



# ANNUAL

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# REPORT 2021



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**STATE OF NEW JERSEY**  
**Highway Safety Annual Report**  
**FEDERAL FISCAL YEAR 2021**  
**October 1, 2020 through September 30, 2021**

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## **INTRODUCTION**

The New Jersey Division of Highway Traffic Safety (DHTS), by N.J.S.A. 27:5F-18 et seq., is responsible under its Director for developing and implementing, on behalf of the Governor, the New Jersey Highway Safety Program, a comprehensive plan to reduce fatalities, injuries and property damage resulting from traffic crashes. The plan is developed in accordance with the U.S. Highway Safety Act of 1966 (P.L.89-564) and any acts amendatory or supplementary thereto. DHTS is also responsible for procuring and administering federal highway traffic safety funds, and processing and administering grants to State agencies, political subdivisions and nonprofit organizations. As the State's lead highway traffic safety agency, DHTS promotes traffic safety and coordinates the traffic safety activities of State and local agencies as part of a comprehensive statewide traffic safety program. The Highway Safety Plan for Federal Fiscal Year 2021 (FFY 2021), developed in accordance with 23 U.S.C. 402, is part of this effort.

DHTS is located in the Department of Law and Public Safety. The Division Director is appointed by, and serves at the pleasure of, the Governor. By the terms of N.J.S.A. 27:5F-32, the Director is specifically appointed as the Governor's Representative for highway traffic safety matters to the National Highway Traffic Safety Administration (NHTSA), although as a functional matter, this also entails all dealings with the Federal Highway Administration of the United States Department of Transportation. The Director is also chairperson of the Governor's Highway Traffic Safety Policy Advisory Council (N.J.S.A. 27:5F-31). The Director's administration of the Division is under the auspices of the Governor and the Attorney General.

## **MISSION STATEMENT**

The mission of DHTS is the safe passage of all roadway users in New Jersey as we move towards zero fatalities.

## **EXECUTIVE SUMMARY**

The Highway Safety Plan Annual Report for FY 2021 (October 1, 2020 - September 30, 2021) addresses the use of monies from the annual allotment of Section 402 State and Community Highway Safety funds. The report also addresses the use of funds from the following grant programs: Section 405 (b,c,d,e,f and h), National Priority Safety Program Grants. Funds from these sections supported projects in the following areas: alcohol and other drug countermeasures; occupant protection; pedestrian and bicycle safety; community traffic safety programs; police traffic services and training; traffic records; other vulnerable road users; and paid and earned media. The DHTS awarded 563 federally-funded projects in FY 2021. The amount of funds allocated to those projects totaled over \$19,000,000 in both new allocations and carryover monies. Projects were implemented by State and local entities and nonprofit organizations. The Division also oversees and coordinates the State Drunk Driving Enforcement Fund, N.J.S.A. 39:4-50.8, the Pedestrian Safety, Enforcement and Education Fund and the Motor Vehicle Snow and Ice Removal Safety Fund.

The annual report provides an overview of the projects funded during the year and the status of the performance measures identified in the FY 2021 Highway Safety Plan. Based on available data, DHTS anticipates meeting eight of the 19 core outcome goals set forth in the FY 2021 Highway Safety Plan. It is important to note that among the 11 core outcome goals not met, several of these program areas are seeing downward data trends nonetheless (serious traffic crash injuries and unhelmeted motorcyclist fatalities). DHTS will continue to conduct a thorough review of all of its performance measures to determine where additional resources are needed to improve traffic safety in New Jersey.

The cooperation and participation of governmental and private sector partners of the DHTS are critical to the overall success of the highway safety program. The principal forum for these traffic safety partners is the Highway Traffic Safety Policy Advisory Council (HTSPAC), which consists of 21 members, appointed by the Governor, who assist in recommending and developing traffic safety policy and programs. HTSPAC membership was updated and reconstituted in FY2021.

In addition, NHTSA and the Federal Highway Administration provide leadership and technical assistance to DHTS. Other partners include the Division of State Police; NJ Motor Vehicle Commission; Division of Alcoholic Beverage Control; Department of Transportation; Department of Education; Department of Health; Office of Emergency Medical Services; Administrative Office of the Courts; Department of Community Affairs; local law enforcement agencies, including the Association of Chiefs of Police and the Traffic Officers Association; universities; advocacy groups, including AAA and the Brain Injury Alliance of NJ; the

Transportation Management Associations; as well as other private sector businesses and organizations. All of these partner organizations play a key role in developing and implementing New Jersey's traffic safety program.

## **COVID-19 PUBLIC HEALTH CRISIS**

The worldwide Covid-19 public health crisis continued to impact traffic safety in the state in FY2021, though thankfully not to the extent of FY2020. New Jersey was able to carry out its full schedule of four statewide enforcement mobilizations in FY2021 as well as the annual seat belt usage survey.

The results from the mobilization campaigns, as well as other DHTS grant programs, indicate that a reduction in overall enforcement activity by police agencies first noted during the height of the health crisis continued in FY2021. In addition, an increase in risky driving behaviors first noted during the pandemic also continued into FY2021. The combination of poor driver behavior coupled with reduced enforcement activities must be considered a key cause of recent increases in motor vehicle fatalities both in New Jersey and nationally.

## **2020 NJ STRATEGIC HIGHWAY SAFETY PLAN**

DHTS is committed to assisting in the implementation of the 2020 SHSP tasks throughout its grant programs. 35 key SHSP emphasis area tasks were identified in the 2020. As of November, 2021, the average level of progress on these tasks was 38%:

### Equity Priority Actions

Engage local advocates to share grant program opportunities with underserved communities.

Identify best practices for considering equity in grant programs.

Identify best practices for integrating equity consideration with Highway Safety Manual analyses.

Identify and define underserved communities' parameters to be used for SHSP.

Average progress 39%.

### Intersections Priority Actions

Map high-risk county and municipal intersections.

Best practices for identifying county and municipal road safety audit locations.

Map high-risk pedestrian intersections on local roadway system.

Proven traffic control and operational countermeasure best practices.

Develop tools for reducing right angle and left turn crashes at county and municipal intersections.

Average progress 49%.

#### Lane Departure Priority Actions

Map lane departure fatalities and serious injuries on local roadway system.

Identify resources to assist road owners in lane departure crash locations.

Best practice strategies to improve data collection process for roadway fixed objects.

Peer exchanges related to lane departure best practices.

Plan to share specifications, details, and Crash Modification Factors.

Average progress 37%.

#### Pedestrians and Bicyclists Priority Actions

Establish a Complete Streets Task Force

Research automated speed enforcement and vulnerable road users policies/practices.

Identify pedestrian and bicyclist design guidance best practices.

Develop a strategy for performance-based implementation of Street Smart campaign statewide.

Identify best practices for safety at transit stops.

Average progress 26%.

#### Driver Behavior Priority Actions

Identify best practices for law enforcement training.

Identify best practices for police recruit training.

Identify driver behavior training, education, and marketing program best practices.

Identify media best practices to reduce aggressive driving.

Identify best practices to increase teen driver seatbelt compliance.

Identify underserved communities with an overrepresentation of driver behavior related fatalities and serious injuries.

Average progress 36%.

#### Other Vulnerable Road Users Priority Actions

Identify mature driver high-risk locations.

Increase motorcycle rider safety education.

Identify work zone safety best practices.

Increase crossing guard training.

Develop safety education content to protect crossing guards and children walking/biking to school training programs.

Average progress 38%.

#### Data Priority Actions

Identify NJTR-1 crash report critical fields.

Identify the police departments not completing critical fields on the NJTR-1 crash report.

Identify NJTR-1 crash report fields that are often not completed.

Identify NJTR-1 crash report common errors.

Research best practices in collecting and calculating bicycle and pedestrian volumes.

Average progress 45%.

## TRAFFIC CRASH DATA

New Jersey, like the nation as a whole, saw an increase in fatal motor vehicle crashes in 2020. Despite the COVID-19 pandemic, which resulted in a decrease of approximately 13.2% in vehicle miles traveled, preliminary data indicates that motor vehicle fatalities increased to a twelve year high of 38,680 deaths (nationally). In 2020, New Jersey experienced 549 fatal crashes that resulted in 587 fatalities. This is an increase of 5.2 percent from 558 in 2019, which equates to 1.61 fatalities per day. Fatalities in 2021 are trending upward and are 18 percent higher than 2020 at the time of this report. Preliminary data shows a reduction only in the number of passengers fatally injured in motor vehicle crashes in 2021 while increases are noted in the other categories.

The total number of persons seriously injured in motor vehicle-related crashes increased dramatically in 2019 due to an injury classification definition change on the New Jersey Police Accident Report (PAR – NJTR-1). In 2019, there were 3,047 persons seriously injured in motor vehicle-related crashes, compared to 1,284 in 2018. In 2020, despite a 31 percent reduction in overall crashes on New Jersey's roadways, serious injuries only declined 7.7 percent (6.5% crash reduction) resulting in 2,811 serious injuries. At the time of this report, only 47,773 crash records for 2021 have been processed, resulting in 645 serious injuries. Serious injury motor vehicle crashes will be closely monitored as the 2021 data continues to be processed. An updated curriculum component was recently added to the NJTR-1 refresher trainings to address the updated definition changes pertaining to the Final Rule in FY2020.

Alcohol played a significant role in motor vehicle crashes in 2020, with 151 alcohol-impaired fatalities reported. This represented a 17 percent increase from the 129 alcohol impaired driving fatalities reported in 2019. Over 25 percent of all motor vehicle fatalities in New Jersey were a result of one or more drivers driving under the influence of alcohol in 2020. At the time of this report, there have been 46 confirmed alcohol involved fatalities reported in 2021 with numerous alcohol-related cases pending toxicology report results.

Pedestrian fatalities are also a major area of concern in New Jersey as they accounted for nearly 30 percent of total fatalities in the state in 2020. At the time of this report, there have been 196 pedestrians killed compared to 160 at this same time in 2020. Bicyclist fatalities increased 38 percent in 2020 (18) compared to 2019 (13). Year-to-date for 2021 there has been one additional bicycle fatality (19 compared to 18).

New Jersey has made great progress in reducing the number of teen drivers (16-20 years of age) involved in fatal crashes. However, teen driver involved fatalities increased 18 percent in 2020 (64 involved drivers) compared to 2019 (54 involved drivers). At the time of this report, preliminary figures are showing a decline in young driver involvement in fatal crashes in 2021.

Motorcycle fatalities (drivers and passengers) decreased by 8 percent in 2020 from 85 in 2019 to 78. Also, the number of fatally injured motorcycle riders that were unhelmeted decreased from 15 in 2019 to 8 in 2020.

Driver behavioral issues such as speeding, driving distracted, and driving under the influence of drugs and/or alcohol continue to plague our roadways. Over the past five years (2016-2020) more than 55 percent of all crashes in New Jersey were the result of speed, distracted driving, and/or impaired driving. 2020 presented new pandemic related traffic safety challenge with abnormalities in travel patterns and personal driving routines.

Traffic related deaths continue to be the leading cause of accidental deaths in New Jersey and the nation. Through enforcement and education programs targeting the motoring public, we will continue to work towards the reduction of motor vehicle fatalities on our roadways. State, county and local agencies along with our other non-profit partners remain steadfast in our cooperative effort to promote effective strategies and programs to reduce overall motorist fatalities on our roads. With the help of our partners, DHTS will continue to strive to meet the goals outlined in the Highway Safety Plan while looking for new, innovative ways to address areas where goals were not met.



## ASSESSMENT OF PROGRESS

States are required to report the progress on the set of performance measures used in the development and implementation of the 2021 Highway Safety Plan. The eighteen core outcome measures and one behavior measure set forth in the 2021 Plan are listed below:

	Goal	Result
1	To reduce total roadway fatalities by 1.5% from 581.2 (2014-2018 avg) to 574 (2017-2021 avg).	The number of traffic fatalities in 2020 increased to 587 from 558 in 2019. As of December 1, 2021, there were a total of 628 fatalities or a 16 percent increase from the previous year by the same date. The effects of the pandemic continued in 2021, such as irregular travel patterns, and in some cases reckless driving, which generated a modest increase in fatalities and injuries in crashes. The performance measure will not be met (forecasted 2017-2021 average is 597).
2	To limit the forecasted increase of total serious traffic injuries to less than 90.8% from 1,113.6 (2014-2018 average) to 2,124.8 (2017-2021 average)	The number of serious injuries decreased to 2,811 in 2020 from 3,047 in 2019. Beginning in 2019, New Jersey updated the injury severity classification labels/definitions, which DHTS believes led to a sharp increase in reported serious injuries. An updated curriculum component was added to the NJTR-1 refresher trainings pertaining to the Final Rule in FY2020 to clarify the new definitions. The performance measure is not expected to be met (forecasted 2017-2021 average is 2,258).
3	To reduce the total fatalities per VMT by 3% from .758 (2014-2018 average) to .740 (2017-2021 average)	The fatalities/VMT in 2020 was 0.885, however the 5-year average (2016-2020) was 0.782. Though New Jersey saw 15 percent less miles traveled throughout the State's roadways, overall fatalities increased 5 percent. VMT totals for calendar year 2021 are currently unavailable. Using 2019 VMTs to forecast 2021 fatality rate, it is expected the performance measure will not be met (forecasted 2017-2021 average is 0.795).
4	To reduce unrestrained passenger fatalities by 3.9% from 125.4 (2014-2018 average) to 120.5 (2017-2021 average)	The number of unrestrained occupant fatalities in 2020 increased to 126 from 109 in 2019. As of December 1, 2021, the number of confirmed unrestrained passenger vehicle occupant fatalities totaled 47. Should there be 123 or fewer unrestrained fatalities in 2021, the performance measure will be met (forecasted 2017-2021 average is 120.3 with 123 fatalities).
5	To reduce alcohol related fatalities 6.8% from 129.6.6 (2014-2018 average) to 120.8 (2017-2021 average)	The number of alcohol impaired driving fatalities in 2020 was 151, an increase from 129 in 2019. As of December 1, 2021, the number of confirmed alcohol involved fatalities was 46. New Jersey is expecting to see similar levels of impaired driving in 2021 upon completion of medical examinations. The performance measure is not expected to be met (forecasted 2017-2021 average is 135.6).
6	To reduce total speed related fatalities of .01% from 119.8 (2014-2018 average) to 119.8 (2017-2021 average)	The number of speed related fatalities in 2020 increased to 142 from the previous year's total of 110. As of December 1, 2021, there were a confirmed total of 44 speed related fatalities. Speeding and reckless driving have increased throughout the State. Due to this trend, this performance measure is not expected to be met (forecasted 2017-2021 average is 127.8).

7	To limit the forecasted increase of motorcycle fatalities of 22.3% from 63.8 (2014-2018 average) to 78 (2017-2021 average)	There was a total of 78 motorcycle fatalities in 2020, a decrease from 85 in 2019. As of December 1, 2021, there were a total of 72 motorcycle fatalities. There is an anticipated reduction in total fatalities in 2021, therefore the performance goal should be met. (forecasted 2017-2021 average is 75.6).
8	To limit the forecasted increase in unhelmeted motorcycle fatalities of 30% from 5 (2014-2018 average) to 6.5 (2017-2021 average)	There was a significant increase in the number of unhelmeted motorcycle fatalities in 2019 (15) compared to 7 in 2018. However, the number of unhelmeted motorcyclist deaths dropped to 8 in 2020. As of December 1, 2021, there were a total of 2 unhelmeted motorcycle fatalities reported. Though there was a decline in 2020, this performance measure is not expected to be met (forecasted 2017-2021 average is 8.2).
9	To reduce young driver involved fatalities by 6.4% from 60.6 (2014-2018 average) to 56.7 (2017-2021 average)	The number of drivers age 20 or younger involved in fatal crashes in 2020 totaled 64, an increase from 54 in 2019. As of December 1, 2021, there were a total of 61 drivers under the age of twenty involved in fatal crashes. Should there be fewer than 63 young drivers involved in fatal crashes in 2021, this performance measure will be met (forecasted 2017-2021 average is 56.7).
10	To limit the forecasted increase of pedestrian fatalities of 5.2% from 171.8 (2014-2018 average) to 180.7 (2017-2021 average)	The number of pedestrian fatalities in 2020 totaled 173, a slight decline from 174 in 2019. As of December 1, 2021, there were a total of 196 pedestrian fatalities representing a 21 percent increase compared to the same date last year. The increase in outdoor activity due to the pandemic generated a spike in non-motorists killed and injured in crashes. Due to the sharp increase in pedestrian fatalities the performance measure will not be met (forecasted 2017-2021 average is 182.6).
11	To reduce bicyclist fatalities by 17.1% from 15.8 (2014-2018 average) to 13.1 (2017-2021 average)	The number of bicyclist fatalities in 2020 totaled 18, an increase from 13 in 2019. As of December 1, 2021, there were a total of 19 bicycle fatalities up from 18 during the same date in 2020. The increase in outdoor activity due to the pandemic generated a spike in non-motorists killed and injured in crashes. This performance measure is not expected to be met (forecasted 2017-2021 average is 17 assuming 19 fatalities in 2021).
12	To reduce drug involved fatalities by 4.4% from 90 (2014-2018 average) to 86 (2018-2021 average)	The number of drug involved fatalities in 2020 totaled 154, an increase from 85 in 2019. As of December 1, 2021, there were a confirmed total of 52 drug involved fatalities. This performance measure is not expected to be met (forecasted 2017-2021 average is 108.9).
13	To limit the forecasted increase of drug involved crashes of 33.5% from 1,303 (2014-2018 average) to 1,739 (2017-2021 average)	The number of drug involved crashes in 2020 totaled 1,591 down from 1,764 in 2019. Although drugged driving decreased 9.8% from 2019 to 2020, overall crashes declined 30% during that same period. Though New Jersey is experiencing an increase in drug-impaired driving, the performance measure is expected to be met (forecasted 2017-2021 average is 1,654.4).
14	To reduce distracted driving related fatalities by 36% from 157 (2014-2018 average) to 99 (2017-2021 average)	The number of distracted driving fatalities in 2020 totaled 172, a 26% increase from 2019 (137). As of December 1, 2021, there were a confirmed total of 82 distracted driving fatalities. This performance measure is not expected to be met (forecasted 2017-2021 average is 151).

15	To reduce distracted driving related crashes by 3.9% from 144,595 (2014-2018 average) to 138,927 (2017-2021 average)	The number of distracted driving crashes in 2020 totaled 90,881, down from 137,111 in 2019, which is the fourth consecutive annual decrease in distracted driving crashes in New Jersey. There was a 33% reduction in distracted driving crashes, compared to a 30% reduction of all crashes in New Jersey. This performance measure is expected to be met (forecasted 2017-2021 average is 128,052).
16	To reduce speed related crashes by 4.13% from 16,821 (2014-2018 average) to 16,127 (2017-2021 average)	The number of speed related crashes in 2020 totaled 12,499, a reduction from 15,172 in 2019. Though there was a 17% reduction in speed-involved crashes, overall crashes declined 33% from 2019 to 2020. This performance measure is expected to be met (forecasted 2017-2021 average is 15,347).
17	To limit the forecasted increase of older driver fatalities of 0.3% from 65.2 (2014-2018 average) to 65.4 (2017-2021 average)	The number of older driver (65+ years of age) fatalities in 2020 totaled 57, a decrease from 62 in 2019. As of December 1, 2021, there were a total of 62 older driver fatalities. Should this upward trend continue through the end of the year and the total number of older drivers killed exceeds 64, this performance measure will not be met (forecasted 2017-2021 average is 65.6).
18	To reduce work zone crashes by 20.8% from 4,883 (2014-2018 average) to 3,865 (2017-2021 average)	The number of work zone related crashes in 2020 totaled 2,803, the lowest number of crashes since electronic record keeping began. There was also a drastic decline in the volume of road work projects and vehicles on the roadway for much of 2020. Due to a 27 percent decrease from 2019, the performance measure is expected to be met (forecasted 2017-2021 average is 3,430).
1	To obtain a seat belt observational usage rate of no less than 91 percent	The annual statewide seat belt usage survey, conducted by the New Jersey Institute of Technology in 2021, found the State's front seat belt usage rate to be at 93.92 percent or an increase of 3.69 percent when compared to the 2019 observed usage rate of 90.23 percent. This performance measure, established in FY21, has been met (2017-2021 average was 92.58 percent).

## Activity Measures

1. **Seat Belt:** There were a total of 14,790 seat belt citations issued during grant-funded enforcement activities in FY2021, up from 2,023 in 2020. Note: three of the four planned statewide enforcement mobilizations in FY2020 were cancelled due to the public health emergency.
2. **Impaired Driving:** There were a total of 2,414 impaired driving arrests made during grant-funded enforcement activities in FY2021, up from 1,208 in 2020. Note: three of the four planned statewide enforcement mobilizations in FY2020 were cancelled due to the public health emergency.
3. **Speed:** There were a total of 16,231 speeding citations issued during grant-funded enforcement activities in FY2021, up from 4,960 in 2020. Note: three of the four planned statewide enforcement mobilizations in FY2020 were cancelled due to the public health emergency.

## UNMET PERFORMANCE TARGETS

Reviewing performance targets is an important, ongoing process. When targets are not met, programmatic efforts should be adjusted accordingly. For FY2021 performance targets not met, DHTS plans the following activities in the next HSP cycle (FY2023).

### Total Roadway Fatalities (1) and Total Fatalities per VMT (3):

The state of New Jersey, along with the rest of the nation, faces very significant challenges in the realm of traffic safety based on what has transpired in 2020 and 2021. Motor vehicle fatalities are up significantly due to a combination of factors relating to the pandemic, driver behavior, and enforcement considerations. DHTS recognizes these challenges and has many new countermeasures planned for the near future, which are detailed throughout this report. A few highlights include:

- Two major paid media campaigns (impaired driving and distracted driving).
- Development of a comprehensive Safety Data Resources Center.
- Implementation of 35 NJ Strategic Highway Safety Plan key emphasis area tasks.
- New programs and resources relating to mature drivers (Voorhees Transportation Institute).
- Rollout and publicizing the state's new pedestrian/bicycle "Safe Passing Law".
- Targeted sustained and mobilization enforcement grants utilizing the Crash Analysis Tool.
- New and expanded pedestrian and child passenger safety-related projects in underserved communities.

### Serious Traffic Injuries (2):

The number of serious injuries in the state declined by eight percent in 2020 compared to 2019. This is a positive development following a significant increase in serious injuries in the preceding year, which DHTS attributed to updated severity labels/definitions on the NJTR-1, which took effect January 1, 2019, and the interpretation of injuries sustained in the crash by the reporting officer. Moving forward, an updated curriculum component to the NJTR-1 Refresher Trainings has been pushed out to clarify the new definitions. As reporting becomes more accurate and consistent these serious injury numbers should continue to decline, when impacted by the various new and enhanced traffic safety countermeasures and programs detailed in the other performance measure areas of this report.

### Alcohol-related Fatalities (5):

The number of alcohol-related annual fatalities rose slightly in 2020, reversing a downward trend from preceding years. In light of this, a large-scale statewide public information paid media campaign will be carried out in calendar year 2022 in this critical area. Also, impaired driving enforcement efforts will be ramped up in the form of additional year-long sustained enforcement grants in communities that are ranked high for alcohol-related crashes and fatalities. The DHTS

Crash Analysis Tool will allow for a more targeted approach to awarding mobilization grants for the national crackdown periods. Targeted social media messaging will be employed to get messaging to high-risk groups. Other activities that should have a positive impact include continued work by the state's new Impaired Driving Task Force and a recently re-launched state Drunk Driving Enforcement Fund program, which will allow for more efficient use of impaired driving countermeasure resources.

#### Speed Related Fatalities (6):

Unfortunately, New Jersey was not immune from the significant increase in speed-related motor vehicle fatalities that the nation suffered during the pandemic year of 2020. All indications are that this troubling trend has continued in 2021. This program area relies heavily on police enforcement of existing speed laws and as such has faced the additional headwinds of reduced enforcement activity by law enforcement as a result of the pandemic and other societal pressures. Speed enforcement efforts in the state will get a boost in the year ahead with the deployment of a large number of radar speed devices, which were purchased by NJ State Police with DHTS grant funds. Additional municipal and county police agencies will also be engaged to undertake sustained speed enforcement projects, to supplement those agencies already working in this important area.

#### Unhelmeted Motorcycle Fatalities (8):

There was a significant increase in unhelmeted motorcycle fatalities in 2020 but it appears that an equally significant reduction is likely in 2021. With that said, one unhelmeted motorcycle fatality is too many, regardless of the year. New Jersey has a very active motorcycle safety program. Plans for FY2023 and beyond include working with the Motor Vehicle Commission, which coordinates rider training programs for the state, to increase enrollment in the classes. The statewide Motorcycle Coalition will review and modify, as needed, the various safety messaging that goes out to motorcycle riders and motor vehicle operators through traditional and social media. Though programs and messaging targeting helmet usage by motorcyclists is restrictive, this important messaging will be pushed out moving forward by DHTS's non-federally funded partners.

#### Pedestrian Fatalities (10):

Though there was a slight decline in statewide pedestrian fatalities in 2020, the situation is more troubling in 2021, as the state appears on its way to an all-time high number of pedestrian fatalities. Internal data analysis reveals that a large percentage of pedestrians being struck and killed had alcohol or drugs in their system at the time of the incident, which further complicates the issue. Moving forward, DHTS will put forth programming that aligns with the NJ SHSP pedestrian safety tasks in terms of data analysis, messaging, and equity considerations. As much as possible, grant funding for pedestrian safety enforcement and education will be expanded into the Top 25 NJ pedestrian crash ranked cities. With the assistance of partner agencies like AAA, NJDOT, NJTPA, and *Street Smart NJ*, DHTS will drill down further in these high pedestrian crashes cities to identify specific locations at which to focus enforcement and educational efforts. The

DHTS crash analysis tool will be very effective in this effort. Both the *Street Smart NJ* pedestrian safety program and the statewide school crossing guard educational program overseen by the Voorhees Transportation Institute will specifically target new programmatic efforts in 2022 into underserved communities, which have been adversely affected by this issue.

#### Bicyclist Fatalities (11):

Bicycle fatalities rose in the state in 2020 and it appears another increase will occur in 2021. Though not a large number of fatalities in the big picture, DHTS will nonetheless ask its CTSP partner agencies to expand their grass roots bicycle safety programming efforts in the upcoming year. A new funded program with the non-profit NJ Bike and Walk Coalition will build a network of community based *Street Savvy Cyclist* teams, which will model, promote and expand safe cycling behavior to other riders in their respective communities through education, special events and public awareness campaigns. The recently passed “New Jersey Safe Passing Law”, which takes effect early in 2022, will afford DHTS and its grantees the chance to undertake a new round of important safety education and awareness on behalf of the state’s most vulnerable roadway users. This new law will be incorporated into bicycle safety training programs for law enforcement personnel.

#### Drug Involved Fatalities (12):

The recent uptick in drug-involved fatalities is a concern. Some of these increases can be attributed to New Jersey’s growing and robust DRE program, however the recent passage of legalized recreational cannabis in the state further complicates the issue. The ongoing rule making and rollout of the legalized cannabis industry will be closely monitored. In light of this, a large-scale statewide public information campaign will be carried out in calendar year 2022 focusing on drug and alcohol impaired driving. DHTS has an active DRE program that will be the focus of enforcement efforts in this realm, assuming that the critical court validation case involving the program ends favorably. New county participants were added to the state’s DRE call out program in FY2021 and existing programs expanded and refined their efforts. A new statewide Impaired Driving Task Force, begun in FY2021, will grow in the years ahead to take the lead role in developing and implementing new cooperative efforts in this critical area. In addition, a report is due in the months ahead on a comprehensive analysis of drugged driving data from the last ten-year period, which will assist in framing activities moving forward.

#### Distracted Driving Fatalities (14):

Distracted driving related motor vehicle fatalities increased significantly during pandemic year of 2020. All indications are that this troubling trend has continued in 2021. This is another program area, like speeding, that relies heavily on police enforcement of existing laws, which has generally been waning of late. In addition to targeted sustained and mobilization enforcement, this program area will get a boost as the results of the groundbreaking Rowan University driver distraction

research study are analyzed and put into use. DHTS also looks forward to building on the success of FY2021's "Take Control of Your Destiny – Don't Drive Distracted" paid media campaign with a follow-up program in FY2022.

Older Driver Fatalities (17):

The number of older drivers killed in crashes in the state declined in 2020, though it appears a small increase in fatalities is likely in 2021. DHTS has provided grant funding to the Voorhees Transportation Institute for a new project, which will identify best practices in mature driver safety programs and bring these programs to New Jersey as part of a Mature Driver Resource Center.

## **PROGRAM FUNDING**

### **Federally Funded Programs**

#### **A. Section 402 Program**

The State and Community Highway Safety Grant program is administered at the federal level primarily by NHTSA and partially by the Federal Highway Administration. The funds are intended to be used as seed money for innovative programs and as leverage to garner other State, local and private resources. The 402 program provides funds to improve the enforcement of existing laws, change public attitudes through education, and build State and local leadership in highway safety. DHTS awarded 60 grants in FY2021, totaling \$7,958,514.

402 program highlights included: First time grant funding to the state's Police Traffic Officers Association; a grant to the NJ Institute of Technology for the state's 2021 seat belt usage survey; 18 comprehensive police enforcement grants; 11 county and regional Community Traffic Safety Grants; New Jersey's Traffic Safety Resource Prosecutor and Statewide Law Enforcement Liaison; and large police training and public education grants with Rutgers University, Kean University, and the Brain Injury Alliance of NJ.

#### **B. Section 405(b) Occupant Protection Program**

The Section 405(b) Occupant Protection Program provides funds to implement effective occupant protection programs to reduce deaths and injuries resulting from individuals riding unrestrained or not properly restrained in motor vehicle child safety seats. DHTS awarded 46 grants, totaling \$1,197,604.

#### **C. Section 405(c) State Traffic Safety Information System Improvements**

The Section 405(c) Traffic Records Program establishes a State traffic safety information system improvement grant program. The program encourages the coordination of safety data systems across agencies and the development and maintenance of a comprehensive traffic safety information system. Projects that improve the timeliness, completeness, uniformity, accessibility, and quality of crash data qualify for funding. DHTS awarded three grants totaling \$891,063.

#### **D. Section 405(d) Impaired Driving Countermeasures**

The Section 405(d) Impaired Driving Countermeasures Program provides funds to implement programs to reduce traffic safety problems resulting from individuals driving motor vehicles



while under the influence of alcohol, drugs, or the combination of alcohol and drugs. DHTS awarded 134 grants in FY2021 totaling \$4,190,125.

#### **E. Section 405(e) Comprehensive Distracted Driving**

The Section 405(e) Comprehensive Distracted Driving Program encourages States to enact and enforce laws prohibiting texting while driving and youth cell phone use while driving. Funds are used to educate the public about the dangers of texting or using a cell phone while driving and for enforcement of distracted driving laws. DHTS awarded 145 grants with this funding, totaling \$2,233,203.

Section 405(e) regulations allow for 50% of the annual award to be reallocated into other programmatic areas. DHTS exercised this option and utilized new and carryover 405(e) flexed funds as follows: \$396,000 for 61 impaired driving crackdown grants; \$1,022,368 for 15 full year sustained enforcement grants targeting impaired driving, distracted driving, seat belt usage, and speeding; and \$499,800 for 65 grants for the May, 2021 Click It or Ticket mobilization.

#### **F. Section 405(f) Motorcycle Safety**

The Section 405(f) Motorcycle Safety Program provides funds to implement programs that will reduce the number of crashes, injuries, and fatalities involving motorcyclists. DHTS awarded one grant, totaling \$120,000 under this program.

#### **G. Section 405(h) Non-motorized Safety**

The Section 405(h) Non-motorized Safety Program earmarks funds to train law enforcement on State laws applicable to bicycle and pedestrian safety; enforcement mobilizations and campaigns designed to enforce pedestrian and bicycle laws; and public information and awareness programs designed to inform motorists, pedestrians and bicyclists of State laws. DHTS awarded 33 grants, totaling \$948,301 under this program.

## **State Funded Programs**

### **A. Drunk Driving Enforcement Fund**

The Drunk Driving Enforcement Fund (DDEF), established under NJSA 39:4-50.8, imposes a \$100 surcharge on each drunk driving conviction. Monies in this fund are managed by DHTS and distributed to police agencies to increase enforcement of drunk 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. Law enforcement agencies, through application to DHTS and approval of the Director, may use DDEF monies for supplemental DWI enforcement patrols and other appropriate DWI tools, equipment, and countermeasures. DDEF funds totaling \$1,539,070.96 were made available to law enforcement agencies during State Fiscal Year 2021 (July 1, 2020 – June 30, 2021) to help reduce alcohol-related crashes and fatalities. The DDEF program was temporarily placed on hold during the fall of 2021 in order to perform a complete internal review of the programmatic and fiscal aspects of the program.

### **B. Pedestrian Safety, Enforcement and Education Fund**

The Pedestrian Safety, Enforcement and Education Fund is a repository for monies provided pursuant to subsection c. of N.J.S.A. 39:4-36. Under the statute, a motorist must stop for a pedestrian crossing the roadway at an intersection. Failure to stop may result in a fine not to exceed \$200.00. A total of \$100.00 of such fine is dedicated to the Fund that is used to make grants available to municipalities and counties with pedestrian safety problems. During 2021, 21 pedestrian safety enforcement and education grants were funded in the amount of \$454,665.

### **C. Motorcycle Safety Education Program**

The NJ Motor Vehicle Commission administers the state's motorcycle safety education program. The program provides for a course of instruction and training designed to develop and instill the knowledge, skills, attitudes, and habits necessary for the safe operation of a motorcycle. Beginner and advanced rider training programs, along with three-wheel training, are conducted throughout the State. Training was provided to 9,216 riders during 2021 at private locations by State approved motorcycle safety providers, which was increase from 5,356 riders trained in 2020.

#### **D. Motor Vehicle Snow and Ice Removal Safety Fund**

The Motor Vehicle Snow and Ice Removal Safety Fund is a separate, non lapsing, dedicated account. All fines imposed and collected as a result of enforcement of N.J.S.A. 39:4-77.1 shall be deposited into the Fund. Monies in the account can be used to offset the costs associated with the establishment of a public awareness campaign and to develop a grant program that private companies can use to purchase, install, and maintain equipment and technology to remove snow and ice from commercial motor vehicles. Seven grants were awarded in FY2021 to purchase commercial vehicle snow removal equipment. A listing of the 16 snow removal devices funded to date through this program is posted on the DHTS website.

## DESCRIPTION OF FUNDED PROJECTS AND ACTIVITIES

### Alcohol and Other Drug Countermeasures – Project Summaries

#### DWI Training/Drug Recognition Expert Program

Critical standardized training courses were offered to law enforcement personnel in FY2021 relating to the detection, apprehension, processing, and prosecution of DWI offenders. The DWI Detection Standardized Field Sobriety Testing five-day course was delivered to 366 officers. The Drug Recognition Expert (DRE) training program was conducted, as well, with 62 police



officers trained and certified as DRE's and another 58 officers certified as DRE Instructors. Advanced Roadside Impaired Driving Enforcement (ARIDE) courses were held for 482 police officers, which was a significant increase from 2020 when Covid-19 related restrictions impacted program delivery. The ARIDE program addresses the gap in training between the Standard Field Sobriety Testing and DRE programs by providing officers with general knowledge

related to drug impairment and driving. In addition, the DRE Drug Impaired Driving (DID) course was delivered to another 659 officers. The ARIDE and DID training does not qualify participants as drug recognition experts, but is intended to make individuals competent in evaluating and documenting suspected abuse and impairment of drugs.

The DRE program trains law enforcement officers to determine whether an individual is under the influence of drugs through a visual evaluation.

The DRE Call-Out program establishes policy and procedures for the utilization of DRE's to evaluate and assess motorists who are arrested for driving under the influence of intoxicating drugs and alcohol. The DRE call-out program was operational in twelve counties in



FY2021: (Bergen, Atlantic/Cape May, Hudson, Monmouth, Morris/Sussex, Ocean, Somerset/Hunterdon, Middlesex, and Union). The program utilizes qualified DRE personnel, as part of a shared services agreement with local police departments, to assist in identifying and removing intoxicated drivers from the roadway. The DRE's are available to all agencies in the county on a call-out basis and for support at DWI sobriety checkpoints. Grant funding was also provided to the New Jersey DRE Association to support its efforts to better train and equip New Jersey DRE's.

## Alcohol Breath Test System

Under the authority of the Attorney General, the Alcohol/Drug Test Unit within the Division of State Police spearheads the continual process of training and re-certifying police officers throughout the State to operate the approved chemical breath test instrument (Alcotest System). In order to support and maintain the training program, funds were used to purchase the equipment necessary for training and re-certifying police officers as breath test operators. The number of officers (local, county, and state) re-certified in FY2021 on the use of the Alcotest was 4,553.

The new Alcotest 9510 breathalyzer instrument will continue testing, pilot program and validation in FY2022.

## Drive Sober or Get Pulled Over Campaigns

From December 4, 2020 – January 1, 2021, the state's law enforcement community teamed up to carry out the *Drive Sober or Get Pulled Over 2020 Year End Holiday Crackdown*. The goal of this campaign was to mobilize the State's police departments during the critical end-of-year holiday period and to raise public awareness about the dangers of impaired driving through a combination of high visibility enforcement backed by targeted media activities. During this campaign, 114 agencies received overtime grant funds totaling \$656,000. The campaign resulted in 590 DWI arrests, 3,121 speeding summonses and 817 seat belt summonses.



To help spread the *Drive Sober or Get Pulled Over* message, police departments engaged their communities through the dissemination of press releases, public service announcements and displays on variable message boards.

The *2021 Drive Sober or Get Pulled Over Statewide Crackdown*, took place August 20 – September 6, 2021, to coincide with the national enforcement crackdown. For this campaign, \$505,000 in overtime grant funding was awarded to 98 agencies. The campaign resulted in 518 DWI arrests, 3,023 speeding summonses and 1,274 seat belt summonses.

## Underage Enforcement

Funds were provided to the Division of Alcoholic Beverage Control to implement the *Cops In Shops Summer Initiative* program. The program funded overtime salaries for police officers to work in an undercover capacity in liquor stores, restaurants and bars in an effort to identify underage individuals who purchase or attempt to purchase alcoholic beverages and adults of legal drinking age who purchase alcoholic beverages for underage persons.

Enforcement efforts were held from May 26, 2021 through September 15, 2021 in Atlantic, Cape May, Middlesex, Monmouth, and Ocean counties. The retail license establishments displayed posters warning underage individuals that police officers may be present in an undercover capacity.

A total of 22 towns participated in the Summer Initiative program. The enforcement effort resulted in the arrest of 62 individuals. There were 130 total offenses charged in the Summer Initiative, 36 of which were for underage individuals: (1) entering a licensed premises for the purpose of purchasing alcoholic beverages and/or (2) misrepresenting or misstating their age with the use of fictitious identification. There were several ordinance violations related to underage possession of alcohol as well.

Funds were also provided to enforce Alcoholic Beverage Control acts and other related laws pertaining to underage alcohol use and/or intoxicated patrons. The use of undercover police personnel is intended to identify underage individuals who order and/or consume alcoholic beverages as well as those who serve them. Appropriate criminal and/or administrative charges were initiated against underage individuals, those providing alcoholic beverages to underage persons as well as liquor licenses that allowed this activity on their premises. 101 licensed establishments were identified for investigation of underage or intoxicated patron drinking activity. 12 administrative violations were identified and submitted to the Division's Enforcement Bureau for prosecution.

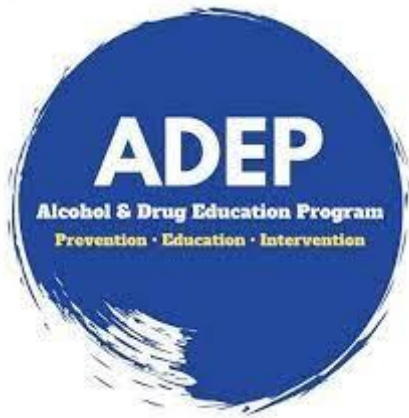
A local underage enforcement grant was provided to the Cape May County Prosecutor's Office to implement undercover operations at locations licensed to serve alcoholic beverages. The purpose of the project was to identify individuals under the legal age attempting to purchase alcohol or providing alcohol to underage patrons and those utilizing fraudulent identification to purchase alcohol. The Cape May project reported carrying out 19 enforcement details during the grant year, resulting in 23 underage patrons being charged. There were also a number of violations issued against liquor establishments relating to the various Covid-19 restrictions that were in effect.

The Clinton Township Police Department utilized grant funding for a combination education/enforcement program focusing on the regional high school within its jurisdiction. Though delivery of the program was impacted by the Covid-19 pandemic, more than 250 high school juniors and seniors received impaired driving education either in person or through online formats.

## College Programs

During FY2021 several New Jersey colleges and universities delivered important campus-based educational programs relating to substance abuse and healthy decision making.

Despite significant pandemic related challenges, TCNJ was successful in providing training, education, and prevention programs. Through TCNJ's ADEP (Alcohol and Drug Education Program) initiative, 198 students received *Training for Intervention Procedures* (TIPS), which is a two-hour skill based training to prevent intoxication, underage drinking, and drunk driving by enhancing the fundamental "people skills" of college students. 98 students participated in BASICS, Choices, or Cannabis 101. These are individual and group interventions, which provide education, personalized feedback, and skills training relating to substance use. This year's virtual Peer Institute included 157 students and advisors who participated in three days of intensive training on how to effectively promote healthy behaviors and mitigate at-risk behaviors. Additionally, TCNJ provided 1,200 students with self-care bags, which included information promoting healthy and safe behaviors while approximately 1,500 students completed the "Binge Thinking!" online training module.



Grant funding enabled the Peer Health Advocates (PHA) program at William Paterson University to promote the HERO Campaign's designated driver messaging at numerous events throughout the campus. Alcohol awareness and educational materials were distributed as part of freshman orientation and welcome events in September as well as throughout the year. Twitter and Instagram platforms, campus bulletin boards, and digital monitors throughout campus were used on an ongoing basis for educational activities.



At Stockton University, eight student peer educators hired through a DHTS “Stay Safe and Graduate” grant endeavored to provide programming to as many of the state’s 10,000 students as possible, though efforts were hampered somewhat by the impact of Covid-19. Highlights included virtual *Alcohol 101* workshops and educational “tables”.

### **New Jersey Prevention Network**

The New Jersey Prevention Network conducted its 21<sup>st</sup> annual addiction conference 2021. The conference, titled “Renew, Recover, Resilience.” took place in a virtual environment on April 29-30, 2021. More than 1,000 professionals who work in substance abuse prevention, education, law enforcement, and health



care attended the online conference. With the support of DHTS grant funding, a highway traffic safety track included a pair of workshops: “Legalization of Marijuana-The Impact in Colorado” and “Smokescreen: What the marijuana industry doesn’t want you to know.” Topics of other workshops included the impact of alcohol abuse on women’s health, health disparities in Covid-19, and the ongoing opioid epidemic. DHTS displayed its traffic safety materials during the events “virtual exhibit center”. All of the workshops and information provided through the conference were recorded for later viewing.

### **Mothers Against Drunk Driving (MADD)**

The New Jersey Chapter of Mothers Against Drunk Driving (MADD) received seed money in FY2021 to carry out its work in victim advocacy and public awareness relating to impaired driving. MADD Victim Service Specialists worked 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. MADD helped raise awareness New Jersey’s new ignition interlock law and worked collaboratively with the enforcement and judicial communities to provide community-based information, support, and referral services.





## **Summary**

As the performance targets for both alcohol involved fatalities and drug involved fatalities were not expected to be met for FY2021, this program area is a major focus for FY2022 and for the planning process for FY2023. Major public information campaigns are planned on this issue, and the DHTS Crash Analysis Tool will continue to be updated and utilized as much as possible to target new and existing impaired driving sustained and mobilization grants throughout the year, with a special focus on national crackdown periods.

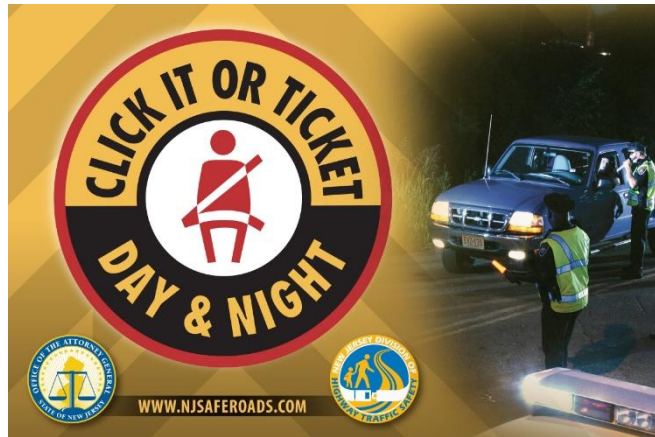
The ongoing rule making and rollout of the state's legalized cannabis industry will be closely monitored. DHTS has an active and robust DRE program that will be the focus of enforcement efforts in this realm. New county participants were added to the state's DRE call out program in FY2021 and existing programs expanded and refined their efforts.

It is hoped that a new statewide Impaired Driving Task Force, begun in FY2021, will grow in the years ahead to take the lead role in developing and implementing new cooperative efforts in this critical area. In addition, a report is due in the months ahead on a comprehensive analysis of drugged driving data from the last ten year period which will assist in framing activities moving forward.

## Occupant Protection – Project Summaries

### Click It or Ticket

The *Click It or Ticket* seat belt enforcement mobilization returned in FY2021 after cancellation in 2020 due to the public health crisis. Beginning May 24 and running through June 6, the mobilization utilized high visibility seat belt checkpoints and saturation patrols, in combination with local and national publicity efforts, to reiterate the life-saving value of seat belts.



Grant funding totaling \$810,000 was awarded to 134 police agencies. These agencies issued 9,755 seat belt summonses, 3,936 speeding summonses, and made 555 DWI arrests. To launch the campaign, traffic safety officials from New Jersey and Pennsylvania gathered for a *Border to Border* Kickoff Event on May 24, 2021 at Citizens Bank Park in Philadelphia.

### Seat Belt Survey

The statewide seat belt survey returned in FY2021 after cancellation in 2020 due to Covid-19. The survey, conducted for DHTS by the New Jersey Institute of Technology, found that the State's front-seat belt usage rate is 93.92%. That is an increase of 3.69 percent from the last survey result of 90.23 in 2019. The driver and front-seat passenger usage rates were 93.77 percent and 94.55 percent respectively. These rates represented increases in the driver's usage rate of 3.36 percent and the passenger usage rate of 5.14 percent.

Among the counties included in the survey, Somerset, Mercer and Union saw the largest increases in belt use (10.41%, 8.09%, and 7.45%) while Hudson and Atlantic were the only two with declines (3.31% and 1.94%).

## Child Passenger Safety

New Jersey's Child Passenger Safety (CPS) program, funded for many years by DHTS, continued its work in FY2021 at reducing traffic injury and fatality rates through coordinated enforcement and education programs regarding the proper use of child restraints in motor vehicles. Twelve agencies (three local police departments, six county police departments, one non-profit agency, one state agency, and NJ State Police) received grant funding for CPS activities that included technician training, re-training and program delivery at the local level.



The theme of New Jersey's CPS program is *100%, Everyone, Every Ride*. The DHTS website, [www.njsaferoads.com](http://www.njsaferoads.com), contains a wealth of information relating to Child Passenger Safety,



including a list of county coordinators, who can 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 was able to contact county coordinators directly and arrange for child safety seat program presentations or receive information and guidance on proper installation techniques.

A highlight of the year was National Child Passenger Safety Week from September 19-25, 2021. During the week, the DHTS sponsored child restraint check/educational events throughout the state.

The DHTS continued its coordination and funding for the state's CPS training efforts and also supported the national child passenger safety certification program which provides a standardized certification to those that are successfully trained. Ten child passenger safety courses were held in 2021, that trained 154 new technicians. In addition, NJ State Police conducted two certification courses for its personnel. There are now 952 individuals trained as certified technicians in the State working in public safety, health and injury prevention programs. Forty-six of the technicians are certified as CPS instructors. New Jersey recertification rate for its technicians in 2021 was 56%, just above the national average of 53.4%



A statewide Child Passenger Safety technical conference, postponed several times by the pandemic, is planned for April 25-26, 2022. The event will include CEU courses, networking opportunities and state and national perspectives for our New Jersey technicians.

## Summary

FY2021 was generally a positive year for the state's occupant protection program. New Jersey emerged from the worst of the Covid-19 pandemic and DHTS was able to fund new sustained enforcement grants, which included an occupant protection component, in several of the highest ranked counties and municipalities in the state for unbelted crash injuries. The solid increase in the state seat belt usage rate, to 93.92% was certainly welcome news and shows that the programmatic efforts that have been undertaken in this area have had a positive impact, such as bringing the Crash Analysis Tool to bear to better target the awarding of mobilization and sustained enforcement grants.

New Jersey continues to have a very robust team of trained technicians who deliver CPS grass roots assistance to parents and caregivers on an ongoing basis throughout the year. Several grantees, including the state's AAA clubs, plan to put a special focus in the years ahead on delivering CPS programs in underserved communities. Finally, DHTS looks forward to bringing all CPS technicians together for a training conference in the spring of 2022.



## Pedestrian and Bicycle Safety – Project Summaries

### Pedestrian Enforcement and Education

Ensuring the safety of pedestrians in New Jersey is a significant challenge. Pedestrian fatalities for calendar year 2021 in the state are, as of this writing, on track to set an all time high. In FY2021, the Division worked in partnership with the Federal Highway Administration, New Jersey Department of Transportation, and the North Jersey Transportation Planning Authority to expand and strengthen the *Street Smart NJ Campaign*. The *Street Smart NJ Campaign* uses a combination of community-wide grass roots education and awareness backed by strong law enforcement measures to reduce pedestrian injury crashes.



54 agencies received grants from the State Pedestrian Safety, Enforcement and Education Fund and Federal Section 405 Non-Motorized Fund. The grant funds were used to pay for overtime enforcement that targeted high pedestrian crash locations and provided pedestrian safety education materials for delivery to high-risk segments of the population.



The *Street Smart Campaign* continually expands into new communities, emphasizing a data driven approach to raise awareness for both pedestrians and motorists, while enforcing laws and changing behaviors. More than 200 towns are participating in the program at this time, many with the support of DHTS funding. The campaign uses several slogans to remind individuals of the major

rules for pedestrian safety: obey the speed limit; stop for pedestrians; use crosswalks; and heads

up, phones down. The campaign uses outdoor advertising, radio public service announcements, internet advertising and outreach materials including street signs, posters and tip cards. One *Street Smart* grant funded agency, Paterson, conducted a multi-week pedestrian safety education and enforcement blitz in October and November, 2021. The police department handed out 345 pedestrian safety tip cards to walkers and hung more than 50 *Street Smart* posters in English, Spanish, and Arabic. The enforcement component resulted in the issuance of 110 summonses to motorists for failing to stop for a pedestrian in a crosswalk, along with 290 other violations.

### **Crossing Guard Program**

New Jersey has approximately 6,800 school crossing guards. The New Jersey crossing guard training and resource program is funded jointly by the New Jersey Department of Transportation and DHTS, and operates under the auspices of the *New Jersey Safe Routes to Schools* program. The New Jersey Safe Routes to School Resource Center Crossing Guard website: [www.njcrossingguards.org](http://www.njcrossingguards.org) includes resource manuals, videos, and other useful training tools.

With the support of DHTS grant funding, representatives of the Voorhees Transportation Center conducted two virtual crossing guard supervisor classes on: June 23, 2021 and August 3, 2021. In all, 68 individuals took part in the trainings, representing 46 municipalities. Since its inception, the training program has reached 79 percent of the municipalities in the state that employ school crossing guards.



The program also raises awareness about school crossing safety to the general public. Since being made available on YouTube in 2015, the training video “Crosswalk Heroes” has had almost 55,000 views. The Spanish language version of the training video has had over 1,400 views on YouTube. “The Challenging Crossings” training video has had over 3,000 views since it was introduced in 2019.



### **Bicycle Safety**

The New Jersey Bike and Walk Coalition, with the support of grant funding from DHTS, conducted a series of bicycle safety rider training courses, both on bike and virtually, as part of the rollout of the City of Newark’s new Bike and Scooter share

program. Certified cycling instructors conducted three Cycling Savvy classroom sessions online over Zoom and four on-the-bike Smart Cycling workshops in four different neighborhoods in Newark. The online sessions streamed live over Facebook to other city residents. Sessions were scheduled at a variety of day and evening times and promoted through the City of Newark.

Bicycle crashes in the Township of Montclair were reduced by 10% in FY2021 with the help of DHTS funds awarded to the Montclair Police Department. The grant dollars were used for an ongoing enforcement and educational program that promotes bicycle safety in the community and addresses violations by motorists who do not yield for bicyclists.



The eight Transportation Management Associations in New Jersey were very active in FY2021 delivering grass roots bicycle safety programming for recreational riders of all ages as well as bicycle commuters. Bike to Work and Bike to School programs were promoted throughout the state and many virtual and in-person educational programs were conducted targeting a variety of age groups. A major

overriding goal of the programs was to foster bike friendly communities and an equitable transportation network, while also promoting the benefits of regular physical activity.

The Division of State Police continued its bicycle safety awareness program in FY2021 with the support of grant funding. More than 550 hours of dedicated bicycle safety overtime was conducted by NJSP School and Safety Outreach Unit troopers. Programs were carried out during the spring and summer at state parks, festivals, fairs, and other special events. In all more than 1,500 people were contacted and provided with safety related information. Several new bicycles were purchased for the unit as well, and maintenance was performed on existing bikes, which are used on an ongoing basis for enforcement patrols and hands-on community events.



## Summary

Reducing pedestrian and bicycle injuries and fatalities remains a major concern in New Jersey. It is projected that the FY2021 HSP Performance Measure relating to pedestrian safety will not be met, and the number of annual pedestrian fatalities for 2021 is projected to increase by approximately 20 percent compared to 2020.



In FY2022, efforts will be ramped up to promote safe walking and bicycling as well as stressing the need for motorists to share the road and beware of non-motorized roadway users. Programs will align with the NJ SHSP in terms of data analysis and equity considerations. Grant funding for pedestrian safety enforcement and education, from both State and Federal funding sources, will be expanded into more than 20 of the Top 25 NJ pedestrian crash ranked cities. With the assistance of its partner agencies (NJDOT, NJTPA, and *Street Smart NJ*), DHTS will work with cities to identify specific locations at which to focus enforcement and educational efforts. The DHTS crash analysis tool will be very effective in this effort. Both the *Street Smart NJ* pedestrian safety program and the statewide school crossing guard educational program overseen by the Voorhees Transportation Institute will specifically target new programmatic efforts in 2022 into underserved communities, which have been adversely affected by this issue.

The recently passed “New Jersey Safe Passing Law”, which takes effect early in 2022, will also afford DHTS and its partner agencies the chance to undertake a new round of safety education on behalf of the state’s most vulnerable roadway users.



## Community Traffic Safety Programs/Teen Driver Safety – Project Summaries

### Community Traffic Safety Programs

Grant funded community-based traffic safety projects have been the backbone of the DHTS highway safety program for many years, as these projects deliver critical educational programming at the local level while also helping disseminate materials and expertise.

In FY2021, these Community Traffic Safety Programs utilized local leadership, resources, and institutional knowledge to offer programs targeted to specific local needs in key emphasis areas including: pedestrian, bicycle and child passenger safety; aggressive, impaired, distracted, and teen driving; seat belt use, and older drivers. The following counties were part of CTSP funded programs in 2021: Atlantic, Burlington, Camden, Essex, Gloucester, Hudson, Hunterdon, Middlesex, Morris, Somerset, Sussex, Union, and Warren.

In addition to county-based operations, DHTS also partnered with a number of regional and statewide non-profit organizations that provided traffic safety outreach, networking, and education with community groups, corporate employers and students. Examples of activities conducted in FY2021 included:



The North Jersey Foundation for Safety (AAA Clubs of New Jersey) conducted older driver safety presentations and Car-Fit sessions both in person also virtually, and certified new Car-Fit Technicians and event coordinators across the state. A safe driving awareness program “*Stay Awake, Stay Alert, Stay Sober*” was sponsored at all rest stops on the New Jersey Turnpike, Garden State

Parkway, and Atlantic City Expressway. A second campaign “*Slow Down/Move Over*” was displayed on buses and billboards throughout the state.

Also, the AAA clubs conducted approximately 60-80 child seat check installations and education contacts per month, offered *Share the Keys* programs for new drivers, and delivered distracted driving, impaired driving and *Shifting Gears* marijuana education events both in person and virtually.

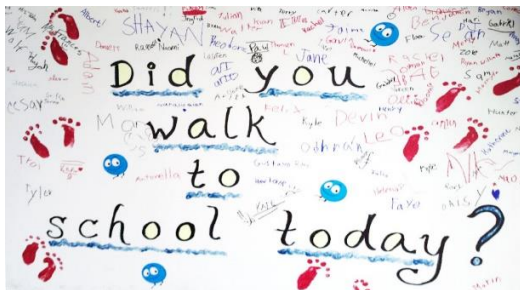
New Jersey’s eight Transportation Management Associations (Hudson TMA, TransOptions, RideWise, Keep Middlesex Moving, goHunterdon, Greater Mercer TMA, Cross County

Connection, and EZRide) used DHTS funding to present a wide variety of bicycle, pedestrian and driver safety public outreach initiatives in FY2021 at the local level. The TMA's are a strong supporter of the *Street Smart NJ* pedestrian safety campaign, offering support and technical assistance to communities engaged in this important program. Traffic safety messaging is pushed out throughout the year by the TMA's, to coincide with major national campaigns as well as local initiatives.



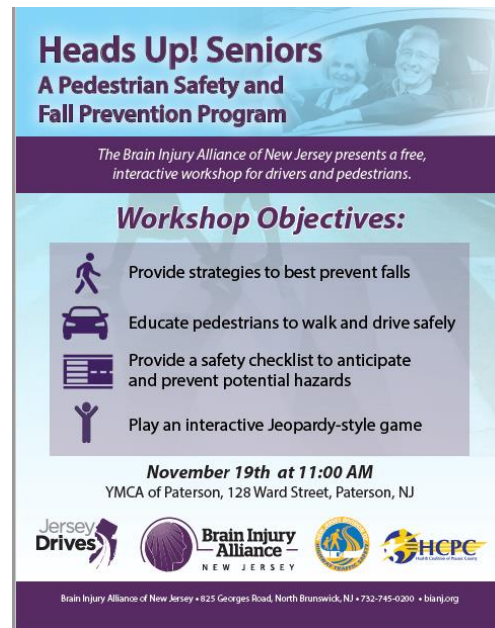
The agencies put a great focus on educating school children, especially in the areas of walking safely and safe cycling. Bicycle and pedestrian safety events were held within underserved communities, many of which have residents who rely heavily on biking and walking as their primary form of transportation. The *Share the Keys* teen driving program, offered in partnership with New Jersey Manufacturers Insurance Company, was delivered to high school students.

Driving safety programs for seniors were also offered to help them stay safe while being mobile both on foot and in the vehicle.



Safe Kids New Jersey (SKNJ) conducted an array of *Children In and Around Cars* safety education programs to targeted areas of need. Together with its statewide network of coalitions, 24,650 community members were reached. Through its child safety seat inspection stations, SKNJ checked 3,272 car seats, reaching 4,257 parents/caregivers and 1,708 children. 58 car seats and 294 bike helmets were provided to families in need. Targeted outreach programs accompanied by extensive social media included International Walk to School Day, National Child Passenger Safety Week, and Never Leave Your Child Alone (Heatstroke Prevention).

The Brain Injury Alliance of New Jersey (BIANJ) continued to raise awareness about traffic safety through presentations, web-based training, social media outreach, participation in coalition meetings and regional, statewide and national conferences. BIANJ delivered over 150 virtual or in-person presentations and safety events across the state in FY2021, including more than 20 Spanish presentations. A social media campaign of consistent safety messaging was shared weekly by approximately 80 organizations through a statewide network. BIANJ utilized social media to create awareness about Motorcycle Safety during the month of May and throughout the year with educational programs to enhance rider safety. BIANJ also worked with social influencers to promote safety messages, which resulted in over 1 million impressions and positive feedback.



BIANJ's comprehensive transportation safety website, *JerseyDrives.com*, was updated with lesson plans and virtual learning tools for teachers, teens, parents and the community. BIANJ also offered virtual workshops, trainings, webinars, and uniquely tailored presentations for all ages. Additionally, the 11th year of the *U Got Brains* Champion Schools Program was successful despite the virtual environment, working with approximately 45,000 students from 47 schools across the state. In light of the pandemic, schools found creative ways to spread their safety messages and most were able to complete their campaigns and participate in a virtual showcase event.

The South Jersey Transportation Planning (SJTP), the regional Metropolitan Planning Organization (MPO) serving Atlantic, Cape May, Cumberland, and Salem Counties, reached a large number of people with important traffic safety information in FY2021. In addition to regularly scheduled Child Passenger Safety check events, the SJTP delivered its three in-class teen driver presentations (*Car Crashes It's Basic Physics*, *Share the Keys* and *Most Dangerous Place on Earth*) 83 times in total, reaching 2,434 students.

Kean University again received grant funding to carry out its Statewide Comprehensive Traffic Safety Project. The program took the lead in hosting eight Basic and six Advanced Crash Investigation Training Courses (14 courses in total) with 404 police officer attendees successfully completing the classes. In addition, 34 officers who had previously completed the Basic and Advanced Crash Investigation courses took part in a new Forensic Science certificate program that was offered for the first time. Kean also continued its sponsorship of the Traffic

Safety Specialist program, which is a statewide, uniform, and consistent recognition of police officers who have attained notable levels of experience, education, training a proficiency in highway safety and traffic enforcement methods and procedures. 81 police officers were recognized in FY2021 as having completed either Level I or Level II of this program. Progress was also made during the year on several new initiatives including the development of a training program for local police relating to cannabis impaired driving enforcement and crash investigation.

## Police Traffic Services and Training – Project Summaries

### Comprehensive Law Enforcement Programs

Recognizing the need for greater sustained enforcement activities throughout the program year, DHTS successfully engaged a large number of new agencies in FY2021 to undertake ongoing, sustained enforcement in four key program areas: speed, occupant protection/seat belts, distracted driving, and impaired driving. Crash ranking lists were developed in these four areas and sustained enforcement grant funding was offered, and in most cases accepted, by police agencies in these high crash counties and communities. 35 sustained enforcement grants were funded in total in FY2021, utilizing Sec 402 and Sec 405e flex funds.

The Essex County Sheriff's Department received a sustained enforcement grant focusing on seat belt usage and speeding. During the grant year, the agency reported issuing 1,166 seat belt and 691 speeding summonses respectively in these two critical program areas. At the local level, the Woodbridge Township Police Department had a productive year, utilizing its sustained enforcement grant to issue 618 speeding summonses and 888 summonses for cell phone usage or careless driving, while also making 221 arrests for DWI.



Both radar and laser speed detection devices have been effective tools used by State Troopers assigned to patrol on both highways and rural roadways. During FY2021, grant funds were used to purchase 125 radar units for NJSP while NJ State Police radar and laser teams conducted more than 750 hours of saturation enforcement. NJSP also used grant funding to undertake

targeted seat belt enforcement statewide throughout the year.



## Distracted Driving Crackdown

New Jersey was fortunate to be one of only a handful of states that qualified to receive distracted driving incentive grant funds again in FY2021. These funds enabled the state to undertake a major public awareness campaign relating to driver distraction (as detailed in the Paid Media area of this report) as well as fund a significant enforcement effort in support of the national *UDrive. UText. UPay.* distracted driving crackdown.



The 2021 *UDrive. UText. UPay.* distracted driving crackdown took place April 1-30, 2021. \$1.4 million in grant funding was awarded to 184 state, county, and local police agencies. During the campaign, these grant funded agencies issued 8,014 summonses for hand held use of a cell phone while driving. An additional 4,346 summonses were issued for careless driving.

## Driver Distraction Survey

Rowan University conducted groundbreaking research for DHTS in FY2021 on the issue of driver distraction, which found that rates of distraction among New Jersey drivers approach 25% along certain high-volume roadways. Every year, thousands of people die in the United States due to crashes involving distracted driving, with this cause contributing to 25% of all fatal traffic crashes in New Jersey. In 2019, distracted driving contributed to 159 of the 524 fatal crashes in New Jersey that claimed 558 lives (New Jersey State Police, 2019). To better understand the prevalence of the issue, and to cross reference driver distraction by time of day, roadway type, etc., a comprehensive study was conducted using a novel approach. Data collectors drove a vehicle through ten high crash corridors with video recorders mounted on the exterior of the vehicle during the Spring and Summer of 2021. The video data, captured through the side windows of vehicles on these roadways, was analyzed to detect driving behaviors using a deep learning algorithm. In total, 335 hours of video observation was conducted. Among the findings:

- “Handheld cellphone” is the leading type of distraction, irrespective of time, type of roadway, season, and the geometric properties of the roadway.



- “Receiving calls” significantly changes with the season, the day of the week, and the roadway type.
- The behavior of “eating/drinking” significantly changes with respect to various roadway features (i.e., signalized/unsignalized roads or spring/summer).
- Summer (24.4%) has a higher rate of distractions than spring (20.8%).
- Geometric features of the roadway (e.g., median type, median width, posted speed limit, shoulder width, and the number of lanes) significantly impact distracted driving behavior.



The outcomes from the study will assist DHTS in planning future countermeasures in this area, such as focusing enforcement and awareness activities more in the summer months, when driver distraction rates are higher. Moreover, such countermeasures should also prioritize corridors with signalized intersections, weekday driving, lower speed limits, wider shoulder width, higher median width, and positive-type medians. Looking to the future, the study results also show that detection of driver behavior from cameras outside the car is a promising avenue for further research.

### **Crash Investigation Training**

The Crash Investigation Training program funded by DHTS was able to return to a normal schedule of offerings in FY2021. The Basic Crash Investigation course was offered ten times at various police academies around the state and was successfully completed by 266 police officers. Six sessions of Advanced Crash Investigation were held, with 170 attendees. Nine specialty courses were conducted as well, on topics including traffic crash reconstruction, pedestrian/bicycle crash investigation, and event data recorder use in traffic reconstruction. These courses were successfully completed by 217 attendees.

## **Traffic Safety Resource Prosecutor**

Three Deputy Attorneys General (“DAG”) in the Department of Law and Public Safety worked as Traffic Safety Resource Prosecutors (TSRP’s) at various times during FY2021. The TSRP’s conducted and attended trainings, sat on several committees, attended traffic safety-related workshops, provided assistance to prosecutors and law enforcement officers on various inquiries, represented the state in traffic safety-related court matters, and provided assistance to prosecutors in preparing briefs and appearing before the New Jersey Supreme Court.

The TSRP’s conducted several training programs including Prosecutor Alcotest Training (90 attendees), Radar Instructor Refresher course (13 sessions, 250 attendees), Basic Motor Vehicle Course for DCJ Investigators, and Basic DRE Course legal aspects.

A significant amount of time was spent in FY2021 on the State v. Olenowski case, in which the State Supreme Court ordered a Frye hearing to determine the scientific reliability of the DRE protocol. The TSRP’s took a lead role in the litigation, including preparing briefs and oral arguments and compiling large amount of discovery documentation requested by the Special Master hearing the case. The Frye hearing began on September 27, 2021.



There was also ongoing work required in the DWI realm, which included preparation for legal challenges stemming from the upcoming rollout of the Alcotest 9510 chemical breath test unit.

The TSRP’s are an important part of New Jersey’s traffic safety program and regularly participate and provide updates on their activities at HTSPAC, NHTSA Region II, and Regional LEL/JOL meetings.

## **Fatal Crash Unit**

The State Police Fatal Accident Investigation Unit performed many functions related to the investigation of fatal and serious injury motor vehicle crashes and the collection of statistical data related to fatal crashes. Unit personnel investigated serious and fatal crashes that occurred in the patrol areas of the State Police and responded to requests for technical assistance with on-scene investigations and/or post collision investigation from county prosecutors’ offices and municipal police departments. The FAIU also reviews, reinvestigates, or reconstructs every fatal crash that occurs in the state in order to ensure accurate FARS reporting. Unit personnel relied



on their advanced training and technical expertise as well as specialized equipment, funded in part by DHTS again in FY2021, in order to effectively and efficiently perform these vital functions.



### **New Jersey Police Traffic Officers Association**

Founded in 1974, the New Jersey Police Traffic Officers Association is one of the nation's only dedicated statewide organizations devoted to the work of police traffic officers. Over the years, the organization has proven an invaluable partner to DHTS. In light of this, DHTS began awarding grant funding to the NJPTOA in FY2021 to assist the entity in its work and to set the stage for greater cooperative efforts in the years ahead. The NJPTOA reports on all contemporary traffic safety issues including the NJ Division of Highway Traffic Safety's campaigns and priorities, traffic related case law, new and emerging technology, training updates and anticipated future issues. The NJPTOA offers and provides access to training events based on the Association and state's needs. The NJPTOA utilizes a web site, monthly meetings and newsletter as well as mass emails to keep its membership informed on all things traffic safety.

### **Law Enforcement Liaison**

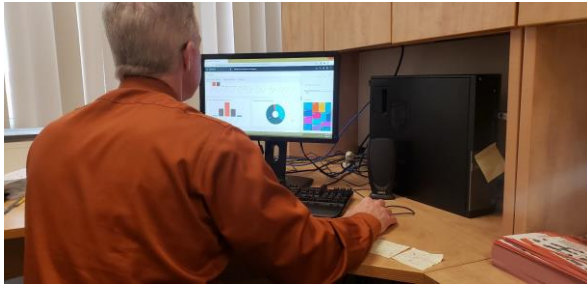
New Jersey's Law Enforcement Liaison was active again in FY2021, through a grant from DHTS to the NJ State Association of Chiefs of Police. Work of the LEL included: providing assistance to DHTS staff in the promotion of law enforcement grants during the seat belt, impaired driving and distracted driving mobilizations, promoting the division's traffic safety initiatives at monthly meetings of the State Association of Chiefs of Police and at monthly and quarterly meetings of the Traffic Officers Association, sharing news on traffic safety topics and initiatives with municipal Chiefs of Police via email blast, assisting the DHTS Director with ongoing projects as needed, and actively being involved in the implementation of the 2020 NJ Strategic Highway Safety Plan.

### **Comprehensive Police Training**

Rutgers University provided a variety of training programs to the law enforcement community of the state in FY2021 through its Comprehensive Police Training Grant from DHTS, the biggest

highlight of which was the debut of a new course: Data-Driven Countermeasures for Traffic Safety. Other areas of training included NJTR-1 Crash Reports (described in the Traffic Records area of this Annual Report), Work Zone Safety (described in the Other Vulnerable Road Users area of this Annual Report), and UAS (Drone) Crash Investigation.

The Data-Driven Countermeasures for Traffic Safety course was developed with the goal of helping potential DHTS grantees create and submit stronger, data-driven project applications. The three day course trains participants to utilize the Crash Analysis Tool (CAT) in a computer lab or virtual classroom by first developing queries for a specific town to identify crash prone locations and factors. Those queries are saved and exported to form the justification for a DHTS grant proposal.



Attendees also received grant writing training to develop a grant proposal related to their data points, utilizing the DHTS SAGE e-grant system. NHTSA's proven countermeasures are discussed, and agencies are assisted in selecting the proper strategies to implement, as well as how to measure the impact of their intervention(s).

Three Data-Driven Countermeasures for Traffic Safety courses were carried out in FY2021, resulting in 46 officers trained from 33 police departments and 1 TMA. Agencies from cities with long-standing traffic safety concerns, such as Newark, Paterson, Trenton, Atlantic City and New Brunswick, attended the classes.

The course, *UAS Application for Traffic Safety*, which debuted in FY2020, focuses on the use of unmanned aircraft (drones) in crash investigation, traffic engineering, mapping, and roadway surveying. Four virtual workshops on this subject were held, attended by 98 officers from more than 40 police departments.

## **Traffic Records – Project Summaries**

An efficient traffic records system is critical to the highway safety program of a state. Projects that were funded and/or supported in FY2021 by DHTS were designed to expand statewide-integrated data collection and transmission systems to improve the timeliness, completeness, accessibility, accuracy, and linkage of safety information. The ultimate goal is data that will allow for analysis of all traffic crashes for use in policy and program development. DHTS was involved in the following crash data-related initiatives:

### **NJTR-1 Training**

The NJTR-1 crash report form is completed by law enforcement for any incident resulting in injury, death or damage in excess of \$500. Proper completion of the report by officers in the field is critical to obtaining valid crash data. During FY2021, twelve virtual refresher workshops were held. A total of 722 State, county, and municipal police officers and safety personnel from 121 agencies were trained in how to properly complete the crash form. Technical assistance was provided to another 300+ officers.

### **Statewide Traffic Records Coordination and Analysis**

The Statewide Traffic Records Coordinating Committee (STRCC) is responsible for the critical job of integrating and exchanging traffic records data between federal, state and local traffic-related agencies and organizations in an effort to reduce fatalities, crashes and injuries. STRCC agency representatives include those involved in highway safety, highway infrastructure, law enforcement and adjudication, public health, injury control and motor vehicle and driver licensing. The Committee provides a forum for the discussion of highway safety data and traffic records issues, represents the interests of the agencies and organizations within the traffic records system and develops and carries out a traffic records strategic plan. Several meetings of the Committee were held during FY2021.

The STRCC Strategic Plan, formally adopted in June, 2020, was updated in May, 2021. The vision statement of the plan is as follows: *It is the vision of the NJ STRCC to support the goal of zero fatalities on our roadways through a seamless traffic records data system delivering complete, timely, accurate and integrated traffic safety information accessible to all data users involved in making traffic safety decisions.*

The plan outlines a robust set of goals that will frame the STRCC work in the years ahead:

**Goal 1: Improve Data Quality: Improve the timeliness, accuracy, completeness and uniformity of traffic data collection.**

Objectives:

- Implement Electronic Data Transfer (EDT) statewide by 2024.
- Incorporate Autonomous Vehicle data on the NJTR-1 form by 2022.
- Improve the reporting of injury data by 2022.
- Reduce the time for toxicology reports (from 2018) to be available for fatal crash input by 2022.

**Goal 2: Improve Integration and Accessibility of Traffic Records: Ensure that all traffic records datasets are integrated and accessible to end users.**

Objectives:

- By the end of 2020, gain a full understanding of what datasets are currently integrated and accessible.
- By the end of 2022, integrate all traffic records datasets (i.e., crash, roadway, driver, vehicle, EMS, citation/adjudication).
- By the end of 2021, integrate EMS vehicle licensing, inspection, insurance, and personnel with the ePCR module.
- By the end of 2024 integrate drug-related datasets with other traffic records datasets.
- By 2024, create a Safety Data Resource Center to manage a portal to provide accessibility to safety data.

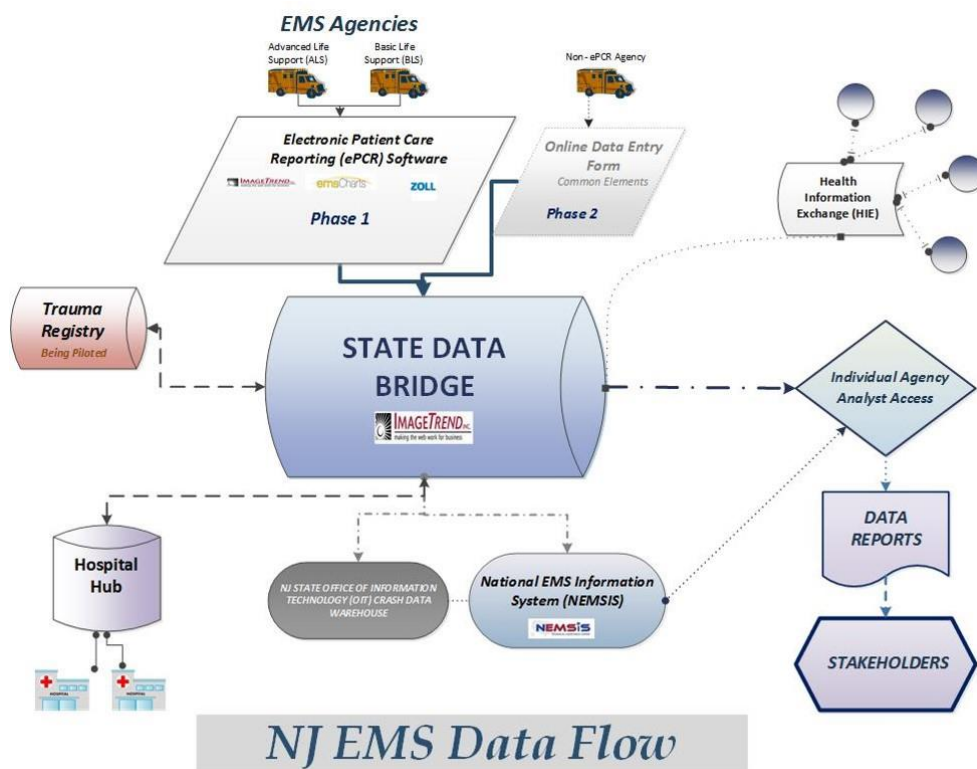
**Electronic Patient Care Reporting and EMS Data Repository**

With the support of DHTS funding, the Department of Health, Office of Emergency Medical Services (OEMS) continued its ongoing program to improve the quantity and timeliness of electronic patient care reporting (ePCR) for Emergency Medical Services (EMS) and the EMS Data Repository. Prior to the ePCR program, all patient data was collected individually by multiple organizations either manually or through unlinked desktops and servers. With the ePCR program, patient and circumstantial data is collected through tablet personal computer devices by both Advanced and Basic Life Support providers who are the first responders to emergency incidents. As the data fields within the ePCR are completed, the information is transferred via Wi-Fi/cellular, in near real-time, to the receiving hospital so all relative data to the patient and their injuries are available to treating clinicians.



The data is also transferred and stored in the repository in such a way that it is accessible by multiple State and Federal agencies.

The EMS Data Repository continues to see significant growth in the quality of data being submitted by EMS providers through the ePCR. The total number of records transmitted to the data bridge decreased slightly in 2021 by 4.3 percent from 1,721,983 in 2020 to 1,645,732 (likely due to patient hesitation of COVID-19). The average number of days for the data to be entered (timeliness) improved by 29.70 percent from 2.90 days to 2.04. For completeness, the overall number of agencies non-compliant with ePCR (not submitting data) declined dramatically (89.4%) from 66 in 2020 to 7 in 2021. This was due to a concentrated effort by OEMS to identify the individual agencies not utilizing ePCR, make the aware of the statutory requirement, and offer assistance in becoming compliant.



Moving forward, OEMS will investigate the feasibility of importing Event Data Recorder (EDR) information from crashes through the ePCR system to enhance the current crash information dataset. Another new initiative through OEMS allows for the licensing, safety monitoring, and crash reporting of emergency vehicles in New Jersey. Additionally, it allows for the collection of data regarding safety inspections, child & adult vehicle crash safety equipment, as well as vehicle safety violation data.

## **In House Data Analysis**

The full time data analyst added to the DHTS staff in FY2019 played a critical role in all DHTS programming again in FY2021, including in the preparation of the annual Highway Safety Plan and annual report as well as serving as a liaison on crash data-related matters to the STRCC and NJ DOT. Having a full time data analyst helps the Division be more data driven in its programmatic and grant funding decisions and also offers a means of supporting local agencies in their data access and analysis efforts.

## **Electronic Data Transfer**

The New Jersey Department of Transportation deployed the State's first integrated and all-inclusive crash reporting system in FY2021, which electronically accepts crash reports from police departments into the state system. This application was developed and maintained by Lexis Nexis on behalf of the New Jersey Department of Transportation to serve as a portal into the State of New Jersey's repository for traffic crash reports. The program, known as NJ Crash, provides a revolutionary new approach for law enforcement agencies to create and submit crash reports. As of July 2021, every police department in New Jersey has access to the system.

The program is equipped with a sophisticated set of validation rules which will improve crash data accuracy. A drawing application is integrated, which allows officers to create detailed crash diagrams quickly. A voice-to-text feature is included, allowing officers to dictate the narrative of their reports. The program also includes a cell phone application that enables officers to utilize their cell phones for scanning and importing driver's license and vehicle registration data, all without storing data locally on the device.

Eleven departments have transitioned to NJ Crash, and several more are in the process of doing so. Many other departments are interested in transitioning but are evaluating how their existing CAD and RMS systems will work with the new program. Others are requesting new features that were not originally part of the NJ Crash program design. The NJ DOT and Lexis Nexis are actively trying to bridge these gaps by improving the capabilities of NJ Crash so that it will fulfill the needs of all police departments. Enhancements are ongoing and include InfoCop integration, which will allow an officer to conduct NCIC and motor vehicle lookups on the involved drivers and vehicle, and then import that data directly into NJ Crash. The importation of third-party crash reports from other crash reporting software systems is also being explored.

The rollout will continue in 2022, however the cooperation of local law enforcement agencies is critical to the success of this project. The electronic data transfer capabilities of the program allow for immediate transfer of crash data, allowing for quick analysis. Eliminating the burden of

the old, paper-based system used by all departments in New Jersey and the transition to this new system is critical for timely traffic safety analysis.

### **Crash Analysis Tool (Numetric)**



The Crash Analysis Tool is used by DHTS to analyze crash data with an eye towards traffic safety programmatic and grant funding decisions. The system is also used by other public and private agencies and individuals 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 is a critical program that is used in all aspects the Division's traffic safety work.

In FY2021, 623 users were enrolled in the system, consisting of law enforcement agencies, local governments, and partnering stakeholders including NJDOT. Product enhancements included an overhaul of the network screening module interface, including custom date ranges and emphasis area applications. This overhaul provides a new way for DHTS to identify segments of roadways that are high-risk. Using this data, DHTS can better assist law enforcement agencies in targeting their enforcement systemically.

In the year ahead, (FY2022) plans include the addition of geospatial layers (such as primary/secondary schools, transit stops, and disadvantaged communities of NJ) to better understand where crashes are taking place and the potential impact it may have on the surrounding community. This upgrade would provide DHTS with better insight into the relationship between motor vehicle crashes and the environmental impact.

### **Traffic Engineering Interns**

Grant funding was again provided to the Warren County Engineer's Office that allowed it to retain the services of two engineering students to collect traffic crash data and assist in performing safety studies at high crash locations. Under the supervision of the Assistant County Engineer, the students gathered crash data, created a computerized crash database, and performed field investigations as needed. The *2020 Warren County Traffic Crash Data and Road Safety Assessment Report* was produced and contains the top crash locations involving county roadways, based on 2020 data, with recommendations for improvements. The *2021 Traffic Study Locations Report*, which was also produced, provides crash data and analysis of roadway locations which have previously undergone improvements or been identified through this program.



## Other Vulnerable Road Users - Project Summaries

### Motorcycle Safety

In FY2021, the Brain Injury Alliance of New Jersey (BIANJ) continued its motorcycle safety programs and hosting of quarterly meetings of the Motorcycle Coalition. The coalition includes motorcycle enthusiasts, rider training site owners, insurance company representatives, community safety partners and motorcycle coaches and trainers. The coalition takes the lead role in guiding the motorcycle training programs in the state and shaping the various safety and share the road (STR) messages that are developed.



2021 messages targeted automobile drivers and the general public in an effort to increase awareness of motorcycles on the road, via traditional and social media. Enhanced messaging occurred in May, which is Motorcycle Safety Month, but the campaign ran throughout the riding season, consisting of radio and online marketing and a successful social media campaign, Did U Gear Up for Your Ride? Radio messages were run during busy weekends throughout the summer to encourage drivers to share the road with motorcycles, with a special focus on areas with high crash rates. BIANJ also carried out digital media placement, which resulted in a large increase of visitors to the STR page during the months of August and September.

The ongoing Champion Schools Program was leveraged to get STR information to the teens throughout the state, through presentations and pledge contests. Presentations were delivered to driver education classes while new materials and QR codes were developed to conduct outreach in a "hands free" manner. Share the road safety messages were promoted in workshops at the NJEA and NJ Shape conferences to reach educators. BIANJ staff hosts the statewide Driver Education Committee, which also is used to promote these STR messages in the classroom.

During the pandemic, BIANJ used virtual messaging and exhibits in person at community events starting in the summer. The *JerseyDrives* website educated the general public about the importance of sharing the road and is updated at least quarterly throughout the year. Programs

geared towards the motorcycle rider also continued as commitments were sought from riders to use good judgement, wear proper gear and become lifelong learners. BIANJ worked with motorcycle clubs, rider training centers and community partners to help spread these messages.

## **Work Zone Safety**

Through the Comprehensive Rutgers University Police Training Grant, work zone safety training and education was provided throughout FY2021 to law enforcement officers, municipal traffic engineers, and public works personnel.



The annual statewide Work Zone Safety Conference was held virtually on April 21, 2021. The event promoted work zone safety awareness on local and state roadways for a multi-disciplinary audience of construction, engineering, public safety,

maintenance and operations personnel and included a panel discussions about the importance of preconstruction meetings and the role of police in work zones. 257 people attended the conference.

In addition, two virtual *Work Zone Safety Train-the-Trainer for Police* workshops were conducted, resulting in 44 officers being trained and two virtual *Work Zone Safety Awareness for Police* workshops were held, resulting in 92 officers being trained.

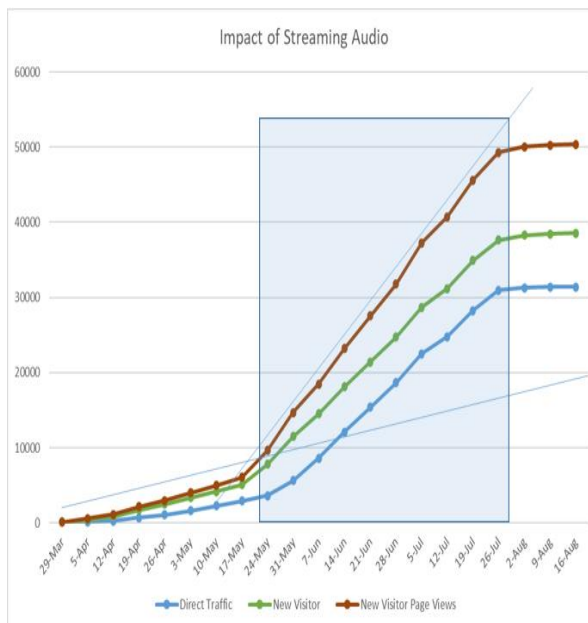
## Paid and Earned Media - Project Summaries

### **Take Control of Your Destiny (distracted driving)**

A major public information campaign, called “Take Control of Your Destiny – Don’t Drive Distracted” was undertaken in FY2021 to address New Jersey’s distracted driving program. Distracted driving was to blame for more than a quarter of the fatal crashes that occurred in New Jersey from 2015 through 2019, claiming the lives of 730 drivers, passengers, pedestrians, and bicyclists. During that same five-year period, more than half of all crashes in the state– both fatal and non-fatal – involved a distracted driver.



The “Take Control of Your Destiny” campaign featured colorful steering wheels depicting life milestones like graduation, marriage, and pursuing creative and professional interests, accompanied by the tagline “*You Have Places to Go. Don’t Drive Distracted.*” The campaign reminds the public that they should put down the phone and keep their eyes on the road in order to achieve their destinies.

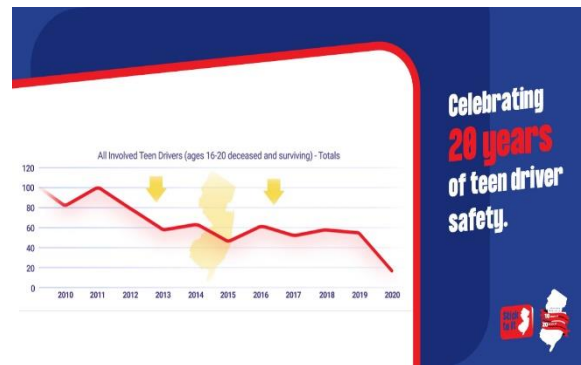


The “Take Control of Your Destiny” campaign used social media channels like Facebook, Snapchat, and Twitter as well as other streaming outlets like Pandora (audio), YouTube (video), and super market and major roadway rest stop screens. The campaign generated almost 70 million impressions across all channels and almost 60,000 page views to the DHTS website. 70% of those sessions came from direct channels suggesting that listeners heard or saw the media and then went directly to the DHTS website at some point thereafter. The sharp increases in engagement due to just the streaming portion of the campaign can be seen on the chart to the left.

As an added component to the “Take Control of Your Destiny” campaign, the Division has launched an awareness contest where the public can design their own steering wheel depicting why they choose to never drive distracted. Winners from this contest will have their steering wheel artwork displayed on the Division’s social media pages.

### **Stick To It (graduated driver's license)**

The Division also continued organic social media postings (including text copy, branded graphics and videos) from the FY2020 “Stick to It” teen driver safety public information campaign about New Jersey graduated driver licensing laws, which are among the strongest in the nation.



### **New Partnerships (teen drivers)**

Furthering its commitment to teen driver safety, the Division has partnered with the New Jersey State Interscholastic Athletic Association (NJSIAA) for sponsored multimedia messaging at high school athletic events that includes social media posts, ads in sports championship booklets, in-game loudspeaker announcements and more.

### **Social Media**

During FY2021, the Division employed a full time public information assistant to coordinate social media copy and graphics and assist with other efforts to create and generate paid and earned media. The goal of all these efforts was to further the division's mission to ensure safety on the roads and increase awareness of the State's several traffic safety initiatives in real time. Twitter, Facebook, Facebook Stories and Instagram Stories were utilized to engage and inform the public about the division's campaigns and programs. The division's social media pages are as follows:

Facebook - @NewJerseyDivisionofHighwayTrafficSafety

Twitter - @NJTrafficSafety

Instagram- @NJTrafficSafety

The DHTS has over 5,600 Twitter followers, over 15,000 “LIKES” on Facebook, and almost 1,500 followers on Instagram. The number of followers has increased on each of the social media platforms from the previous year.



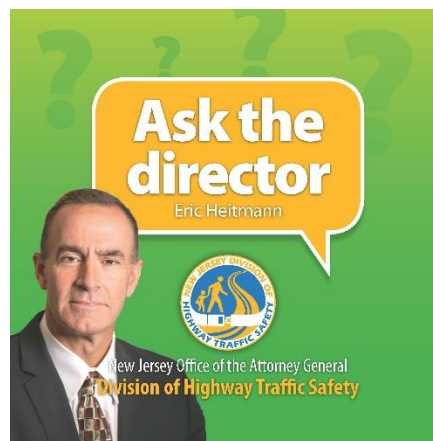
The Division's social media channels were integral in pushing out safety messaging to the public in FY2021. With impaired driving and speeding more prevalent as a result of the COVID-19 pandemic, the Division emphasized "Drive Sober," "Slow Down" and "Click It Or Ticket" messaging for added safety awareness on these issues.



Social media partnerships with other state and federal traffic safety partners, such as the New Jersey State Police, New Jersey Department of Transportation, AAA, Brain Injury Alliance and beyond has allowed a consistent and cohesive social media message to be pushed out for maximum reach and effect.

### **Ask the Director**

New FY2021 social media engagement and awareness tactics included an "Ask the Director" question and answer video with the Division's director, and the exploration of paid and vetted social media influencers to push out curated traffic safety messaging to their local followers.



## **EVIDENCE-BASED TRAFFIC SAFETY ENFORCEMENT PROGRAM**

Conducting evidence-based enforcement requires three main components. It begins with an analysis of relevant data to form problem identification. The second phase is the deployment of proven countermeasures targeted at the problems identified during the analysis, and lastly, evidence-based enforcement relies on continuous follow-up and necessary adjustments to the plan. Correctly identifying roadways, jurisdictions and their law enforcement agencies to participate in enforcement initiatives requires a data-driven process and careful resource analysis. Selected police departments must identify areas with the best opportunity to effectively reduce crashes, injuries, and ultimately, deaths. Grant funding levels should be based on a jurisdiction's proportion of crashes within each safety focus area. For example, over the last five years (2016-2020), Middlesex County accounts for nearly 11 percent of all distracted driving involved crashes reported by local police departments. Therefore, data shows they should receive approximately 11 percent of the distracted driving enforcement and education funding. This amount is used as a starting point, but the final award amount is determined by also evaluating past performance, ability to participate, and internal contributions to serve as matching efforts.

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

From the State to local level, the DHTS Crash Analysis Tool is used to analyze crash data. This multi-layered support program is made available to all law enforcement personnel and other decision makers to help identify and assess the most cost-effective ways and improve safety on the state's roadways through a data driven approach. Data provided by NJDOT is used to clearly identify and target roadways and jurisdictions where crashes are occurring, through the DHTS Crash Analysis Tool.

New Jersey's FY2021 traffic safety program efforts and funding allocations were evidence-based, as political subdivisions and other safety agencies were identified to participate in DHTS grant-funded activities. The two examples provided here are twofold: To identify the data-driven approaches to mitigating our worst safety related problems, as well as providing insight into how the data-driven decision-making process operates.

### *Project Description: A Novel Approach to Identify Distracted Driving Events in New Jersey*

Between 2016 and 2020, over 50 percent of all crashes in New Jersey involved some degree of distracted driving at the time of the crash. During that same period, distracted driving contributed to 25 percent of all traffic fatalities in the State. Over the past several years, various techniques (e.g., surveys, crash reports, videos, and simulations) were developed and implemented by the transportation safety community to identify and evaluate distracted driving events. However, these methods collect cross-sectional data on individual subjects and do not provide the actual number of distractions on the road. To fill this gap, DHTS partnered with Rowan University on a study that collected longitudinal data on distracted driving events in the state of New Jersey. The method involved a data collection crew continuously driving through the selected corridors to track driver distraction events by manual counting and video recording. The event data on distracted driving was analyzed to find the significance of various temporal features and geometric properties of roadways on the rate of distraction. The video data from the observational study was utilized to detect driving behaviors using a deep learning algorithm. The results from the analysis of event data demonstrated that cellphone use is the most prominent type of distraction. They also showed that the number of distractions—such as receiving calls, grooming, and talking to passengers—was significantly affected by both the time of day and by roadway type.

This study provided an evaluation of distracted driving from three perspectives. Firstly, it found the factors contributing to crashes involving distracted driving. Secondly, it examined the changing patterns in distraction events or in the behaviors of the drivers. Thirdly, it investigated a method for the detection of distracted driving. A summary of the results is provided in detail below. It should be noted that the results presented in the observational study support the research hypothesis; that the variation of temporal and roadway features significantly influences driver behavior and their patterns of being distracted.

#### **Crash Analysis**

A detailed crash analysis identified factors that contributed to crashes involving cellphone distractions. The summary of the results is as follows:

- The likelihood of severity of ‘injury’ crashes increased by 39% due to an increase in the total number of vehicles involved in the crash. Speed limit violations, the involvement of a drugged driver, and night hours were also found to increase the likelihood of severity of ‘injury’ crashes involving cellphone use by 2.8%, 4.7%, and 8.4%, respectively.
- An increase in AADT and driving in an urban setting led to a decrease in the likelihood of severity of ‘injury’ cellphone-related crashes by 21.9% and 43.1%, respectively.

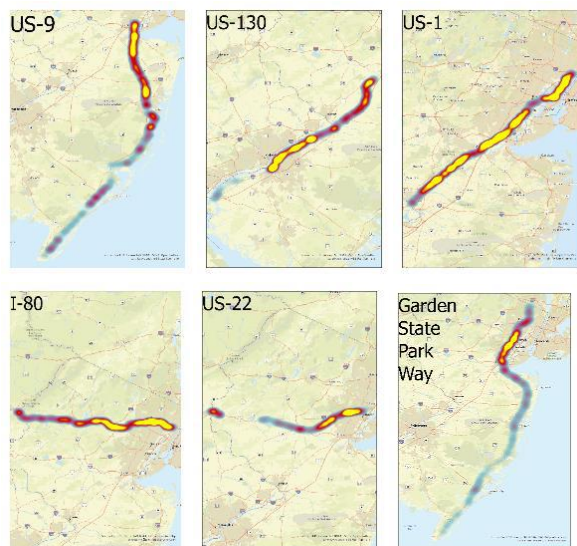
#### **Event Data Analysis**

Six corridors were identified as distracted driving priority areas: US-1, US-9, US-130, I-80, US-22 and the Garden State Parkway. A test vehicle, driven by a study participant, collected 334 hours



and over 14,835 miles of event data via a dual-mounted camera system. The event data captured on the selected corridors (with variations for peak/off-peak hours, seasons, the day of the week, signalized/unsignalized roads, toll/non-toll roads, number of lanes, posted speed limit, and median type) resulted in the following:

- “Handheld cellphone” is the leading type of distraction, irrespective of time, type of roadway, season, and the geometric properties of the roadway.
- “Receiving calls” significantly increased during the weekdays, on the unsignalized and non-toll roads compared to the weekends, signalized and toll roads.
- The behavior of “eating/drinking” significantly changes with respect to various temporal and roadway features (i.e., higher on signalized roads compared to unsignalized roads, and higher during the summer compared to the spring).
- The significance of the “fidgeting and grooming” category was found to be mainly due to seasonal variations, while the “radio/reaching object” class significantly changes due to the variation of weekday/weekend.
- Summer (24.4%) has a higher rate of distractions than spring (20.8%).
- Geometric features of the roadway (e.g., median type, median width, posted speed limit, shoulder width, and the number of lanes) significantly impact distracted driving behavior.



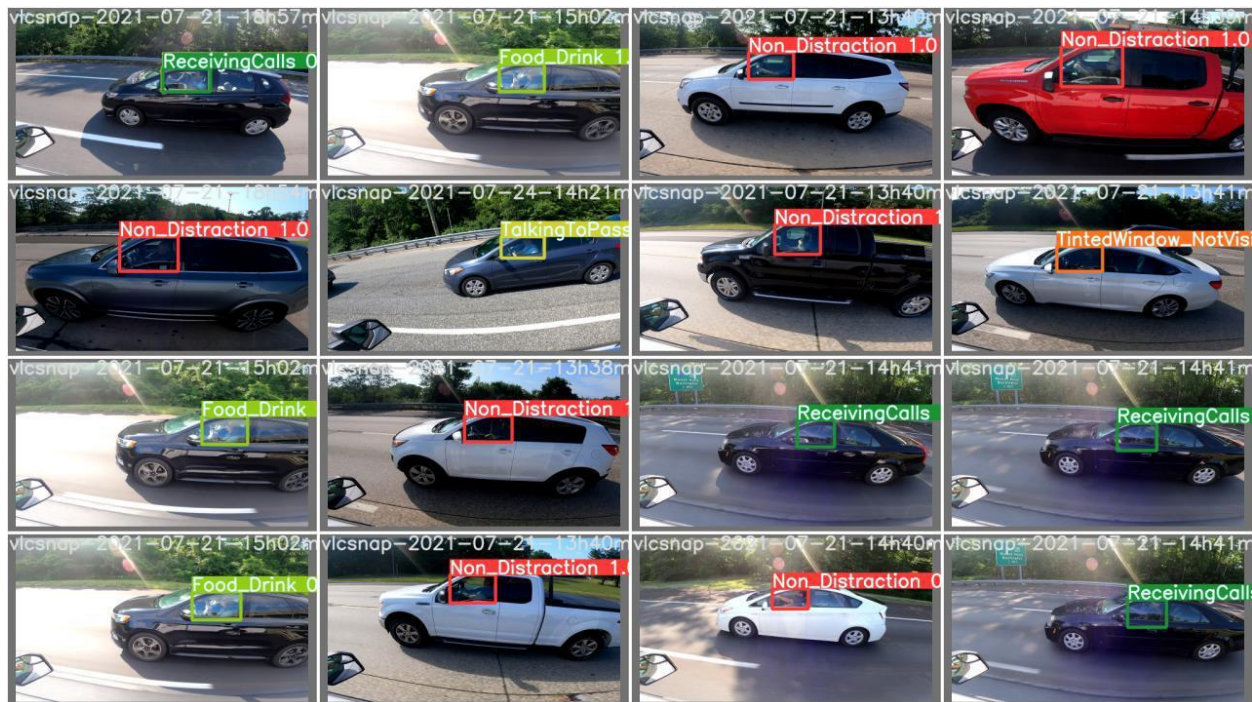
### **Distracted Driving Detection**

Based on the detection of driver behavior from observational video recording data using YOLOv5, the following findings were reached:

- Detection of driver behavior from cameras outside the car requires well-organized data preprocessing.
- The YOLOv5 model accurately predicted 85% of the driver distraction behaviors.

- The model prediction produces less false positive values than false negatives.

The findings of the cellphone-related crash analysis will assist DHTS in planning future countermeasures in this area, such as focusing enforcement and awareness activities more in the summer months, when driver distraction rates are higher. Moreover, such countermeasures should also prioritize corridors with signalized intersections, weekday driving, lower speed limits, wider shoulder width, higher median width, and positive-type medians. Looking to the future, the study results also show that detection of driver behavior from cameras outside the car is a promising avenue for further research.



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

Every April, New Jersey participates in NHTSA's *UDrive. UText. UPay.* 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 was updated and analyzed to assist in determining grantee participation in the *UDrive. UText. UPay.* campaign.



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

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

The top 15 of the FY2021 (crash years 2015-2019) Distracted Driving Enforcement Ranking List is shown below, along with a summation of crash years 2016-2020. These departments were invited to participate in high visibility enforcement efforts to reduce cell phone use and overall distracted driving behavior on New Jersey's roadways. DHTS provided technical assistance to grantees and fostered relationships with partnering agencies tasked with the same safety initiatives.

The ranking list is updated each year with a new 5-year summation and average. The list assists DHTS in determining the progress being made in reducing the number of distracted driving crashes in these prioritized areas as an evaluation of applied safety countermeasures.

FY21 DISTRACTED DRIVING ENFORCEMENT RANKING LIST								
Reporting Police Department		Years 2015-2019			Years 2016-2020			
County	Police Department	Total Crashes 2015-2019	5-Year Average	Statewide Rank	Total Crashes 2016-2020	5-Year Average	Statewide Rank	Rank Difference
Hudson	JERSEY CITY PD	21,507	4,301	1	21,467	4,293	1	0
Passaic	PATERSON PD	21,133	4,227	2	21,435	4,287	2	0
Essex	NEWARK PD	14,997	2,999	3	13,870	2,774	3	0
Middlesex	EDISON TWP PD	13,211	2,642	4	12,287	2,457	4	0
Passaic	CLIFTON PD	13,050	2,610	5	11,644	2,329	5	0
Middlesex	WOODBIDGE TWP PD	9,882	1,976	6	9,193	1,839	6	0
Hudson	NORTH BERGEN PD	8,663	1,733	7	8,948	1,790	7	0
Ocean	LAKEWOOD PD	8,663	1,733	7	7,279	1,456	12	5
Ocean	TOMS RIVER PD	7,870	1,574	9	7,382	1,476	11	2
Union	UNION TWP PD	7,648	1,530	10	7,659	1,532	9	-1
Mercer	TRENTON PD	7,069	1,414	11	7,507	1,501	10	-1
Union	ELIZABETH PD	6,996	1,399	12	7,693	1,539	8	-4
Mercer	HAMILTON TWP PD (MERCER)	6,928	1,386	13	5,514	1,103	15	2
Essex	IRVINGTON PD	6,378	1,276	14	6,631	1,326	13	-1
Ocean	BRICK TWP PD	6,297	1,259	15	5,563	1,113	14	-1

## **RECENT LEGISLATIVE ENACTMENTS**

The following highway safety legislation was approved during calendar year 2021.

### **P.L. 2020, c.148**

This law requires a person to watch a video created by the Motor Vehicle Commission, in conjunction with the Attorney General, before the person takes an examination for any permit. The video is to explain the rights and responsibilities of a driver stopped by a law enforcement officer. The video shall be used for informational purposes only and shall not be used in any criminal proceeding involving a driver stopped by a law enforcement officer. Under the bill, the video is to explain the rights and responsibilities of a driver stopped by a law enforcement officer.

Approved on January 4, 2021, this act became effective on August 1, 2021.

### **P.L. 2021, c.194**

The “New Jersey Safe Passing Law” imposes certain requirements on a motorist when the motorist is overtaking pedestrians, certain bicycles, low-speed electric scooters, and any other personal conveyances permitted under law.

Under the provisions of this law, the operator of a motor vehicle approaching a pedestrian, bicycle, low-speed electric bicycle, low-speed electric scooter, or other personal conveyance permitted under law is required to approach with due caution and, absent any other direction by a law enforcement officer, proceed as follows: 1) If possible in the existing safety and traffic conditions, make a lane change into a lane not adjacent to the pedestrian, bicycle, low-speed electric bicycle, low-speed electric scooter, or other personal conveyance permitted under law; 2) Leave a reasonable and safe distance of not less than four feet while approaching the pedestrian, bicycle, low-speed electric bicycle, low-speed electric scooter, or other personal conveyance permitted under law and maintain this distance until the motor vehicle has safely passed; or 3) If a lane change or leaving a reasonable and safe distance of at least four feet is not possible, prohibited by law, or unsafe, the operator of the motor vehicle is to reduce the speed of the motor vehicle to 25 miles per hour and be prepared to stop.

A person violating the provisions of this bill is to be subject to a fine of not less than \$100 or more than \$500.

Approved on August 5, 2021, this act becomes effective on March 1, 2022.

