRASHES BY ROAD SYSTEM %, 2014 - 2018



# **Countermeasure Strategies in Program Area**

| Countermeasure Strategy                    |
|--|
| Enforcement of GDL and Zero-tolerance Laws |
| Communication Campaign-older drivers       |
| Communication Campaign-motorcycle riders   |
| Work Zone Safety Training                  |

## Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** Reduce the five-year rolling average of mature driver fatalities by 14%, serious injuries by 5%, and total injuries by 5%, over the period 2018 to 2023.

**Objective:** Reduce the five-year rolling average of younger driver fatalities by 27%, serious injuries by 14%, and total injuries by 14%, over the period 2018 to 2023.

**Objective:** Reduce the five-year rolling average of motorcyclist fatalities by 27%, serious injuries by 14%, and total injuries by 14%, over the period 2018 to 2023.

**Objective:** Reduce the five-year rolling average of work zone fatalities by 38%, serious injuries by 38%, and total injuries by 38%, over the period 2018 to 2023.

# Strategies in 2020 Strategic Highway Safety Plan

Assess state, county, and municipal programs to identify and prioritize high-crash locations for mature drivers and younger drivers.

Implement educational campaigns to improve mature driver, younger driver, motorcyclist, and work zone workers safety.

Review current educational campaigns and make recommendations to improve quality and consistency across the state.

Target enforcement efforts where it can be most effective in reducing younger driver fatalities and serious injuries.

Develop a strategy to increase enrollment in motorcycle rider safety education and for incorporating motorcycle awareness into automobile and truck driver education.

Review existing research on best practices relating to improving motorcycle safety.

Provide recommendations for a unified work zone strategy to be employed by state agencies, authorities, and counties.

Initiate a study to evaluate the efficacy of various driver behavior modification approaches.

Implement or improve education/training for workers on the roads and drivers travelling through school zones or work zones.

#### **Associated Performance Measures**

| Fiscal<br>Year | Performance measure name                              | Target End<br>Year | Target<br>Period | Target<br>Value |
|----------------|---|--------------------|------------------|-----------------|
| 2021           | Number of drivers age 20 or younger involved in fatal | 2021               | 5 Year           | 56.7            |
|                | crashes (FARS)  |                    |                  |                 |
| 2021           | Number of Older Driver Fatalities                     | 2021               | 5 Year           | 65.4            |
| 2021           | Number of motorcyclist fatalities (FARS)              | 2021               | 5 Year           | 78.0            |
| 2021           | Number of motorcyclist fatalities (FARS)              | 2021               | 5 Year           | 6.5             |
| 2021           | Number of Work Zone Related Crashes                   | 2021               | 5 Year           | 3,365.4         |

# Countermeasure Strategy: Enforcement and Education of Graduated Driver Licensing (GDL) Law

# Effectiveness of Countermeasure

The effectiveness of Graduated Driver Licensing (GDL) in reducing crashes involving young drivers has been demonstrated many times (Countermeasures That Work, 9th Edition, 2017). In New Jersey, where one of the nation's strongest set of GDL provisions are on books young driver crashes were reduced by 8% in the most recent five-year period studied (2013-2017) (Children's Hospital of Philadelphia, 2019).

GDL laws are more effective when backed up by high visibility enforcement. One study found that teen drivers reported frequently violating GDL passenger restrictions because local police did not routinely enforce GDL laws (Chaudhary, et al., 2007). Another 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). GDL enforcement details also provide law enforcement the opportunity to stress other safe driving practices. A recent New Jersey study showed that the top two contributing circumstances in young driver crashes in 2017 were driver inattention (39%) and following too closely (12%) (Children's Hospital of Philadelphia, 2019).

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 limit setting on the part of parents, and several studies show that teenagers whose parents impose stricter driving limits report fewer risky driving behaviors, traffic violations and crashes (Simons-Morton, 2007). There is also recent information indicating that parents who utilize new technologies to track the behind-the-wheel behavior of their young driver can have a positive impact (Farah, et al., 2014). It seems that educational programs alone are unlikely to produce lasting 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 the young drivers in their home.

### Linkage between Problem Identification and Performance Targets

Motor vehicle crashes are the leading cause of death for teenagers. During the last ten years (2010-2019), there were 648 total fatalities in New Jersey in crashes that involved a younger driver behind the wheel. Preliminary 2019 figures show younger drivers have been involved in 10.7 percent of total motor vehicle fatalities (60 out of 560), up from 9.4 percent in 2018. 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.

Other Vulnerable Road Users is one of the six Emphasis Areas of the 2020 Strategic Highway Safety Plan. DHTS will make it a priority to assist in implementing the strategies of the SHSP in which it can play a role, relating to younger drivers, older drivers, motorcycle rider education, and enhancing work zone safety through the emergence and use of new technology.

Project Name: GDL ENFORCEMENT AND EDUCATION

Sub-Recipients: DIVISION OF STATE POLICE AND KEAN UNIVERSITY

Total Project Amount: \$100,000

### **Project Description:**

The Division of State Police will conduct patrols in identified high crash areas involving young drivers to enforce the GDL laws and other related traffic violations. In addition, troopers will take part in GDL checks at various high schools throughout the State to ensure 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 FY2021. 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. The orientation program is designed for parents and their teens in the prepermit/permit stage of licensing and includes a resource guide containing materials that support parental involvement and safe driving behaviors. 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.

To highlight the effectiveness of New Jersey's teen driver laws, a number of initiatives are planned for FY2021 relating to anniversaries in New Jersey's Graduated Driver Licensing system. Some of these special events, which include the release of study reports, press events, teen video contests, and a paid advertising push, were postponed from the spring of 2020 and will be instead carried out in FY2021.

Funding Source: SECTION 402 Local Benefit: \$25,000

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# Countermeasure Strategy: Communication and Outreach to Older Drivers

# Effectiveness of Countermeasure

The overall goal of older-driver-related countermeasures 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. "Safe mobility for life" was the key phrase used in the U.S. Department of Transportation's *Safe Mobility for a Maturing Society: Challenges and Opportunities* plan published in 2003 (U.S. DOT, 2003). The plan established a number of strategies to address safe mobility on the State or local level. Strategies included educating and training older drivers to assess their driving capabilities and limitations and improving skills when possible. A general trend that has been identified is that as drivers get older they are over represented in crashes that require navigating more complex situations such as intersections, left turns, and reacting to an impending crash (Stutts, Martell, & Staplin, 2009).

Many organizations (AARP, AAA, National Safety Council) 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 limiting their driving during potentially more risky times of day (National Cooperative Highway Research Program, 2004, Strategy D2). The limited information available suggests that some educational material may increase driver's knowledge.

It must be realized that of all the traffic safety programmatic areas, countermeasures targeting older drivers are among the most complex because they involve so many issues outside of the normal traffic safety realm (Countermeasures That Work, 9th Edition, 2017).

### Assessment of Safety Impacts

There are several 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

During the last ten years (2010–2019), there were 659 older driver (65+) fatalities, down from 671 between 2009-2018. In 2019, 62 drivers age 65 or older were killed compared to 72 in 2018. 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. AAA also plans, with the support of grant funding, a series of general senior traffic safety educational programs, targeted for those areas of the State overrepresented in older driver crashes.

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

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# Countermeasure Strategy: Communication and Outreach to Motorcyclists

## Effectiveness of Countermeasure

A motorcycle is inherently more difficult to operate than a passenger vehicle because it requires more physical skill and strength. The relationship of motorcycle speed and stability is also a critical consideration when riding a motorcycle, as the stability of a motorcycle is relative to speed. As speed increases, the motorcycle becomes more stable, requiring less effort from the operator to maintain its balance, even as it becomes less maneuverable. At very low speeds, the motorcycle becomes less stable, requiring greater effort from the operator to balance it. Furthermore, a motorcycle offers little rider protection in a crash. NHTSA estimates that per vehicle mile traveled, motorcyclists are about 29 times more likely than passenger car occupants to die in a crash (Countermeasures That Work, 9th Edition, 2017).

Motorcycle riders should be properly trained and licensed. They should be alert and aware of the risks they face while riding; in particular, they should not be impaired by alcohol or drugs. Another objective is to increase other motorists' awareness of motorcyclists by increasing the visibility of motorcyclists and educating drivers on the importance of sharing the road with motorcycles. Motorcycle riders should all wear helmets but enacting and enforcing universal helmet laws are politically difficult.

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. In terms if rider impairment, research by Becker, McKnight, Nelkin, and Piper (2003) confirmed earlier studies that motorcycle riders are more concerned with their physical well-being and the security of their motorcycle and less concerned about any fines or sanctions that might come from operating a motorcycle while impaired.

Several States have conducted communications and outreach campaigns to increase other driver's 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. Although this countermeasure is widely used, no evaluations of the

effectiveness of campaigns to increase driver awareness of motorcyclists are available (Countermeasures That Work, 9th Edition, 2017).

# 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. Nearly 7,000 riders received this training in 2019.

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 DHTS, MVC, and grantee stakeholders will continue in FY2021.

# Linkage between Problem Identification and Performance Targets

Preliminary figures are indicating the State experienced a spike in motorcycle fatalities in 2019 from 53 in 2018 to 83. Motorcyclists account for approximately 15 percent of all traffic fatalities in 2019. Although the younger rider (21-35 years of age) is overrepresented in fatalities, representing 38 percent of motorcycle fatalities (2014-2018), 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 30 percent of motorcycle fatalities (2014-2018), out pacing the younger driver category.

Project Name: MOTORCYCLE TRAINING AND AWARENESS Sub-Recipients: BRAIN INJURY ALLIANCE OF NJ

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 including the following groups and agencies: AAA Clubs of NJ, ABATE of the Garden State, Backroads USA, NJ Motor Vehicle Commission, Rider Insurance, Sinister Steel Motorcycle Association, DHTS, Statewide TPA's and rider training entities including: Barb's Harley Davidson, Bergen Harley Davidson, Central Jersey Rider Training, Fairleigh Dickinson University, Harley Davidson of Ocean County, Joint Base McGuire-Dix-Lakehurst (military training), Motorcycle Riding Centers, Motorcycle Rider Training Inc., Motorcycle Training Center, Rider Education of New Jersey, Rider Training of NJ at Camden County College and The Riding Academy of NJ.

The Coalition, under the auspices of BIANJ, carries out educational and awareness programs geared towards the rider and general public, provides Rider Coaches with annual trainings, and develops printed materials. The programs that have been developed and pushed out are interactive and engaging in nature, and are promoted through the web, social and traditional media with a common theme of "Share the Road".

Recognizing the importance of training motorcycle riders, the members of the Coalition brought the Motorcycle Safety Foundations Basic Rider Course update (MSF-BRCu) to all the rider training programs. The MSF Quality Assurance Program (QAP) assists the rider training providers in maintaining consistent performance standards throughout the State using the QA evaluation form on the MSF website.

The Brain Injury Alliance of New Jersey will continue to 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 *Jersey Drives/Motorcycle Safety* website <a href="https://jerseydrives.com/motorcyclists-2/">https://jerseydrives.com/motorcyclists-2/</a> focuses on a *Share the Road* message, including the importance of why to share the road and how to share the road safely. Other important safety information for motorcycle riders is included as well. Social and traditional media are utilized on an ongoing basis to promote the website.

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 nearly 7,000 riders in 2019 in motorcycle education basic and experienced rider courses. The Motorcycle Safety Education Fund supports the program and is used to defray its costs. 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. These funds are used for motorcycle safety rider coach trainings and materials to promote the trainings and the *Share the Road* campaign.

Funding Source: SECTION 405(f) Additional Funding Source: \$500,000 (Motorcycle Safety Education Fund)

Local Benefit: \$200,000

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# Countermeasure Strategy: Work Zone Safety Training

# Effectiveness of Countermeasure

Training and administrative controls are vital in the process by which highways are built and maintained, in order to minimize the risk of crashes, injuries and fatalities within work zones. In a 2013 study conducted for FHWA, the NJ Institute of Technology analyzed work zone crashes in New Jersey and made a number of recommendations. While each work zone is unique and driver behavior is significantly impacted by the work zone configuration and roadway operation, speed-flow through the work zone is the critical factor. The time of day of the project, duration of the project, signage, and training of personnel are also important considerations (*Work Zone Safety Analysis, Final Report.* Daniel, Ozbay, Chien, 2013).

Problems and ineffectiveness in work zones arise when the responsible agencies fail to monitor their work zones properly or fail to apply proper procedures and guiding principles in a consistent way (*Safe and Effective Work Zone Inspection*, American Traffic Safety Services Association, USDOT/FHWA, 2013).

# 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.

Challenges to the roadway network include growing and shifting populations that may cause some routes to become inadequate; aging infrastructure; increasing maintenance costs; increasing congestion; and a 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 work zones and those that travel through them such as 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 populations 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 collisions.

# Linkage between Problem Identification and Performance Targets

Over the past five years from 2014-2018, there have been 24,414 reported crashes in construction, maintenance, and utility zones. On average, a little less than 2 percent of all crashes in the State occur in a work zone.

**Project Name: TRAINING** 

Sub-Recipients: RUTGERS UNIVERSITY

Total Project Amount: \$125,000

**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.

As part of the comprehensive police training grant operated by Rutgers University, various work zone safety related tasks will be carried out in FY2021. Funds will be used to support the Annual Work Zone Safety Conference, to be held in conjunction with National Work Zone Safety Week in 2021. 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.

Throughout the year there will be a variety of training programs offered that will vary from half-day overview courses that provide the basics for safe work zone operations 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 include: Four-day police work zone safety train-the-trainer programs; One-day police work zone safety refresher courses; Half-day work zone safety awareness for local police courses; and Half-day work zone safety awareness for municipal and county public works/engineering courses.

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

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

#### TRAFFIC RECORDS

#### General Overview

Traffic records data serves as the primary source of knowledge about New Jersey's transportation environment. The State's traffic records system consists of numerous systems gathering, processing, and sharing information about crashes, the location and characteristics of the state's roadways, registered vehicles and licensed drivers, citation, adjudication and health data. Together these systems provide the underpinnings of a comprehensive system to reduce and eliminate serious injuries and fatalities on New Jersey's roadways.

As an aspirational goal, New Jersey has adopted the Towards Zero Deaths (TZD) strategy for eliminating fatalities and serious injuries through the Strategic Highway Safety Plan (SHSP). In order to achieve this goal, New Jersey's traffic records systems must be able to provide timely, accurate, integrated and accessible data. This data is fundamental to focusing resources and monitoring progress toward short and long-term strategies.

# **Countermeasure Strategies in Program Area**

### **Countermeasure Strategy**

Highway Safety Office Program Management

Training and Data Improvements

## Coordination with goals in 2020 Strategic Highway Safety Plan

**Objective:** New Jersey will identify the percentage of crash records that are deemed acceptable with no missing critical data elements and no errors in critical data elements. Establish a performance metric(s) for the timeliness in crash data availability from the time a crash occurs to when the crash is reported, and for measuring uniformity of data collection across jurisdictions. New Jersey will also have Injury Surveillance, Citations/Adjudications, Vehicle Registration, Driver Licensing and History, and Roadway Inventory datasets linked to NJ Crash Datasets.

**Objective:** Create a Safety Resource Center to manage data linked to data portal and make it accessible.

**Objective:** A complete inventory of traffic and infrastructure data is available for sharing between organizations and agencies.

**Objective:** Develop alternate methods to assess health and equity factors related to crashes.

**Objective:** Assess the consistency of data on all data query platforms.

### Strategies in 2020 Strategic Highway Safety Plan

Improve law enforcement training to ensure the completeness and accuracy of critical data elements in the police crash investigation report form.

Research best practices and technology to collect crash data.

Reduce time for law enforcement to complete the police crash investigation form by assessing existing efforts and providing recommendations to auto populate fields in the form.

Ensure all police departments are using the same crash report standards by providing updates on changes to the police crash investigation reporting form manual.

Increase ongoing efforts by NJ OIT and STRCC to integrate Injury Surveillance,

Citations/Adjudications, Vehicle Registration, Driver Licensing and History, and Roadway Inventory databases with the New Jersey crash records database.

Develop scope, vision, mission, and goals for a Safety Resource Center and outline its role in the context of agency roles, academia, law enforcement, and the public.

Improve access to data analysis tools and portals.

Identify and document health outcome data and trauma data to be incorporated into safety analyses.

#### **Associated Performance Measures**

| Fiscal<br>Year | Performance measure name                 | Target End<br>Year | Target<br>Period | Target<br>Value |
|----------------|--|--------------------|------------------|-----------------|
| 2021           | Number of PAR Training Events Held       | 2021               | Annual           | 12.00           |
| 2021           | Number of Registered Crash Analysis Tool | 2021               | Annual           | 450.00          |
|                | Users                                    |                    |                  |                 |

# Countermeasure Strategy: Highway Safety Office Program Management

Project Name: TRAFFIC RECORDS PROGRAM MANAGEMENT Sub-Recipients: DIVISION OF HIGHWAY TRAFFIC SAFETY

Total Project Amount: \$300,000

**Project Description:** 

This program 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 \$200,000 of the budgeted amount and the remainder is budgeted for travel and other miscellaneous expenditures.

Funding Source: SECTION 402 Local Benefit: 0

# **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 FY2021 will need to be analyzed by experienced personnel, utilizing state-of-the-art crash analysis tools, to identify trends in crash causation. This information will be provided to managers to assist in highway traffic safety program development and will be offered to other public and private agencies to help them develop safety related projects at the local level.

Relating to the crash report itself, 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 (5th Edition, 2017). This methodology was 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 was generated for each recommended Data Element and Attribute collected or derived from New Jersey's PAR. The mapping process provided a straightforward roadmap for implementing the MMUCC into the data collection process in the State. By completing this mapping process, the State determined and prioritized changes that were implemented in the recently 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 latest NJTR-1 went into use on January 1, 2017 and there have been ongoing 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. Effective January 1, 2019, the <u>serious injury reporting standards</u> were updated to meet the FHWA's Safety Performance Management Measures Final Rule (23 CFR 490) and the National Highway Safety Grants Program Interim Final Rule (23 CFR 1300).

# Linkage between Problem Identification and Performance Targets

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

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

#### **Timeliness:**

The transfer of motor vehicle crash data in an electronic format is the key that will ultimately facilitate a quick turnaround 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 has enabled the State to move forward in its plans to ultimately provide a way for all law enforcement agencies to submit their records electronically. In FY2021, it is expected that NJDOT will begin piloting a statewide program for electronic transfer of crash report information from local jurisdictions.

#### **Accuracy:**

Maintaining and maximizing the accuracy of crash reports is an ingoing challenge. Differences in interpretation on the part of the officer filling out the report can cause issues. In some cases, pinpointing the exact location of the crash can also be 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, through dozens of fields that need to be entered on the report. Training and education are provided to law enforcement agencies on the proper method of data collection and data entry on the form to ensure the most accurate information is received.

### **Integration:**

The State Traffic Records Coordinating Committee aims to integrate statewide crash data to the Motor Vehicle Commission's licensing and vehicle registration information as well as Emergency Medical Service information and citation/adjudication data from the NJ court system.

#### **Accessibility:**

The DHTS Crash Analysis Tool is a decision support tool developed and maintained by Numetric, a business intelligence company. The Crash Analysis Tool is a powerful analytical tool designed to allow engineers, planners,

designers, and executives to perform analysis, reporting, and crash data review in one streamlined, easy to use platform. The tool allows merging of multiple data sets including crash data, roadway data, and various safety layers for a seamless experience, referencing data from various sources and using it to make data driven decisions regarding roadway safety. The tool includes the ability to quickly identify crash patterns, drill down within the data and analyze segments at varying levels. This multi-layered support and crash analysis program is used by DHTS and also made available to all law enforcement personnel and stakeholders.

Project Name: DATA ANALYSIS

Sub-Recipients: RUTGERS UNIVERSITY

Total Project Amount: \$125,000

**Project Description:** 

The collection and detailed analysis of data is a critical first step in the process of developing programs to reduce fatalities and serious injuries on New Jersey's roadways. The cornerstone of this effort each year is the development of the Highway Safety Plan and Annual Reports. These documents rely on data to develop and prioritize highway safety program areas and to analyze the effectiveness of programs previously implemented. The data analysis involved in the process is extensive and involves several databases in order to ensure accuracy. The DHTS Crash Analysis Tool, FARS database, and other data sources are 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 and experienced individuals are assigned the task of performing data analysis, maintaining critical hardware and software, and assisting in the preparation of the Highway Safety Plan and Annual Report. Funds will be provided in a grant to Rutgers University to pay for staff salaries, training, and travel expenses.

Funding Source: SECTION 405(c) Local Benefit: \$125,000

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Project Name: TRAFFIC RECORDS COORDINATING COMMITTEE

Sub-Recipients: RUTGERS UNIVERSITY

Total Project Amount: \$500,000

**Project Description:** 

This task will provide, in a grant to Rutgers University, the resources necessary to lead and carry out the important work of the STRCC. Responsibilities will include facilitating STRCC meetings, recruiting new members and retaining current members, and executing the STRCC Strategic Plan (last updated spring 2020). The strategic plan details new and ongoing projects designed to enhance the traffic records system in the state and meet the recommendations of the most recent traffic records program assessment (2017). The STRCC also prepares reports on STRCC project activities and facilitates and/or participates in subcommittee work as needed.

Funds will be used to pay for the salary and travel of the STRCC Chairperson (approximately \$75,000). The bulk of the funds in this grant will go to the large annual maintenance contract and licenses for the Crash Analysis Tool, as well as planned upgrades to the CAT in FY2021.

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. The STRCC will also play a lead role in renewed efforts to launch electronic data transfer of crash reports by local police agencies.

Data is one of the six Emphasis Areas of the 2020 Strategic Highway Safety Plan. DHTS, primarily through the STRCC, will make it a priority to assist in implementing the strategies of the SHSP in which it can play a role, such as enhancing the accuracy and timeliness of NJTR-1 reports, improving data integration, and ultimately developing a NJ Safety Data Resource Center.

Funding Source: SECTION 405(c) Local Benefit: \$500,000

**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 crash resulting in injury, death, or property damage of \$500 or more. Police officers receive only brief training on how to properly complete the NJTR-1 crash form through their police academy instructions or through in-service training. Funds from this task will be used within the Rutgers Comprehensive Police Training Grant to provide workshops for law enforcement that will address proper form completion and the importance of data accuracy. For FY2021 the trainings will put special emphasis on the recently revised NJTR-1 form and the more recent changes to serious injury reporting classifications within the crash report. Funds will be used to pay for training materials and hourly wages of instructors.

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

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Project Name: TRAFFIC RECORDS INFORMATION SYSTEM

Sub-Recipients: NJ OFFICE OF EMERGENCY MEDICAL SERVICES, NJ MOTOR VEHICLE COMMISSION

Total Project Amount: \$1,100,000

**Project Description:** 

In FY2021 funds from this task will be used to implement projects designed to improve the traffic safety information system in New Jersey, as detailed in the 2020 updated strategic plan of the STRCC.

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. Funds here will be used for contractual services to expand and enhance the current electronic patient care report project.

The Department of Health will also be considered, as per the STRCC strategic plan, for two smaller pilot programs. One of the projects would provide GPS units or a smartphone app to EMS personnel to enable them to accurately record exact locations for crashes that they respond to. The other would allow OEMS to research the feasibility of importing Event Data Recorder (EDR) data into its existing database to enhance the overall crash information dataset.

The NJ Motor Vehicle Commission will be considered for funding to join a new data exchange program, called the State-to-State (S2S) Verification Service, as part of its strategic efforts to become federally compliant with the Real ID Act of 2005. The State-to-State (S2S) system, for which MVC seeks funding, references a verification service that is being developed as the largest project within the Real ID program requirements. The verification service satisfies provision number 37.13(b)(5), which requires compliant states to electronically verify a customer's presented DL or ID with the State of issuance.

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

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### EVIDENCE-BASED TRAFFIC SAFETY ENFORCEMENT PROGRAM

# 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. 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 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 (2014-2018), the City of Newark accounts for 10 percent of all pedestrian crashes in crashes reported by local police departments. Therefore, data shows they should receive approximately 10 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.

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 Traffic Safety Analytics company, and maintained by both Rutgers University and NJ Division of Highway Traffic Safety. Several states throughout the US also subscribe to this software for their data accessibility needs. This new multilayered 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. The system provides a suite of applications that aid in the breakdown of over 4 million crash records into digestible information for analysis, performance measuring and reporting. DHTS recently launched its newest application, the Network Screening Module. This powerful application functions as a hot-spot identification tool that enables the user to quickly drill down to any crash attribute at the local roadway level.

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.).

Utilizing these resources, New Jersey's entire FY2021 funding allocations are evidence-based as we identify and encourage municipalities and safety agencies to participate in our grant-funded activities. The examples provided here are twofold: To identify our worst safety related problems and applying data-driven countermeasures, as well as providing insight into how the data-driven decision-making process operates.

# Project Description: City of Newark Pedestrian Safety

DHTS has been providing pedestrian safety technical and administrative support to several municipalities throughout the State and recently partnered with the North Jersey Transportation Planning Authority in the *Street-Smart NJ* pedestrian safety campaign. *Street Smart NJ* is a public awareness and behavioral change pedestrian safety campaign. Since its creation in 2013, more than 80 communities have participated in *Street Smart NJ*.

Street Smart NJ emphasizes educating drivers, pedestrians, and bicyclists through mass media, as well as targeted enforcement. Police officers focus on engaging and educating, rather than simply issuing citations. Street Smart NJ complements, but does not replace, other state and local efforts to build safer streets and sidewalks, enforce laws and train better roadway users. The campaign is coordinated by the North Jersey Transportation Planning Authority

(NJTPA) and is supported by federal and state funds, with additional funding/in-kind contributions from local partners, including the state's eight Transportation Management Associations.

Each year, additional *Street-Smart NJ* campaigns expand into new locations. In FY2020 a *Street Smart NJ* campaign was conducted in the City of Newark.

Over the last 5 years (2014-2018), over 10 percent of all pedestrian crashes in the State took place in the City of Newark. To understand the safety pedestrian situation Newark, a screening analysis was conducted to determine trends in the occurrence of pedestrian involved crashes throughout the City with a strong focus on the 'hot-spot' Utilizing the Crash locations. Analysis Tool Network Screening module, a ranking list of the top 50 locations of pedestrian crashes was



generated and used to target messaging and outreach. Enforcement efforts will target the top intersections where crashes with pedestrians are taking place and will include decoy enforcement operations. The Newark Police Department will conduct community outreach meetings at senior citizen centers, community events, and schools to address and enhance the awareness of residents through educational and enforcement methods. A strong marketing presence will also be deployed throughout the city with the aid of supporting businesses and governmental entities. The adjacent chart shows the results of a scan of pedestrian involved crashes in the City of Newark over the past five years and reveals the 0.5-mile segments where the greatest injuries were sustained. The top location, with a total of 27 crashes, 2 of them fatal, was Route 21 between mileposts 1.9 and 2.4. This location is adjacent to the Newark Penn Station public transit hub which experiences high volumes of transit ridership.

| TOP 10 PEDESTRIAN CRASH LOCATIONS NEWARK BY WEIGHTED SEVERITY, 2014-2018 |          |                   |                 |                  |               |               |   |   |   |    |   |
|--|----------|-------------------|-----------------|------------------|---------------|---------------|---|---|---|----|---|
| Rank   | Route    | Milepost<br>Start | Milepost<br>End | Total<br>Crashes | Crash<br>Rate | EPDO<br>Score | K | A | В | С  | 0 |
| 1  | 21       | 1.90              | 2.40            | 27               | 3.0           | 2,179.9       | 2 | 0 | 6 | 17 | 2 |
| 2  | 510      | 29.00             | 29.50           | 27               | 4.5           | 2,176.5       | 2 | 0 | 7 | 15 | 3 |
| 3  | 07141865 | 1.90              | 2.40            | 16               | 0.0           | 2,080.4       | 2 | 1 | 3 | 7  | 3 |
| 4  | 508      | 10.40             | 10.90           | 17               | 2.7           | 2,043.7       | 2 | 0 | 1 | 12 | 2 |
| 5  | 510      | 26.40             | 26.90           | 14               | 1.5           | 2,027.7       | 2 | 0 | 2 | 9  | 1 |
| 6  | 21       | 3.30              | 3.80            | 10               | 0.1           | 1,979.4       | 2 | 0 | 1 | 6  | 1 |
| 7  | 07141909 | 0.30              | 0.80            | 6                | 0.0           | 1,975.5       | 2 | 1 | 0 | 2  | 1 |
| 8  | 27       | 36.60             | 37.10           | 7                | 0.3           | 1,957.3       | 2 | 0 | 1 | 4  | 0 |
| 9  | 21       | 2.70              | 3.20            | 7                | 0.3           | 1,947.7       | 2 | 0 | 1 | 3  | 1 |
| 10   | 95       | 58.90             | 59.40           | 4                | 0.1           | 1,925.6       | 2 | 0 | 1 | 1  | 0 |

# Project Description: UDrive. UText. UPay. Campaign and Distracted Driving Enforcement

Every April, New Jersey participates in NHTSA's *U Drive. U Text. U Pay.* Campaign, joining the rest of the nation in a coordinated crackdown on distracted driving behaviors. For the FY2021 mobilization, a statewide list detailing the occurrence of crashes involving distracted driving will be updated and analyzed to assist in determining grantee participation in the annual *U Drive. U Text. U Pay.* campaign.

The data-driven process to determine the top locations for campaign funding involves querying the crash database for the most recent 5 years of crashes involving distracted driving. The towns that are overrepresented in distracted driving crashes are



asked to participate in high visibility enforcement efforts to reduce cell phone use among drivers. Each police department is given a rank based on crash volume over the past 5 years. The crash totals of the top 100 police departments are summed, and the percent makeup of the cumulative top 100 total determines the approximate funding levels for each department. Through these grants, law enforcement officers will actively seek out cell phone users through special roving patrols or through spotter techniques. Grant funding for the mobilization will be offered based on the rankings list, and in scaled amounts as much as possible, to focus available funding into the places of greatest need.

As an example, the top 15 of the FY2021 Distracted Driving Enforcement Rankling List is shown below. These departments will be invited to participate in high visibility enforcement efforts to reduce cell phone use and overall distracted driving behavior on New Jersey's roadways. DHTS will provide technical assistance to grantees and foster relationships with partnering agencies tasked with the same safety initiatives. Each year DHTS will revisit the ranking lists to determine the progress being made in reducing the number of distracted driving crashes in grant funded communities as an evaluation of applied safety countermeasures.

| FY2021 DISTRACTED DRIVING ENFORCEMENT RANKING LIST |                          |                  |                   |                   |                      |            |             |  |  |  |
|--|--------------------------|------------------|-------------------|-------------------|----------------------|------------|-------------|--|--|--|
| County   | Police Department        | Total<br>Crashes | 5-Year<br>Average | Statewide<br>Rank | Project Period       | # of hours | Budget      |  |  |  |
| Hudson   | JERSEY CITY PD           | 21,507           | 4,301             | 1                 | 4/1/2020 - 8/31/2020 | 500        | \$27,500.00 |  |  |  |
| Passaic  | PATERSON PD              | 21,133           | 4,227             | 2                 | 4/1/2020 - 8/31/2020 | 500        | \$27,500.00 |  |  |  |
| Essex  | NEWARK PD                | 14,997           | 2,999             | 3                 | 4/1/2020 - 8/31/2020 | 450        | \$24,750.00 |  |  |  |
| Middlesex  | EDISON TWP PD            | 13,211           | 2,642             | 4                 | 4/1/2020 - 8/31/2020 | 450        | \$24,750.00 |  |  |  |
| Passaic  | CLIFTON PD               | 13,050           | 2,610             | 5                 | 4/1/2020 - 8/31/2020 | 450        | \$24,750.00 |  |  |  |
| Middlesex  | WOODBRIDGE TWP PD        | 9,882            | 1,976             | 6                 | 4/1/2020 - 7/31/2020 | 350        | \$19,250.00 |  |  |  |
| Hudson   | NORTH BERGEN PD          | 8,663            | 1,733             | 7                 | 4/1/2020 - 7/31/2020 | 300        | \$16,500.00 |  |  |  |
| Ocean  | LAKEWOOD PD              | 8,663            | 1,733             | 7                 | 4/1/2020 - 7/31/2020 | 300        | \$16,500.00 |  |  |  |
| Ocean  | TOMS RIVER PD            | 7,870            | 1,574             | 9                 | 4/1/2020 - 7/31/2020 | 275        | \$15,125.00 |  |  |  |
| Union  | UNION TWP PD             | 7,648            | 1,530             | 10                | 4/1/2020 - 7/31/2020 | 275        | \$15,125.00 |  |  |  |
| Mercer   | TRENTON PD               | 7,069            | 1,414             | 11                | 4/1/2020 - 7/31/2020 | 250        | \$13,750.00 |  |  |  |
| Union  | ELIZABETH PD             | 6,996            | 1,399             | 12                | 4/1/2020 - 7/31/2020 | 250        | \$13,750.00 |  |  |  |
| Mercer   | HAMILTON TWP PD (MERCER) | 6,928            | 1,386             | 13                | 4/1/2020 - 7/31/2020 | 250        | \$13,750.00 |  |  |  |
| Essex  | IRVINGTON PD             | 6,378            | 1,276             | 14                | 4/1/2020 - 7/31/2020 | 225        | \$12,375.00 |  |  |  |
| Ocean  | BRICK TWP PD             | 6,297            | 1,259             | 15                | 4/1/2020 - 7/31/2020 | 225        | \$12,375.00 |  |  |  |

Appendix A to Part 1300 – Certifications and Assurances for Fiscal Year 2021 Highway Safety Grants (23 U.S.C. Chapter 4; Sec. 1906, Pub. L. 109-59, As Amended By Sec. 4011, Pub. L. 114-94)

[Each fiscal year, the Governor's Representative for Highway Safety must sign these Certifications and Assurances affirming that the State complies with all requirements, including applicable Federal statutes and regulations, that are in effect during the grant period. Requirements that also apply to subrecipients are noted under the applicable caption.]

By submitting an application for Federal grant funds under 23 U.S.C. Chapter 4 or Section 1906, the State Highway Safety Office acknowledges and agrees to the following conditions and requirements. In my capacity as the Governor's Representative for Highway Safety, I hereby provide the following Certifications and Assurances:

### **GENERAL REQUIREMENTS**

The State will comply with applicable statutes and regulations, 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

### **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, <u>OMB Guidance on FFATA Subward and Executive Compensation Reporting</u>, August 27, 2010, (<a href="https://www.fsrs.gov/documents/OMB Guidance">https://www.fsrs.gov/documents/OMB Guidance</a> 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;
  - (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 OMB guidance.

#### **NONDISCRIMINATION**

(applies to subrecipients 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 or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 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, subrecipients 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 74087-74100).

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 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
  Nondiscrimination 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—
    - To comply with all Federal nondiscrimination laws and regulations, as may be amended from time to time;

- 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 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 are 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 subagreement 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 U.S.C. 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:
  - 1. The dangers of drug abuse in the workplace;
  - 2. The grantee's policy of maintaining a drug-free workplace;
  - 3. Any available drug counseling, rehabilitation, and employee assistance programs;
  - 4. The penalties that may be imposed upon employees for drug violations occurring in the workplace;
  - 5. 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);
- Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will –
  - 1. Abide by the terms of the statement;
  - 2. 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;
  - 2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a 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 subrecipients 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 subrecipients 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, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients 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 and not more than \$100,000 for each such failure.

#### RESTRICTION ON STATE LOBBYING

(applies to subrecipients 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 or 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.

# <u>CERTIFICATION REGARDING DEBARMENT AND SUSPENSION</u> (applies to subrecipients as well as States)

Instructions for Primary Tier Participant Certification (States)

- 1. By signing and submitting this proposal, the prospective primary tier participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR parts 180 and 1200.
- 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 primary tier 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 tier 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 tier 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 tier participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary tier participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

- 5. The terms *covered transaction, civil judgment, debarment, suspension, ineligible, participant, person, principal, and voluntarily excluded*, as used in this clause, are defined in 2 CFR parts 180 and 1200. 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 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 the department or agency entering into this transaction.
- 7. The prospective primary tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Participant 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 1200.
- 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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any prospective lower tier participants, each participant may, but is not required to, check the System for Award Management Exclusions website (https://www.sam.gov/).
- 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, in addition to other remedies available to the Federal government, the department or agency may terminate the transaction for cause or default.

#### <u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Tier</u> Covered Transactions

- (1) The prospective primary tier participant certifies to the best of its knowledge and belief, that it and its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any 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 records, 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 tier participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### Instructions for Lower Tier Participant 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 1200.
- 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 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, civil judgment, debarment, suspension, ineligible, participant, person, principal, and voluntarily excluded*, as used in this clause, are defined in 2 CFR parts 180 and 1200. 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 the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Participant 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 1200.
- 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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any prospective lower tier participants, each participant may, but is not required to, check the System for Award Management Exclusions website (https://www.sam.gov/).
- 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, 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 or debarment.

<u>Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions:</u>

- 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 participating in covered transactions 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 AMERICA ACT**

(applies to subrecipients 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 with Federal funds only steel, iron and manufactured products produced in the United States, 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 for approval by the Secretary of Transportation.

## PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE (applies to subrecipients 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 United 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 and resources on traffic safety programs and policies for employers, please contact the Network of Employers for Traffic Safety (NETS), a public-private partnership dedicated to improving the traffic safety practices of employers and employees. You can download information on seat belt programs, costs of motor vehicle crashes to employers, and other traffic safety initiatives at www.trafficsafety.org. The NHTSA website (www.nhtsa.gov) also provides information on statistics, campaigns, and program evaluations and references.

#### 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 vehicles 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.

#### **SECTION 402 REQUIREMENTS**

- 1. To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for a grant under 23 U.S.C. 402 is accurate and complete.
- 2. 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))
- 3. 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))
- 4. 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.)
- 5. 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 U.S.C. 402(b)(1)(D))
- 6. 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))
- 7. 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 –
    - o Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
    - o Increase use of seat belts by occupants of motor vehicles;
  - Submission of information regarding mobilization participation into the HVE Database:
  - Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits;

- An annual Statewide seat 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 allocation 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. 148(a).
   (23 U.S.C. 402(b)(1)(F))
- 8. The State will actively encourage all 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))
- 9. 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))

I understand that my statements in support of the State's application for Federal grant funds are statements 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.

Eric Heitmann Digitally signed by Eric Heitmann Date: 2020.06.08 12:26:44 -04'00'

Signature Governor's Representative for Highway Safety

Date

Eric Heitmann

Printed name of Governor's Representative for Highway Safety

## Appendix B to Part 1300 – Application Requirements for Section 405 and Section 1906 Grants

[Each fiscal year, to apply for a grant under 23 U.S.C. 405 or Section 1906, Pub. L. 109-59, as amended by Section 4011, Pub. L. 114-94, the State must complete and submit all required information in this appendix, and the Governor's Representative for Highway Safety must sign the Certifications and Assurances.]

| State: NEW JERSEY   | Fiscal Year: 2021   |
|---|---|
|   | t for which the State is applying for a grant, fill in<br>ont number or page numbers where the requested<br>nents may be submitted electronically.  |
| ■ PART 1: OCCUPANT PROTECTION   | N GRANTS (23 CFR 1300.21)   |
| [Check the box above only if applying for the   | his grant.]   |
| All States:   |   |
| [Fill in all blanks below.]   |   |
|   | for occupant protection programs will maintain its t protection programs at or above the average level of 14 and 2015. (23 U.S.C. 405(a)(9))  |
| The State's occupant protection pro<br>provided in the HSP atthe attached S   | gram area plan for the upcoming fiscal year is ec. 405b application. (location)   |
|   | ck it or Ticket national mobilization in the fiscal year State's planned participation is provided in the HSP (location).   |
|   | ned activities demonstrating the State's active<br>a stations are provided in the HSP at<br>(location).   |
| stations and events during the upcor<br>of planned inspection stations and e<br>categories: urban, rural, and at-risk | for: (1) the total number of planned inspection<br>ming fiscal year; and (2) within that total, the number<br>events serving each of the following population<br>by The planned inspection stations/events provided in<br>the current nationally Certified Child Passenger Safety |

| •      | Countermeasure strategies and planned activities, as provided in the HSP at the attached Sec. 405b application. (location),  |
|--------|--|
|        | that include estimates of the total number of classes and total number of technicians to be trained in the upcoming fiscal year to ensure coverage of child passenger safety inspection stations and inspection events by nationally Certified Child Passenger Safety Technicians.         |
| Lower  | Seat Belt Use States Only:   |
| [Check | at least 3 boxes below and fill in all blanks under those checked boxes.]  |
|        | The State's <b>primary seat belt use law</b> , requiring all occupants riding in a passenger motor vehicle to be restrained in a seat belt or a child restraint, was enacted on (date) and last amended on (date), is in effect, and will be enforced during the fiscal year of the grant. |
|        | in effect, and will be enforced during the fiscal year of the grant.  Legal citation(s):   |
|        | The State's <b>occupant protection law</b> , requiring occupants to be secured in a seat belt or age-appropriate child restraint while in a passenger motor vehicle and a minimum fine of \$25, was enacted on   |
|        | (date), is in effect, and will be enforced during the fiscal year  |
|        | of the grant.  |
|        | Legal citations:   |
|        | • Requirement for all occupants to be secured in seat belt or age appropriate child restraint;   |
|        | • Coverage of all passenger motor vehicles;  |
|        | • Minimum fine of at least \$25;   |
|        | • Exemptions from restraint requirements.  |
|        | The countermeasure strategies and planned activities demonstrating the State's <b>seat belt enforcement plan</b> are provided in the HSP at (location).  |
|        | The countermeasure strategies and planned activities demonstrating the State's <b>high risk population countermeasure program</b> are provided in the HSP at   |
|        | (location)   |

| The State's <b>comprehensive occupant protection program</b> is provided as follows:   |
|--|
| • Date of NHTSA-facilitated program assessment conducted within 5 years prior to the application date(date);   |
| <ul> <li>Multi-year strategic plan: HSP at(location);</li> <li>The name and title of the State's designated occupant protection coordinator is</li> </ul>  |
| List that contains the names, titles and organizations of the Statewide occupant protection task force membership: HSP at (location).  |
| The State's NHTSA-facilitated <b>occupant protection program assessment</b> of all elements of its occupant protection program was conducted on (date) (within 3 years of the application due date); |

# **■ PART 2: STATE TRAFFIC SAFETY INFORMATION SYSTEM IMPROVEMENTS GRANTS (23 CFR 1300.22)**

[Check the box above only if applying for this grant.]

#### All States:

• The lead State agency responsible for traffic safety information system improvement programs will maintain its aggregate expenditures for traffic safety information system improvements programs at or above the average level of such expenditures in fiscal years 2014 and 2015. (23 U.S.C. 405(a)(9))

#### [Fill in all blank for each bullet below.]

| rategic Plan is provided as follows:   |  |
|--|--|
| Description of specific, quantifiable and measurable improvements at the attached Sec. 405c application.   | _(location);   |
| ist of all recommendations from most recent assessment at:<br>ne attached Sec. 405c application.   | _(location);   |
| ecommendations to be addressed, including countermeasure strategie lanned activities and performance measures at attached Sec. 405c application. | es and (location):   |
| ecommendations not to be addressed, including reasons for not imple<br>ISP at  | ementing:  |
| e attached Sec. 405c application.  | _(location)  |
|  | ist of all recommendations from most recent assessment at: le attached Sec. 405c application.  ecommendations to be addressed, including countermeasure strategies lanned activities and performance measures at le attached Sec. 405c application.  ecommendations not to be addressed, including reasons for not imple |

# **■ PART 3: IMPAIRED DRIVING COUNTERMEASURES** (23 CFR 1300.23(D)-(F))

[Check the box above only if applying for this grant.]

#### **All States:**

- The lead State agency responsible for impaired driving programs will maintain its aggregate expenditures for impaired driving programs at or above the average level of such expenditures in fiscal years 2014 and 2015.
- The State will use the funds awarded under 23 U.S.C. 405(d) only for the implementation of programs as provided in 23 CFR 1300.23(j).

#### Mid-Range State Only:

[Check one box below and fill in all blanks under that checked box.]

| ☐ The State submits its Statewide impaired driving pladriving task force on                                    | n approved by a Statewide impaired(date).             |
|--|---|
| <ul> <li>HSP at</li></ul>  | (location) ons of all task force members;(location)   |
| ☐ The State has previously submitted a Statewide impostatewide impaired driving task force onto use this plan. | aired driving plan approved by a (date) and continues |

### **High-Range State Only:**

[Check one box below and fill in all blanks under that checked box.]

| ☐ The State submits its Statewide impaired driving plan approved by a Statewide impaired driving task force on              |
|---|
| NHTSA-facilitated assessment of the State's impaired driving program conducted on (date). Specifically, –                   |
| <ul> <li>HSP at</li></ul>   |
| force;  |
| <ul> <li>HSP at(location)</li> </ul>  |
| contains the list of names, titles and organizations of all task force members;   |
| <ul> <li>HSP at(location)</li> </ul>  |
| contains the strategic plan based on Highway Safety Guideline No. 8 - Impaired  |
| Driving;  |
| <ul> <li>HSP at (location)     addresses any related recommendations from the assessment of the State's impaired</li> </ul> |
|   |
| driving program;  |
| <ul> <li>HSP at(location)</li> <li>contains the planned activities, in detail, for spending grant funds;</li> </ul>         |
|   |
| <ul> <li>HSP at(location describes how the spending supports the State's impaired driving program and</li> </ul>            |
| describes how the spending supports the State's impaired driving program and achievement of its performance targets.        |
| ☐ The State submits an updated Statewide impaired driving plan approved by a Statewide                                      |
| impaired driving task force on (date) and   |
| updates its assessment review and spending plan provided in the HSP   |
| at (location).  |

## □ PART 4: ALCOHOL-IGNITION INTERLOCK LAWS (23 CFR 1300.23(G))

[Check the box above only if applying for this grant.]

| [Fill in <b>all</b> blanks | ĭ. |
|----------------------------|----|
|----------------------------|----|

| [Fill in all blanks.]   |
|---|
| The State provides citations to a law that requires all individuals convicted of driving under the influence or of driving while intoxicated to drive only motor vehicles with alcoholignition interlocks for a period of 6 months that was enacted on (date) and last amended on (date), is in effect, and will be enforced during the fiscal year of the grant.  Legal citation(s): |
|   |
| □ PART 5: 24-7 SOBRIETY PROGRAMS (23 CFR 1300.23(H))  |
| [Check the box above only if applying for this grant.]  |
| [Fill in all blanks.]   |
| The State provides citations to a law that requires all individuals convicted of driving under the influence or of driving while intoxicated to receive a restriction on driving privileges that was enacted on (date) and last amended on (date), is in effect, and will be enforced during the fiscal year of the grant.  Legal citation(s):  |
|   |
| [Check at least one of the boxes below and fill in all blanks under that checked box.]  |
| □ Law citation. The State provides citations to a law that authorizes a Statewide 24-7 sobriety program that was enacted on (date) and last amended on (date), is in effect, and will be enforced during the fiscal year of the grant.  Legal citation(s):  |
| □ <i>Program information</i> . The State provides program information that authorizes a Statewide 24-7 sobriety program. The program information is provided in the HSP at (location).  |

#### **■ PART 6: DISTRACTED DRIVING GRANTS (23 CFR 1300.24)**

[Check the box above only if applying for this grant and fill in all blanks.]

#### **Comprehensive Distracted Driving Grant**

 The State provides sample distracted driving questions from the State's driver's license examination in the HSP at the attached Sec 405e application. (location).

#### • Prohibition on Texting While Driving

The State's texting ban statute, prohibiting texting while driving and requiring a minimum fine of at least \$25, was enacted on  $\frac{1/20/2004}{2004}$  (date) and last amended on  $\frac{6/27/2013}{2004}$  (date), is in effect, and will be enforced during the fiscal year of the grant.

#### Legal citations:

- N.J.S.A. 39:4-97.3a Prohibition on texting while driving;
   N.J.S.A. 39:4-97.3b Definition of covered wireless communication devices;
   N.J.S.A. 39:4-97.3d Minimum fine of at least \$25 for an offense;
   N.J.S.A. 39:4-97.3 (No Exemptions) Exemptions from texting ban.
- Prohibition on Youth Cell Phone Use While Driving

The State's youth cell phone use ban statute, prohibiting youth cell phone use while driving, driver license testing of distracted driving issues and requiring a minimum fine of at least \$25, was enacted on  $\frac{1/20/2004}{}$  (date) and last amended on  $\frac{1/20/2004}{}$  (date), is in effect, and will be enforced during the fiscal year of the grant.

#### Legal citations:

- N.J.S.A. 39:3-13.2a and 39:3-13.4a. and c. driving;
   N.J.S.A. 39:4-97.3b Definition of covered wireless communication devices;
   N.J.S.A. 39:4-97.3d Minimum fine of at least \$25 for an offense;
   N.J.S.A. 39:3-13 (No Exemptions) Exemptions from youth cell phone use ban.
- The State has conformed its distracted driving data to the most recent Model
  Minimum Uniform Crash Criteria (MMUCC) and will provide supporting data (i.e.,
  NHTSA-developed MMUCC Mapping spreadsheet) within 30 days after notification
  of award.

### **■ PART 7: MOTORCYCLIST SAFETY GRANTS (23 CFR 1300.25)**

[Check the box above only if applying for this grant.]

[Check at least 2 boxes below and fill in all blanks under those checked boxes only.]

| ■ Mot | orcycle riding training course:  |
|-------|--|
| •     | The name and organization of the head of the designated State authority over motorcyclist safety issues is New Jersey Motor Vehicle Commission.  |
| •     | The head of the designated State authority over motorcyclist safety issues has approved and the State has adopted one of the following introductory rider curricula: [Check at least one of the following boxes below and fill in any blanks.]   |
|       | ■ Motorcycle Safety Foundation Basic Rider Course;  □ TEAM OREGON Basic Rider Training;  □ Idaho STAR Basic I;   |
|       | ☐ California Motorcyclist Safety Program Motorcyclist Training Course; ☐ Other curriculum that meets NHTSA's Model National Standards for Entry-Level Motorcycle Rider Training and that has been approved by NHTSA.   |
| •     | In the HSP at _attached Sec. 405f (location), a list of counties or political subdivisions in the State where motorcycle rider training courses will be conducted during the fiscal year of the grant AND number of registered motorcycles in each such county or political subdivision according to official State motor vehicle records. |
| □ Mot | orcyclist awareness program:   |
| •     | The name and organization of the head of the designated State authority over motorcyclist safety issues is   |
| •     | The State's motorcyclist awareness program was developed by or in coordination with the designated State authority having jurisdiction over motorcyclist safety issues   |
| •     | In the HSP at  |
| •     | In the HSP at  |

where the incidence of crashes involving a motorcycle and another motor vehicle is highest, and a list that identifies, using State crash data, the counties or political subdivisions within the State ranked in order of the highest to lowest number of crashes involving a motorcycle and another motor vehicle per county or political subdivision.

| Reduction of fatalities and crashes involving motorcycles:   |
|--|
| Data showing the total number of motor vehicle crashes involving motorcycles is provided in the HSP at (location)  |
| Description of the State's methods for collecting and analyzing data is provided in the HSP at (location)  |
| Impaired driving program:  |
| <ul> <li>In the HSP at (location) performance measures and corresponding performance targets developed to reduce impaired motorcycle operation.</li> </ul> |
| • In the HSP at  |
| Reduction of fatalities and accidents involving impaired motorcyclists:  |
| Data showing the total number of reported crashes involving alcohol-impaired and drug-impaired motorcycle operators is provided in the HSP at (location)   |
| <ul> <li>Description of the State's methods for collecting and analyzing data is provided in the<br/>HSP at (location).</li> </ul>                         |
|  |

#### **■** Use of fees collected from motorcyclists for motorcycle programs:

| [Check one box on | ly below and | fill in all blanks | s under the checked | box only.] |
|-------------------|--------------|--------------------|---------------------|------------|
|-------------------|--------------|--------------------|---------------------|------------|

- ☐ Applying as a Law State
  - The State law or regulation requires all fees collected by the State from motorcyclists for the purpose of funding motorcycle training and safety programs are to be used for motorcycle training and safety programs. **AND**
  - The State's law appropriating funds for FY \_\_\_\_\_ demonstrates that all fees collected by the State from motorcyclists for the purpose of funding motorcycle training and safety programs are spent on motorcycle training and safety programs.
     Legal citation(s):\_\_\_\_\_
- Applying as a Data State
  - Data and/or documentation from official State records from the previous fiscal
    year showing that <u>all</u> fees collected by the State from motorcyclists for the
    purpose of funding motorcycle training and safety programs were used for
    motorcycle training and safety programs is provided in the HSP at
    the attached Sec. 405f application. (location).

## $\hfill \square$ PART 8: STATE GRADUATED DRIVER LICENSING INCENTIVE GRANTS (23 CFR 1300.26)

[Check the box above only if applying for this grant.]

[Fill in all applicable blanks below.]

The State's graduated driver's licensing statute, requiring both a learner's permit stage and intermediate stage prior to receiving an unrestricted driver's license, was last amended on \_\_\_\_\_\_ (date), is in effect, and will be enforced during the fiscal year of the grant.

#### Learner's Permit Stage -

#### Legal citations:

| • | Applies prior to receipt of any other permit,              |
|---|--|
|   | license, or endorsement by the State if applicant is       |
|   | younger than 18 years of age and has not been issued an    |
|   | intermediate license or unrestricted driver's license by   |
|   | any State;   |
| • | Applicant must pass vision test and knowledge              |
|   | assessment;  |
| • | In effect for at least 6 months;                           |
| • | In effect until driver is at least 16 years of age;        |
| • | Must be accompanied and supervised at all times;           |
| • | Requires completion of State-certified driver              |
|   | education or training course or at least 50 hours of       |
|   | behind-the-wheel training, with at least 10 of those hours |
|   | at night;  |
| • | Prohibits use of personal wireless                         |
|   | communications device;                                     |
| • | Extension of learner's permit stage if convicted of        |
| , | a driving-related offense;                                 |
| • | Exemptions from learner's permit stage.                    |
|   |  |

#### Intermediate Stage -

#### Legal citations:

Commences after applicant younger than 18 years of age successfully completes the learner's permit stage, but prior to receipt of any other permit, license, or endorsement by the State;
 Applicant must pass behind-the-wheel driving skills assessment;

| • | In effect for at least 6 months; In effect until driver is at least 17 years of age; Must be accompanied and supervised between hours of 10:00 p.m. and 5:00 a.m. during first 6 months |
|---|---|
|   | of stage, except when operating a motor vehicle for the purposes of work, school, religious activities, or emergencies;   |
| • | No more than 1 nonfamilial passenger younger than 21 years of age allowed;  |
| • | Prohibits use of personal wireless communications device;   |
| • | Extension of intermediate stage if convicted of a driving-related offense;  |
| • | Exemptions from intermediate stage.   |

#### **■ PART 9: NONMOTORIZED SAFETY GRANTS (23 CFR 1300.27)**

[Check the box above only applying for this grant AND only if NHTSA has identified the State as eligible because the State annual combined pedestrian and bicyclist fatalities exceed 15 percent of the State's total annual crash fatalities based on the most recent calendar year final FARS data.]

The State affirms that it will use the funds awarded under 23 U.S.C. 405(h) only for the implementation of programs as provided in 23 CFR 1300.27(d).

### □ PART 10: RACIAL PROFILING DATA COLLECTION GRANTS (23 CFR 1300.28)

[Check the box above only if applying for this grant.]

[*Che* 

| iec | eck one box <b>only</b> below and fill in <b>all</b> blanks under the checked box <b>only</b> .]  |  |  |  |  |  |  |  |
|-----|---|--|--|--|--|--|--|--|
|     | In the HSP at   |  |  |  |  |  |  |  |
|     | In the HSP at   |  |  |  |  |  |  |  |
|     | (location), the State will undertake countermeasure strategies and planned activities during the fiscal year of the grant to maintain and allow public inspection of statistical information on the race and ethnicity of the driver for each motor vehicle stop made by a law enforcement officer on all public roads except those classified as local or minor rural roads. (A State may not receive a racial profiling data collection grant by checking this box for more than 2 fiscal years.) |  |  |  |  |  |  |  |

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

- I have reviewed the above information in support of the State's application for 23 U.S.C.
   405 and Section 1906 grants, and based on my review, the information is accurate and complete to the best of my personal knowledge.
- As condition of each grant awarded, the State will use these 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.
- 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.

I understand that my statements in support of the State's application for Federal grant funds are statements 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.

Eric Heitmann Digitally signed by Eric Heitmann Date: 2020.06.08 12:28:22 -04'00' Date

Signature Governor's Representative for Highway Safety

## Eric Heitmann

Printed name of Governor's Representative for Highway Safety

### PROGRAM COST SUMMARY

| PROGRAM AREA  APPROVED PROGRAM COST  FUNDS   |   | FFY 2021 PR  | OGRAM COST S            | UMMARY              |                     |   |            |
|--|---|--------------|-------------------------|---------------------|---------------------|---|------------|
| PLANNING & ADMIN - PA 21-01 \$ 897,000 \$ 897,000 0 \$ 897,000 ALCOHOL - AL 21-07 \$ 700,000 0 0 0 \$ 700,000 PEDIBICYCLE SAFETY - PS 21-16 \$ 250,000 0 0 0 \$ 250,000 OCCUPANT PROTECTION - OP 21-11 \$ 1,275,000 \$ 1,0785,018 \$ 2,260,000 \$ 3,605,000 CTSP - CP 21-03 \$ 3,605,000 \$ 10,785,018 \$ 2,260,000 \$ 3,605,000 CTSP - CP 21-08 \$ 2,400,000 0 \$ 2,300,000 \$ 2,400,000 PAID MEDIA & PIBE - PM 21-21 \$ 400,000 0 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 400,000 0 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 400,000 0 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 0 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 0 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 \$ 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 \$ 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 \$ 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 \$ 0 \$ 75,000 \$ 3,000,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000 PAID MEDIA & PIBE - PM 21-21 \$ 125,000 PAID MEDIA & PIBE -                     | PROGRAM AREA  |              |                         |                     | CURRENT BALANCE     |   |            |
| ALCOHOL - AL 21-07 \$ 700,000 0 0 \$ 700,000 PED/BICYCLE SAFETY - PS 21-16 \$ 250,000 0 0 0 \$ 250,000 OCCUPANT PROTECTION - OP 21-11 \$ 1,275,000 0 \$ 800,000 \$ 1,275,000 POLICE TRAFFIC SVCS PT 21-03 \$ 3,605,000 \$ 10,785,018 \$ 2,260,000 \$ 3,605,000 CTSP - CP 21-08 \$ 2,400,000 0 \$ 2,300,000 \$ 2,400,000 PAID MEDIA & PI&E - PM 21-21 \$ 400,000 0 0 \$ 2,300,000 \$ 2,400,000 TRAFFIC RECORDS - TR 21-02 \$ 300,000 0 0 \$ 75,000 \$ 300,000 ROADWAY SAFETY - RS 21-61 \$ 125,000 0 0 0 \$ 125,000 TOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000  SECTION 405(b)  OCCUPANT PROTECTION \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000 TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(c) \$ 3,800,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(c) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(c) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(c) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(c) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(c) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(c) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(c) \$ 3,800,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(c) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(c) \$ 200,000 \$ 685,005 \$ 200,000 \$ 3,800,000  SECTION 405(c) \$ 200,000 \$ 685,005 \$ 200,000 \$ 3,800,000  SECTION 405(c) \$ 200,000 \$ 685,005 \$ 200,000 \$ 3,800,000  SECTION 405(c) \$ 200,000 \$ 685,005 \$ 200,000 \$ 3,800,000  | SECTION 402   |              |                         |                     |                     |   |            |
| PEDIBICYCLE SAFETY – PS 21-16 \$ 250,000 0 0 \$ 250,000  OCCUPANT PROTECTION – OP 21-11 \$ 1,275,000 0 \$ 800,000 \$ 1,275,000  POLICE TRAFFIC SVCS. – PT 21-03 \$ 3,605,000 \$ 10,785,018 \$ 2,260,000 \$ 3,605,000  CTSP – CP 21-08 \$ 2,400,000 0 \$ 2,300,000 \$ 2,400,000  PAID MEDIA & PI&E – PM 21-21 \$ 400,000 0 0 \$ 75,000 \$ 300,000  TRAFFIC RECORDS – TR 21-02 \$ 300,000 0 \$ 75,000 \$ 300,000  ROADWAY SAFETY – RS 21-61 \$ 125,000 0 0 0 \$ 125,000  TOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000  SECTION 405(b)  OCCUPANT PROTECTION \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d)  IMPAIRED DRIVING \$ 5,050,000 \$ 1,1690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d)  SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 5,800,000  TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(e) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  | PLANNING & ADMIN - PA 21-01   | \$ 897,000   | \$ 897,000              | 0                   | \$ 897,000          |   |            |
| OCCUPANT PROTECTION – OP 21-11         \$1,275,000         0         \$800,000         \$1,275,000           POLICE TRAFFIC SVCS. – PT 21-03         \$3,605,000         \$10,785,018         \$2,260,000         \$3,605,000           CTSP – CP 21-08         \$2,400,000         0         \$2,300,000         \$2,400,000           PAID MEDIA & PI&E – PM 21-21         \$400,000         0         0         \$400,000           TRAFFIC RECORDS – TR 21-02         \$300,000         0         \$75,000         \$300,000           ROADWAY SAFETY – RS 21-61         \$125,000         0         0         \$1,25,000           TOTAL SECTION 402         \$9,952,000         \$11,682,018         \$5,435,000         \$9,952,000           SECTION 405(b)         \$1,400,000         \$1,483,030         \$750,000         \$1,400,000           SECTION 405(b)         \$1,400,000         \$1,483,030         \$750,000         \$1,400,000           TRAFFIC RECORDS         \$1,725,000         \$1,690,133         \$625,000         \$1,725,000           TOTAL SECTION 405(c)         \$1,725,000         \$1,690,133         \$625,000         \$1,725,000           SECTION 405(d)         \$5,050,000         \$4,161,217         \$3,050,000         \$5,050,000 <td <="" colspan="2" td=""><td>ALCOHOL - AL 21-07</td><td>\$ 700,000</td><td>0</td><td>0</td><td>\$ 700,000</td></td>   | <td>ALCOHOL - AL 21-07</td> <td>\$ 700,000</td> <td>0</td> <td>0</td> <td>\$ 700,000</td> |              | ALCOHOL - AL 21-07      | \$ 700,000          | 0                   | 0 | \$ 700,000 |
| POLICE TRAFFIC SVCS. – PT 21-03 \$ 3,605,000 \$ 10,785,018 \$ 2,260,000 \$ 3,605,000 CTSP – CP 21-08 \$ 2,400,000 0 \$ 2,300,000 \$ 2,400,000 CTSP – CP 21-08 \$ 2,400,000 0 \$ 2,300,000 \$ 2,400,000 CTSP – CP 21-08 \$ 2,400,000 0 \$ 0 \$ 2,300,000 \$ 2,400,000 CTSP – CP 21-02 \$ 300,000 0 \$ 0 \$ 75,000 \$ 300,000 CTAAFFIC RECORDS – TR 21-02 \$ 300,000 0 \$ 75,000 \$ 300,000 CTOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000 CTOTAL SECTION 405(b) \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000 CTOTAL SECTION 405(b) \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 3,800,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 3,800,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000 CTOTAL SECTION 405(c) \$ 3,800,000 \$ 3,800,000 CTOTAL SECTION 405(c) \$ 3,800,000 CTOTAL SECTION 405( | PED/BICYCLE SAFETY – PS 21-16   | \$ 250,000   | 0                       | 0                   | \$ 250,000          |   |            |
| CTSP - CP 21-08         \$ 2,400,000         0         \$ 2,300,000         \$ 2,400,000           PAID MEDIA & PI&E - PM 21-21         \$ 400,000         0         0         \$ 400,000           TRAFFIC RECORDS - TR 21-02         \$ 300,000         0         \$ 75,000         \$ 300,000           ROADWAY SAFETY - RS 21-61         \$ 125,000         0         0         \$ 125,000           TOTAL SECTION 402         \$ 9,952,000         \$ 11,682,018         \$ 5,435,000         \$ 9,952,000           SECTION 405(b)           OCCUPANT PROTECTION         \$ 1,400,000         \$ 1,483,030         \$ 750,000         \$ 1,400,000           TOTAL SECTION 405(b)         \$ 1,400,000         \$ 1,483,030         \$ 750,000         \$ 1,400,000           SECTION 405(c)         \$ 1,725,000         \$ 1,690,133         \$ 625,000         \$ 1,725,000           TOTAL SECTION 405(c)         \$ 1,725,000         \$ 1,690,133         \$ 625,000         \$ 1,725,000           SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,600,000         \$ 3,800,000           SECTION 405(e)         \$ 3,800,000         \$   | OCCUPANT PROTECTION – OP 21-11  | \$ 1,275,000 | 0                       | \$ 800,000          | \$ 1,275,000        |   |            |
| PAID MEDIA & PI&E - PM 21-21 \$ 400,000 0 0 \$ 400,000  TRAFFIC RECORDS - TR 21-02 \$ 300,000 0 \$ 75,000 \$ 300,000  ROADWAY SAFETY - RS 21-61 \$ 125,000 0 0 \$ 125,000  TOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000  SECTION 405(b)  OCCUPANT PROTECTION \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  TOTAL SECTION 405(b) \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 1,725,000 \$ 1,690,137 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 5,050,000  SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  TOTAL SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000   | POLICE TRAFFIC SVCS. – PT 21-03   | \$ 3,605,000 | \$ 10,785,018           | \$ 2,260,000        | \$ 3,605,000        |   |            |
| TRAFFIC RECORDS - TR 21-02 \$ 300,000 0 \$ 75,000 \$ 300,000  ROADWAY SAFETY - RS 21-61 \$ 125,000 0 0 0 \$ 125,000  TOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000  SECTION 405(b)  OCCUPANT PROTECTION \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  TOTAL SECTION 405(b) \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(f) \$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | CTSP – CP 21-08   | \$ 2,400,000 | 0                       | \$ 2,300,000        | \$ 2,400,000        |   |            |
| ROADWAY SAFETY - RS 21-61 \$ 125,000 0 0 \$ 125,000  TOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000  SECTION 405(b)  | PAID MEDIA & PI&E – PM 21-21  | \$ 400,000   | 0                       | 0                   | \$ 400,000          |   |            |
| TOTAL SECTION 402 \$ 9,952,000 \$ 11,682,018 \$ 5,435,000 \$ 9,952,000  SECTION 405(b)  OCCUPANT PROTECTION \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  TOTAL SECTION 405(b) \$ 1,400,000 \$ 1,483,030 \$ 750,000 \$ 1,400,000  SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(f) \$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | TRAFFIC RECORDS – TR 21-02  | \$ 300,000   | 0                       | \$ 75,000           | \$ 300,000          |   |            |
| SECTION 405(b)   S 1,400,000   \$ 1,483,030   \$ 750,000   \$ 1,400,000  | ROADWAY SAFETY - RS 21-61   | \$ 125,000   | 0                       | 0                   | \$ 125,000          |   |            |
| OCCUPANT PROTECTION         \$ 1,400,000         \$ 1,483,030         \$ 750,000         \$ 1,400,000           TOTAL SECTION 405(b)         \$ 1,400,000         \$ 1,483,030         \$ 750,000         \$ 1,400,000           SECTION 405(c)         \$ 1,725,000         \$ 1,690,133         \$ 625,000         \$ 1,725,000           TOTAL SECTION 405(c)         \$ 1,725,000         \$ 1,690,133         \$ 625,000         \$ 1,725,000           SECTION 405(d)           IMPAIRED DRIVING         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)         \$ 200,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000  | TOTAL SECTION 402   | \$ 9,952,000 | \$ 11,682,018           | \$ 5,435,000        | \$ 9,952,000        |   |            |
| OCCUPANT PROTECTION         \$ 1,400,000         \$ 1,483,030         \$ 750,000         \$ 1,400,000           TOTAL SECTION 405(b)         \$ 1,400,000         \$ 1,483,030         \$ 750,000         \$ 1,400,000           SECTION 405(c)         \$ 1,725,000         \$ 1,690,133         \$ 625,000         \$ 1,725,000           TOTAL SECTION 405(c)         \$ 1,725,000         \$ 1,690,133         \$ 625,000         \$ 1,725,000           SECTION 405(d)           IMPAIRED DRIVING         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)         \$ 200,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000  |   |              |                         |                     |                     |   |            |
| TOTAL SECTION 405(b) \$1,400,000 \$1,483,030 \$750,000 \$1,400,000  SECTION 405(c)   | • •   | \$ 1 400 000 | \$ 1 /83 030            | \$ 750,000          | \$ 1,400,000        |   |            |
| SECTION 405(c)         \$1,725,000         \$1,690,133         \$625,000         \$1,725,000           TOTAL SECTION 405(c)         \$1,725,000         \$1,690,133         \$625,000         \$1,725,000           SECTION 405(d)           IMPAIRED DRIVING         \$5,050,000         \$4,161,217         \$3,050,000         \$5,050,000           TOTAL SECTION 405(d)         \$5,050,000         \$4,161,217         \$3,050,000         \$5,050,000           SECTION 405(e)         DISTRACTED DRIVING         \$3,800,000         \$5,826,522         \$3,600,000         \$3,800,000           TOTAL SECTION 405(e)         \$3,800,000         \$5,826,522         \$3,600,000         \$3,800,000           SECTION 405(f)         MOTORCYCLE         \$200,000         \$685,005         \$200,000         \$200,000           TOTAL SECTION 405(f)         \$200,000         \$685,005         \$200,000         \$200,000           SECTION 405(h)         NON-MOTORIZED SAFETY         \$1,500,000         \$1,588,045         \$1,400,000         \$1,500,000   |   |              |                         |                     |                     |   |            |
| TRAFFIC RECORDS \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d)  | 101AL 0L011014 400(B)   | ψ 1,400,000  | ψ 1,403,030             | ψ 130,000           | ψ 1,400,000         |   |            |
| TOTAL SECTION 405(c) \$ 1,725,000 \$ 1,690,133 \$ 625,000 \$ 1,725,000  SECTION 405(d)   | SECTION 405(c)  |              |                         |                     |                     |   |            |
| SECTION 405(d)         IMPAIRED DRIVING         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           TOTAL SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(e)           DISTRACTED DRIVING         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           TOTAL SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(f)           MOTORCYCLE         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           TOTAL SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)           NON-MOTORIZED SAFETY         \$ 1,500,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000   | TRAFFIC RECORDS   | \$ 1,725,000 | \$ 1,690,133            | \$ 625,000          | \$ 1,725,000        |   |            |
| IMPAIRED DRIVING         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           TOTAL SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(e)           DISTRACTED DRIVING         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           TOTAL SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(f)           MOTORCYCLE         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           TOTAL SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)           NON-MOTORIZED SAFETY         \$ 1,500,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000  | TOTAL SECTION 405(c)  | \$ 1,725,000 | \$ 1,690,133            | \$ 625,000          | \$ 1,725,000        |   |            |
| IMPAIRED DRIVING         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           TOTAL SECTION 405(d)         \$ 5,050,000         \$ 4,161,217         \$ 3,050,000         \$ 5,050,000           SECTION 405(e)           DISTRACTED DRIVING         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           TOTAL SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(f)           MOTORCYCLE         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           TOTAL SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)           NON-MOTORIZED SAFETY         \$ 1,500,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000  | 050510N 405/ I\   |              |                         |                     |                     |   |            |
| TOTAL SECTION 405(d) \$ 5,050,000 \$ 4,161,217 \$ 3,050,000 \$ 5,050,000  SECTION 405(e)  DISTRACTED DRIVING \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(f)  MOTORCYCLE \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  TOTAL SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(h)  NON-MOTORIZED SAFETY \$ 1,500,000 \$ 1,588,045 \$ 1,400,000 \$ 1,500,000   |   | \$ 5,050,000 | \$ 4.161.217            | \$ 3.050.000        | \$ 5,050,000        |   |            |
| SECTION 405(e)         \$3,800,000         \$5,826,522         \$3,600,000         \$3,800,000           TOTAL SECTION 405(e)         \$3,800,000         \$5,826,522         \$3,600,000         \$3,800,000           SECTION 405(f)         \$200,000         \$685,005         \$200,000         \$200,000           TOTAL SECTION 405(f)         \$200,000         \$685,005         \$200,000         \$200,000           SECTION 405(h)         \$1,500,000         \$1,588,045         \$1,400,000         \$1,500,000   |   |              |                         |                     | . , ,               |   |            |
| DISTRACTED DRIVING         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           TOTAL SECTION 405(e)         \$ 3,800,000         \$ 5,826,522         \$ 3,600,000         \$ 3,800,000           SECTION 405(f)           MOTORCYCLE         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           TOTAL SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)           NON-MOTORIZED SAFETY         \$ 1,500,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000   | 1017/E 0E011014 400(d)  | ψο,σοσ,σοσ   | ψ <del>4</del> ,101,211 | <b>\$</b> 0,000,000 | <b>\$ 0,000,000</b> |   |            |
| TOTAL SECTION 405(e) \$ 3,800,000 \$ 5,826,522 \$ 3,600,000 \$ 3,800,000  SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  TOTAL SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(h) \$ 1,500,000 \$ 1,588,045 \$ 1,400,000 \$ 1,500,000   | SECTION 405(e)  |              |                         |                     |                     |   |            |
| SECTION 405(f)         Company of the property   | DISTRACTED DRIVING  | \$ 3,800,000 | \$ 5,826,522            | \$ 3,600,000        | \$ 3,800,000        |   |            |
| MOTORCYCLE         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           TOTAL SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)           NON-MOTORIZED SAFETY         \$ 1,500,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000  | TOTAL SECTION 405(e)  | \$ 3,800,000 | \$ 5,826,522            | \$ 3,600,000        | \$ 3,800,000        |   |            |
| MOTORCYCLE         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           TOTAL SECTION 405(f)         \$ 200,000         \$ 685,005         \$ 200,000         \$ 200,000           SECTION 405(h)           NON-MOTORIZED SAFETY         \$ 1,500,000         \$ 1,588,045         \$ 1,400,000         \$ 1,500,000  | CECTION 405(4)  |              |                         |                     |                     |   |            |
| TOTAL SECTION 405(f) \$ 200,000 \$ 685,005 \$ 200,000 \$ 200,000  SECTION 405(h)  NON-MOTORIZED SAFETY \$ 1,500,000 \$ 1,588,045 \$ 1,400,000 \$ 1,500,000   |   | \$ 200,000   | \$ 685 005              | \$ 200,000          | \$ 200,000          |   |            |
| SECTION 405(h)  NON-MOTORIZED SAFETY \$ 1,500,000 \$ 1,588,045 \$ 1,400,000 \$ 1,500,000   |   | ·            | . ,                     | ·                   | ·                   |   |            |
| NON-MOTORIZED SAFETY \$ 1,500,000 \$ 1,588,045 \$ 1,400,000 \$ 1,500,000   | 10 IAL OLO HON TOO(I)   | Ψ 200,000    | Ψ 000,000               | Ψ 200,000           | Ψ 200,000           |   |            |
|  | SECTION 405(h)  |              |                         |                     |                     |   |            |
| TOTAL SECTION 405(h) \$ 1,500,000 \$ 1,588,045 \$ 1,400,000 \$ 1,500,000   | NON-MOTORIZED SAFETY  | \$ 1,500,000 | \$ 1,588,045            | \$ 1,400,000        | \$ 1,500,000        |   |            |
|  | TOTAL SECTION 405(h)  | \$ 1,500,000 | \$ 1,588,045            | \$ 1,400,000        | \$ 1,500,000        |   |            |

