

FEDERAL FISCAL YEAR 2018

PENNSYLVANIA HIGHWAY SAFETY PLAN



report

Pennsylvania Highway Safety Plan

Federal Fiscal Year 2018

prepared for

National Highway Traffic Safety Administration

prepared by

Pennsylvania Department of Transportation

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Introduction to the Pennsylvania Highway Safety Planning Process

PENNSYLVANIA HIGHWAY SAFETY PLAN



pennsylvania

DEPARTMENT OF TRANSPORTATION

1. Introduction to the Pennsylvania Highway Safety Planning Process

EXECUTIVE SUMMARY

According to the Highway Safety Act of 1966, 23 USC Chapter 4, Section 402, each state shall have a highway safety program approved by the Secretary, designed to reduce traffic crashes, deaths, injuries, and property damage. In order to secure funding each state must submit to The National Highway Traffic Safety Administration (NHTSA) a Highway Safety Plan (HSP). Contained in the HSP must be a set of clear and measurable highway safety targets, descriptions of the process used in determination of the highway safety problems, and the activities on how projects will address the highway safety problems. This Pennsylvania HSP for Federal Fiscal Year (FFY) 2018 serves as the State of Pennsylvania's application to NHTSA for Federal funds available under Section 402 State and Community Highway Safety grant program and the Section 405 National Priority Safety Program of Fixing America's Surface Transportation (FAST) Act. The following problem areas will be addressed through the FFY 2018 HSP:

- Impaired Driving;
- Occupant Protection;
- Speeding and Aggressive Driving;
- Distracted Driving;
- Mature Drivers;
- Motorcycle Safety;
- Young Drivers;
- Pedestrian Safety;
- Bicycle Safety;
- Commercial Vehicles; and
- Traffic Safety Information Systems.

In October 2016, NHTSA committed to eliminate traffic deaths within 30 years. Pennsylvania's proposed HSP target supports this national effort. Relying heavily on the implementation of autonomous vehicle technology, which will not be readily implemented for another decade, the reduction in fatalities over the next 30 years will not be linear. By 2018, Pennsylvania hopes to reduce fatalities to a 5-year average (2014-2018) of 1,176.6. This target aligns with Pennsylvania's Strategic Highway Safety Plan (SHSP). Safety has always been one of the Pennsylvania Department of Transportation's (PennDOT) strategic focus areas. The programs and activities of the HSP and SHSP reflect a substantial broad-based effort designed to meet the ambitious target.

The Department's Highway Safety and Traffic Operations Division (HSTOD) is directly responsible for the identification of roadway safety issues related to both driver behavior and roadway improvements. To address the constant demand of evolving highway safety concerns HSTOD develops multiple plans throughout the year that collectively make up the PennDOT HSP. HSTOD's problem identification and performance target-setting processes, performance targets and measures, and strategies related to the program areas are described in this plan.

MISSION STATEMENT

HSTOD fulfills its mission through a variety of public information, education, and enforcement efforts. The FFY 2018 HSP describes the process used to identify specific highway safety problem areas, including the development of countermeasures to correct those problems, and processes to monitor the performance of those countermeasures.

Vision

Our vision is to provide the safest roadways possible so that everyone arrives safely at their destinations.

Mission

Our mission is to improve highway safety by developing, promoting, and implementing education, enforcement, engineering, and emergency services strategies.

ORGANIZATION AND STAFFING

HSTOD is committed to coordinating highway safety initiatives designed to impact our priority areas and programs that will help us reach our fatality reduction targets. Office staff members are committed to further developing partnerships with agencies statewide, including law enforcement, emergency medical services, health care professionals, businesses, educators, and private citizen organizations. It is through these vital statewide links that we believe much can be accomplished in promoting safe driving practices.

The Deputy Secretary for Highway Administration, George W. McAuley, Jr., P.E., is the Governor's Highway Safety Representative for Pennsylvania. The Chief of HSTOD, Glenn Rowe, P.E., is the coordinator for Pennsylvania's Highway Safety Program.

The functions of the Highway Safety Program are conducted by the Program Services Unit of the Highway Safety Section (HSS). The Section Chief of HSS, Gavin Gray, P.E., oversees the activities of the Highway Safety Program, Highway Safety Improvement Program, Crash Information Systems and Analysis Unit, and the Safety Engineering & Risk Management Unit. In addition, he is responsible for the development of the Strategic Highway Safety Plan (SHSP).

The Program Services Unit, also referred to as the Pennsylvania Highway Safety Office (HSO), consists of one Manager, two Supervisors, and five Specialists.

- **Tom Glass, Transportation Planning Manager (TPM)** – Manages the Program Services Unit, including the planning, administration, fiscal control, and evaluation of the Commonwealth’s Highway Safety Program financed through NHTSA highway safety and other Federal and state funds. Other duties include submission of the Performance Plan, the Highway Safety Plan and Program Cost Summary required for the Section 402 funding, the Annual Report, and general direction of the highway safety program. This position supervises two Transportation Planning Specialist Supervisor and one Transportation Planning Specialist-1 personnel.

Relevant Training: NHTSA Program Management; NHTSA Financial Seminar; NHTSA Data Analysis and Evaluation; TESC; CDART; ESS; The Hiring Toolkit (specifically for PennDOT Supervisors); dotGrants Application “Train-the-Trainer”; Intelligrants Grant Designer Form Builder; PennDOT Leadership Academy for Supervisors; National Association for Pupil Transportation courses #801 and #802; NHTSA Standardized Child Passenger Safety Training Program; PennDOT Workforce and Succession Planning; and PennDOT Absence Management for Supervisors

- **Troy Love, Transportation Planning Specialist Supervisor (TPSS)** – Supervises the Impaired Driving Program. Oversees the completion of Section 405d applications, collection of Blood Alcohol Content (BAC) results for the Fatality Analysis Reporting System (FARS), implementation of impaired driving crackdowns and mobilizations, and other impaired driving programs and activities. Supervises individual grants to conduct impaired driving enforcement, Driving Under the Influence (DUI) court grants, the DUI Technical Services contract, the statewide Ignition Interlock Quality Assurance Program, the Institute of Law Enforcement Education Memorandum of Understanding (MOU) with the Pennsylvania Department of Education, and other projects. Assists with the Department’s dotGrants system and coordinates any upgrades and enhancements as needed. This position supervises two Transportation Planning Specialist-1 personnel.

Relevant Training: NHTSA Program Management; NHTSA Impaired Driving Program Management; NHTSA Data Analysis and Evaluation; NHTSA Financial Seminar; Intelligrants Grant Designer Form Builder; BHSTE/CDART; Crystal Reports 1 and 2; and PennDOT Leadership Academy for Supervisors

- **Christopher Swihura, Transportation Planning Specialist Supervisor (TPSS)** – Supervises the Local Safety Programs, including grants administration, monitoring Community Traffic Safety Programs, Occupant Protection Program (including the annual observational seat belt survey), Child Passenger Safety Program, Pennsylvania State Police MOU, Child Seat Loaner Program, Public Information and Education contract activities, and enforcement programs. Coordinates the preparation of the Section 405b application and the Safety Advisory Committee. This position supervises two Transportation Planning Specialist-1 personnel.

Relevant Training: NHTSA Program Management; NHTSA Impaired Driving; NHTSA Standardized Child Passenger Safety Training Program; NHTSA Data Analysis and Evaluation; CDART; Crystal Reports 1; and Traffic Occupant Protection Strategies (TOPS); Commonwealth Mentoring Program

- **Scott Kubisiak, Transportation Planning Specialist 1 (TPS-1)** – An Assistant Manager of the Program Services Unit. Coordinates and compiles statistical data for the Sobriety Checkpoint and Aggressive Driving Enforcement and Education Programs. Oversees the Ignition Interlock program, DUI courts, Enforcement and Judicial Outreach programs, paid media activities, and all project activity in highway safety regions one and three.

Relevant Training: NHTSA Program Management; NHTSA Impaired Driving Program Management; and NHTSA Data Analysis and Evaluation

- **Michael Dudrich, Transportation Planning Specialist (TPS-1)** – Provides Quality Assurance support for the highway safety program. Assists with fiscal administrative efforts in preparation of Federal voucher submissions to comptroller. Reviews and tracks grantee reimbursements for errors and noncompliant items; providing training to grantees as necessary. Conducts on-site project quality assurance audits in compliance with Federal requirements. Assists in the management of the Commonwealth’s access to the Federal Grants Tracking System and with the day-to-day activities related to the administration of the \$22.0 million Highway Safety Grant Program. Oversees the Bureau’s e-grants fiscal operations, the Pedestrian Enforcement and Education Program Grants, as well as all projects in highway safety region two.

Relevant Training: NHTSA Program Management; NHTSA Managing Federal Finances; and NHTSA Data Analysis and Evaluation

- **Emily Bremer, Transportation Planning Specialist Trainee (TPS-1)** – An Assistant Manager of the Program Services Unit. Oversees mature driver, Commercial Motor Vehicle safety programs, the Law Enforcement Liaison program, and all projects in highway safety region four.

Relevant Training: Crash Data Analysis Retrieval Tool (CDART), NHTSA Milestones of Highway Safety Program Development, NHTSA Managing Highway Safety Programs, Aging Road User Program Management

- **Christine Timbrell, Transportation Planning Specialist Trainee (TPS-1)** – An Assistant Manager of the Program Services Unit. Oversees the Pennsylvania State Police MOU, the Pennsylvania Teen Driver Safety Program Grant, the Public Information & Education (PI&E) Grant, the Yellow Dot Program, and all projects in highway safety region six.

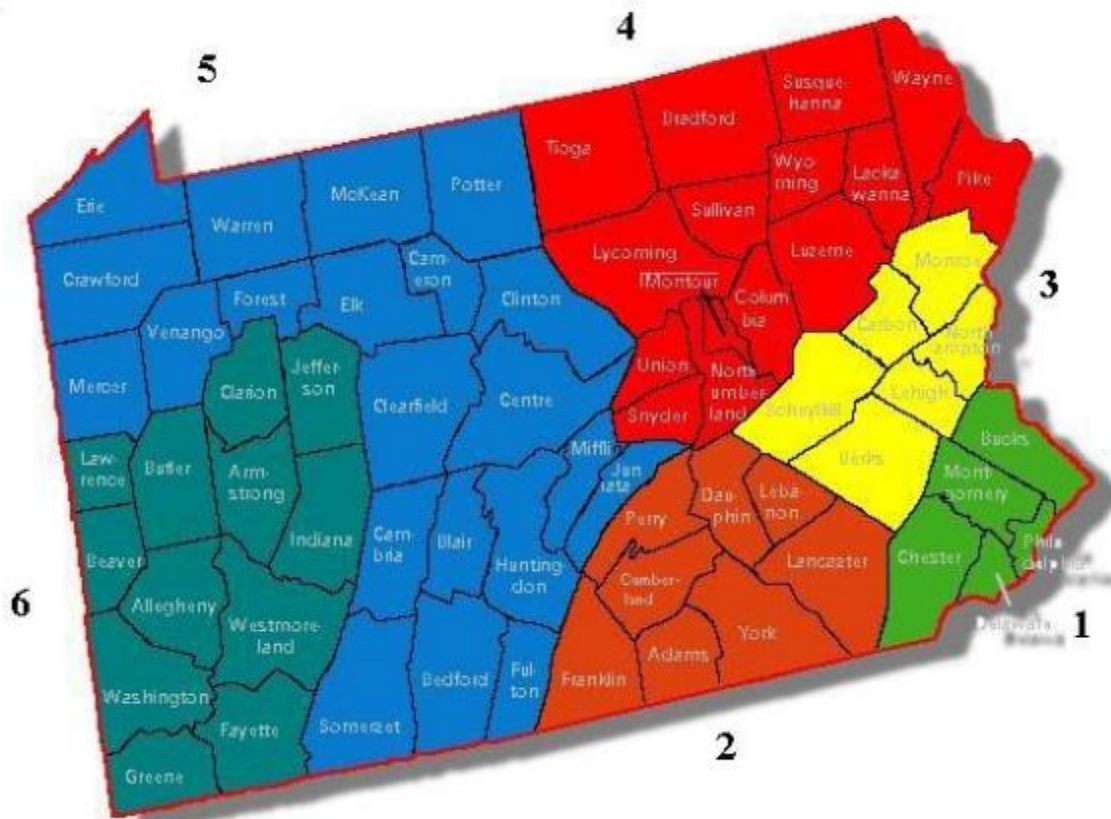
Relevant Training: Crash Data Analysis Retrieval Tool (CDART), NHTSA Milestones of Highway Safety Program Development, NHTSA Managing Highway Safety Programs

- **Benjamin Paulson, Transportation Planning Specialist Trainee (TPS-1)** – An Assistant Manager of the Program Services Unit. Oversees the Motorcycle Safety Project, the statewide Child Passenger Safety Program, and all projects in highway safety region five.

Relevant Training: Crash Data Analysis Retrieval Tool (CDART), NHTSA Milestones of Highway Safety Program Development, NHTSA Managing Highway Safety Programs

Highway Safety Regions

Coordination of project activities and communications is conducted using six Highway Safety Regions established to align with major media markets in Pennsylvania. HSO staff are assigned regional coverage to support and monitor projects (see above for specific staffing assignments).



TIMELINE AND PLANNING PROCESS

The HSTOD conducts transportation safety planning year round. Emerging trends and safety needs are identified through data monitoring and outreach to key safety stakeholders. Figure 1.1 and Table 1.1 depict the annual planning cycle.

Figure 1.1 Overview of HSP Planning Process



Table 1.1 Annual Safety Planning Calendar

Month	Activities
October	Solicit final reports and claims for grants ending September 30 th . Program staff begins work on FFY 2017 Annual Report. The first meeting of the annual Spring Traffic Safety Grantee Workshop planning committee is held.
November	Conduct first meeting of Safety Advisory Committee (SAC) to begin planning FFY 2019 Highway Safety Plan. Final reimbursement claims for FFY 2017 are processed. Coordinate participation in the Thanksgiving Click It or Ticket (CIOT) mobilization.
December	Finalize FFY 2017 Annual Report. Conduct second meeting of the SAC. Coordinate participation in the Holiday Impaired Driving mobilization.
January	Conduct final SAC meeting to establish FFY 2019 program area countermeasures and budgets. Program staff begins FFY 2018 project monitoring visits.
February and March	Submit FFY 2019 program budget to PennDOT Program Management Committee for executive approval. Coordinate CIOT Teen mobilization and St. Patrick’s Day Impaired Driving mobilization. Begin Aggressive Driving Enforcement Wave 1. Conduct Spring Traffic Safety Grantee Workshop. Develop plan for participation in the National CIOT mobilization.
April to June	Solicit applicants for FFY 2019 local grant opportunities and begin preparation of FFY 2019 Highway Safety Plan (HSP) and 405 certifications. Coordinate Memorandum’s of Understanding for FFY 2019 state projects approved by the SAC. Conduct activities for National Distracted Driving Awareness Month.
May and June	Finalize FFY 2019 HSP and 405 certifications after soliciting internal and NHTSA Regional Office comments. Participate in the National CIOT mobilization and coordinate activities for Motorcycle Awareness, Global Youth Traffic Safety, and National Bicycle Safety Months. Develop plan for participation in the National Impaired Driving Crackdown.
July	Submit final HSP and 405 certifications to NHTSA. Begin Aggressive Driving Enforcement Wave 2. Coordinate activities for Child Passenger Safety Week.
August and September	Complete selection and subsequent negotiations of FFY 2019 local grants. Complete processing of FFY 2019 local and state agreements. Participate in the National Impaired Driving Crackdown and Child Passenger Safety Week. Send out close-out reminders to FFY 2018 grantees.

Strategic Partners and Stakeholders

The Safety Advisory Committee (SAC) members provide input on safety program areas and effective countermeasures to help achieve HSTOD's vision and mission. The SAC provides a broad perspective in the alignment of behavioral highway safety programs across all critical safety partners in Pennsylvania. They also approve funding levels for broader state and local safety programs which satisfy fund qualifying criteria and eligibility, legislative requirements, and contract coverage. Behavioral programs involve police traffic enforcement in combination with public education and information activities. Infrastructure safety programs deal with physical infrastructure improvements and are not addressed by the SAC. Infrastructure safety programs are identified in the PennDOT Highway Safety Improvement Program and incorporated into its Engineering District Safety Plans.

The SAC consists of representatives from PennDOT, Pennsylvania Department of Health, Pennsylvania State Police, National Highway Traffic Safety Administration, Federal Highway Administration, and representatives from local government and police departments. The Program Management Committee (PMC) is a PennDOT executive-level committee and approves the State's overall Highway Safety Program based upon the targets and priorities established in the SHSP. The PMC has final approval on all budget changes.

To implement the highway safety plan, the SAC divides state and Federal money among state-level and local grant funds.

State Safety Partners

Pennsylvania State Police

Pennsylvania State Police (PSP) has about 4,700 sworn members and has jurisdiction in all political subdivisions in the State. PSP provides traffic enforcement on the interstates, turnpike, and provides full-time police service for about half of Pennsylvania municipalities. Municipalities with full-time PSP coverage represent about 20 percent of the State population. The PSP is provided with highway safety funding to implement proven and cost-effective traffic safety enforcement strategies to address speeding and aggressive driving, distracted driving, DUI, and occupant protection. All troops participate in national mobilizations and some assist local police in safety enforcement. The Pennsylvania State Police host 70 child safety seat fitting stations year round and participate in trainings (as both instructors and students) and seat check events during enforcement mobilizations.

Department of Drug and Alcohol Programs

According to Pennsylvania statute, individuals who are convicted or plead guilty for an impaired driving offense must undergo a full drug and alcohol assessment prior to sentencing if any of the following apply; the individual has a prior DUI offense, or if indicated by the pre-screening evaluation, or if the BAC at time of arrest was 0.16 or greater. The intent is to properly identify those individuals who have an alcohol or drug addiction and ultimately lead to a reduction in DUI recidivism by including treatment as a component of the court sentencing. This is a crucial factor in the success of the

combined health/legal approach to reducing impaired driving. In 2016, the pre-screening evaluation of DUI offenders recommended that nearly 90 percent of those offenders undergo a full drug and alcohol assessment. Of all the DUI convictions in 2016, just over half were for a second or subsequent conviction. The burden of ensuring compliance with this statute lies within each county court and compliance has a direct impact on recidivism. According to court data and a 2016 state Supreme Court case, the county courts are failing to universally comply with this statute. The Department of Drug and Alcohol Programs is continuing its evaluation the programs within the county court systems to review compliance with statute, as well as to identify best practices to share with non-compliant counties.

Department of Education Institute for Law Enforcement Education

Providing and coordinating training for the police community is paramount in reaching the safety targets outlined in this Highway Safety Plan. A large number of strategies contained in this plan are enforcement-based. As a result, the police community must be trained in conducting targeted DUI enforcement to include NHTSA standardized field sobriety testing (SFST), chemical breath testing procedures, and trainings such as advanced roadside impaired driving enforcement (ARIDE) and as drug recognition experts (DRE) to detect motorists impaired by drugs. In order to participate in NHTSA grant-funded sobriety checkpoints, officers must be trained in sobriety checkpoints and NHTSA SFST certified to act as the testing officer at a checkpoint. The SHSO plans to continue to fund the Institute for Law Enforcement Education (ILEE) to perform these training needs for the police community. The Institute for Law Enforcement Education functions as a division of the Pennsylvania Department of Education and offers a broad range of training options with a focus on highway safety issues.

Pennsylvania Chapter of the American Academy of Pediatrics Traffic Injury Prevention Project

PennDOT secured a vendor to continue statewide child passenger safety project coordination. A multi-year contract was awarded to Pennsylvania TIPP and was fully executed on October 1, 2014. A continuation of a long-standing educational effort in the Commonwealth, the selected vendor will, at a minimum, educate children, parents, school personnel, nurses, doctors, police, and the general public on the importance of occupant protection in vehicles, pedestrian safety, bicycle safety, school bus safety, and alcohol prevention for individuals aged birth to 21. Additional tasks include the development of highway safety materials for individuals, act as lead coordinator of the State's Child Passenger Safety Week activities, and make presentations to groups with a particular emphasis on working with pediatricians, hospitals, daycare centers, schools, and colleges to decrease the number of children injured or killed in traffic crashes.

Local Safety Partners

The Highway Safety Office has created 12 grant program areas to implement the Highway Safety Program at the local level. Eligible applicants for most grants are local governments, State-related universities and the Pennsylvania State System of Higher Education (PASSHE) universities, hospitals, and nonprofit organizations. The DUI court grant is awarded to county courts. Most of the grants require the grantee to take on responsibility for coordinating a statewide program and, in some cases, awarding mini-grants for implementation of that program. The Community Traffic Safety Project grant funds the 15 to 20 Community Traffic Safety Programs (CTSP) that work locally to implement a large part of the highway safety program. All of the grants are awarded competitively except for the Municipal Impaired Driving

Enforcement and Police Traffic Services grants which are awarded through formulae based on the number of applicable crashes by municipality and the willingness and ability of a municipality to implement the program.

Community Traffic Safety Projects

The Community Traffic Safety Program consists of projects which compliment high-visibility enforcement efforts, address local safety problems beyond the effective reach of the state highway safety office, and form a link between state and local government. General tasks include:

- Targeting programming towards local highway safety issues as identified by data review;
- Coordination of educational programs for various audiences;
- Utilization of materials/program/projects which are appropriate and effective;
- Education of the public concerning Pennsylvania's motor vehicle laws;
- Establishment of partnerships with police departments and other traffic safety stakeholders to collaborate programming; and
- Planning of press and other earned media through collaboration with the PennDOT District Safety Press Officers to communicate standard messages to the public.

Local Police

About half of Pennsylvania municipalities are served by local police departments. These municipalities make up about 80 percent of the State population. Municipal police departments conduct enforcement to address occupant protection, speeding and aggressive driving, distracted driving, and DUI. They participate in high-visibility enforcement efforts, national mobilizations, and conduct local enforcement campaigns. The police departments coordinate with other safety partners and are a key part of the education and outreach programs, especially to schools.

County Courts

County courts participate in the DUI Court program, which is aimed at reducing DUI recidivism. The support of the courts during enforcement efforts is crucial in reinforcing the penalties for unsafe driver behavior.

Grant Funding Process

Grant application information is distributed to parties expressing interest in the grants. Included are descriptions of the program, program requirements, eligibility and qualifications, and guidance on administering the funds. Also included is guidance on forming proper problem identification and on selecting acceptable countermeasures and metrics.

FFY 2018 Local Grant Opportunities

1. Community Traffic Safety Project: Competitive

Traffic safety educational outreach programs to schools and communities targeting local safety issues identified through data analysis. Provide support towards national and statewide enforcement mobilizations and other programs.

Eligible: Local governments, Pennsylvania State-related universities, and Pennsylvania State System of Higher Education universities.

2. Occupant Protection Enforcement and Education Program: Competitive

Coordination of statewide occupant protection enforcement and education program. Includes coordination, support, and administration of local police department participation in national and statewide enforcement mobilizations and associated educational outreach efforts.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

3. Aggressive Driving Enforcement and Education Program: Competitive

Coordination of statewide aggressive driving enforcement and education program. Includes coordination, support, and administration of local police department participation in national and statewide enforcement mobilizations and associated educational outreach efforts.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

4. Pedestrian Education and Enforcement Program: Competitive

Localized High-Visibility Enforcement (HVE) operations and community outreach to promote safer walking and driving behaviors and to reinforce the message through law enforcement to increase compliance with appropriate traffic laws by both pedestrians and drivers.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

5. Municipal Impaired Driving Enforcement: Allocation Formula

Coordination of local police participation in impaired driving enforcement countermeasures, including officer overtime, necessary equipment purchases, and associated training.

Eligible: Local governments.

6. Police Traffic Services Program: Allocation Formula

Coordination of local police participation in impaired driving, occupant protection, and aggressive driving enforcement countermeasures, including officer overtime, necessary equipment purchases, and associated training.

Eligible: Local governments.

7. DUI Court: Competitive

Development and facilitation of a DUI Court system, including judicial training in the area of DUI courts, establishment of new probation officers whom monitor DUI court participants, and necessary equipment.

Eligible: Pennsylvania County Courts.

8. Traffic Safety Resource Prosecutor: Competitive

Coordination of the Traffic Safety Resource Prosecutor position in accordance with national and state guidelines in support of the Commonwealth's Highway Safety Program.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

9. Crash Records Law Enforcement Liaisons: Competitive

Coordination of the Crash Records Law Enforcement program designed to assist the Pennsylvania Department of Transportation with transitioning crash records submissions by Pennsylvania Police Agencies from paper to electronic filing in addition to other services as identified.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

10. Teen Driver Safety Program: Competitive

Coordination of parent/caregiver workshops, mini-grants for peer-to-peer programs and development of youth traffic safety summits.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

11. Judicial Outreach Liaison (JOL): Competitive

The JOL serves as that technical resource in a peer to peer exchange of information between judges. The JOL also serves as the liaison between the highway safety and the judiciary communities offering insight, sharing concerns, participating in stakeholder meetings, providing training, and promotes best practices such as DUI courts and other evidence based best practices.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

12. DUI Law Enforcement Liaisons: Competitive

Their tasks include providing technical assistance to the impaired driving task forces, relay proper case law regarding various aspects of impaired driving, and to act as an extension of PennDOT for our law enforcement partners.

Eligible: Local governments, colleges or universities, hospitals, and nonprofits.

Grant applications are reviewed by a committee that scores each proposal on seven key areas:

1. **Problem Statement:** Is the problem clearly identified? Data analysis and evaluation are the foundation for the project and will determine the structure and accuracy of the targets, activities, results, and evaluation efforts for the duration of the project. This section must not only identify problems but precisely communicate why it is a problem.
2. **Alignment to Strategic Focus Area (SFA) and National Highway Traffic Safety Administration (NHTSA) goals:** Does this program address 1 or more of the SFAs and NHTSA goals? Are the program targets clearly outlined?
3. **Program Activities:** Does the request clearly identify the strategies/activities to be conducted? Will the activities to be conducted address the problem stated?
4. **Measurement of Results/Evaluation/Effectiveness:** Are the results measurable, dependable and aligned with the grant targets? Is a Table of Measurements included as part of the grant proposal? An important component is how well the applicant's proposal addresses the 15 NHTSA Evaluation Criteria:
 - a. Overall Traffic Fatalities;
 - b. Number of Suspected Serious Injuries;
 - c. Fatalities per 100 Million Vehicle Miles Traveled;
 - d. Number of Unrestrained Passenger Vehicle Occupant Fatalities;
 - e. Number of Fatalities Involving Driver or Motorcycle Operator with ≥ 0.08 BAC;
 - f. Number of Speeding-Related Fatalities;
 - g. Number of Motorcycle Fatalities;
 - h. Number of Unhelmeted Motorcycle Fatalities;
 - i. Number of Drivers Age 20 or Younger Involved in Fatal Crashes;
 - j. Number of Pedestrian Fatalities;
 - k. Number of Bicycle Fatalities;
 - l. Percent Observed Belt Use for Passenger Vehicles – Front Seat Outboard Occupants;
 - m. Number of Safety Belt Citations Issued During Grant-Funded Enforcement Activities;
 - n. Number of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities; and
 - o. Number of Speeding Citations Issued During Grant-Funded Enforcement Activities.
5. **Past Performance:** Has the applicant's past work-related safety experience and/or grant performance history demonstrated a proven ability to fully develop and implement a successful highway safety program?

6. **Agency/Personnel Qualifications:** Does the applicant's education and work experience demonstrate the proven expertise to conduct a highway safety program in the area of highway safety laws and regulations, problem identification, strategic program development, program delivery, budget management, interim and final evaluations, report writing, and related duties?
7. **Proposed Budget:** Does the proposed budget make sense given the activities planned? Is it within the statewide budget planned at the beginning of the grant cycle?

Upon conclusion of the grant application period, a team of scorers utilize an objective scoring method applied equally to all applications. Successful applications are determined by how well the applicant's proposal addresses problem identification, program targets, and project evaluation. Applicant agency qualifications and the proposed project budget also are considered in scoring applications.

Unsuccessful applicants are provided the opportunity for a debriefing by the Department. The discussion is limited to a critique of the submitted proposal. The feedback is designed to help the applicant strengthen future submissions.

Successful applicants move into negotiations with the HSO staff. Negotiations include requested changes to project scopes, measurements, and budgets. Individual local project budgets are established based on a review of multiyear crash data to prioritize problematic program areas and/or locations. Upon completion of negotiations, proposals are routed through the dotGrants grant approval workflow, consisting of review and electronic approval by HSTOD, Office of Chief Counsel, Office of the Comptroller, and Department of Treasury personnel.

Once approved and implemented, all projects are monitored in accordance with procedures established by PennDOT reflecting state and Federal rules and regulations. Project directors are required to submit quarterly reports indicating activities and progress. Reports are requested on standard quarters: October to December; January to March; April to June; and July to September. Annual reports also are requested for identified projects. The DUI Enforcement projects are required to submit enforcement activity reports within one week of the operations.

COUNTERMEASURE AND STRATEGY SELECTION PROCESS

The statewide safety partners work to achieve Pennsylvania's safety targets through the use of proven countermeasure activities that address crashes and fatalities in the safety focus areas. Section 4 shows what programs and projects will take place in Fiscal Year 2018 by program area. Each program area depicts state crash data to provide justification for including the program area and guides the selection and implementation of countermeasures to address the problem in a way that is specific to Pennsylvania.

Countermeasures are activities that will be implemented in the next year by the HSO and the safety partners. The selected countermeasures are proven effective nationally, have been successful in Pennsylvania, and are appropriate given the data in the problem identification and the resources available. Each countermeasure (project/program) contains a description of the activity, who will implement it and where it will be implemented, the funding code and whether funding will be state, Federal, or a combination. The specific metrics that will be used to evaluate the activities at the end of the fiscal year and to adjust the program as

needed for the next year. Citations to the NHTSA publication “Countermeasures that Work, A Highway Safety Countermeasure Guide for State Highway Safety Offices, Eighth Edition, 2015” are included with the countermeasure descriptions (CTW, Chapter: Sections).

COORDINATION WITH SHSP

In October 2016, the National Highway Traffic Safety Administration (NHTSA) committed to eliminate traffic deaths within 30 years. Pennsylvania has adopted a goal to support this national effort. This ambitious timeline will rely heavily on the implementation of autonomous vehicle technology, which is anticipated to be implemented sometime between 2025 and 2030. Accordingly, the reduction in fatalities over the next 30 years will not be linear. Pennsylvania’s goal is to reduce the current number of fatalities and serious injuries by two percent per year (120 and 305 respectively) over the next five years. This goal was established in conjunction with our Federal partners based on a combination of reviewing Pennsylvania’s historical data and observations of national trends. As autonomous vehicle technologies are implemented, the fatality and serious injuries reduction goals will increase.

Figure 1.2 Historic Fatalities and Targets

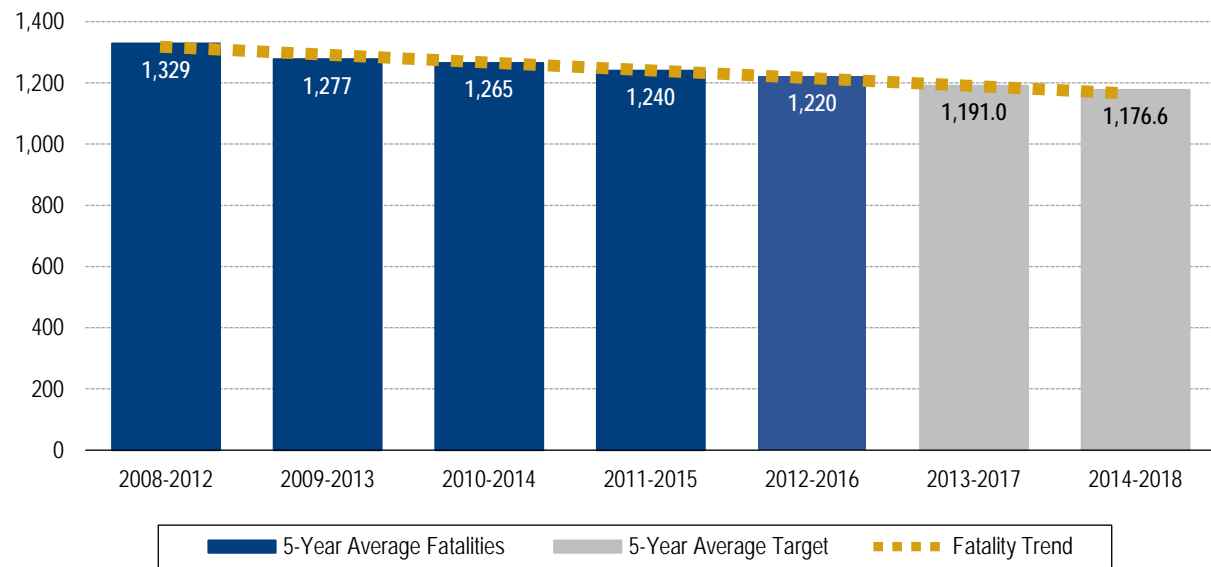


Figure 1.3 Historic Suspected Serious Injuries and Targets

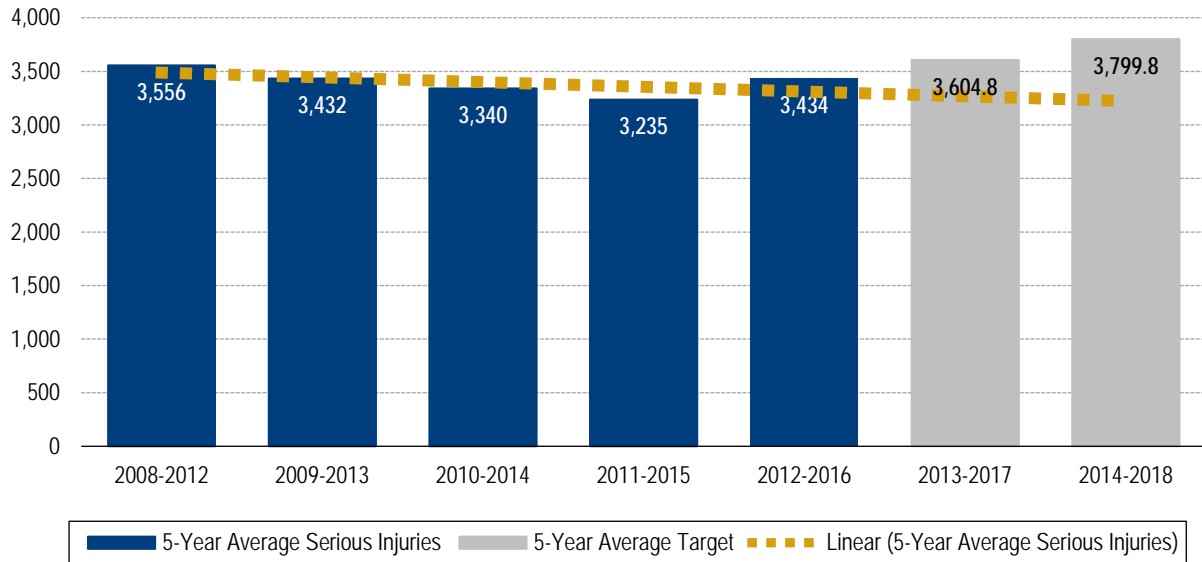
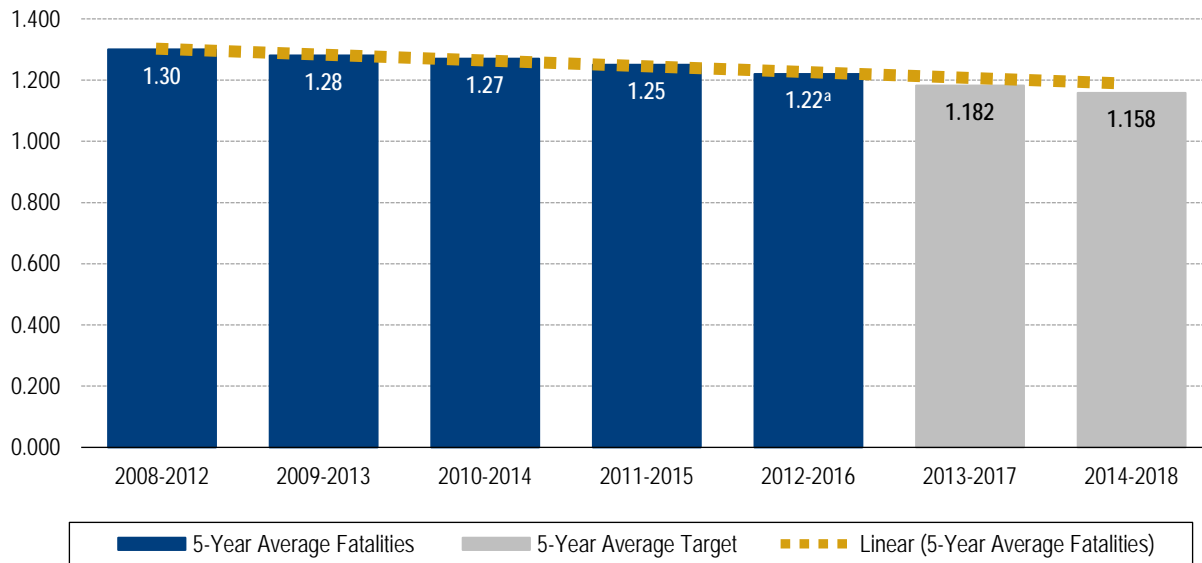


Figure 1.4 Historic Fatalities per 100 Million Vehicle Miles Traveled (MVMT) and Targets



^a 2015 VMT data was used for calculating the 2012-2016 fatality rate (2016 incomplete).

HSTOD staff has been an active partner in the SHSP process since the development of the plan in 2006 and are members of the SHSP Steering Committee. The 2017 SHSP was developed, with HTSOD actively participating in the process, to maintain and build on the momentum achieved by the state’s previous strategic plans, which involved outlining both existing and new strategies, as well as the selection of 16 key emphasis areas that have the greatest potential to reduce highway fatalities and suspected serious injuries.

The behavioral goals, strategies, and action steps in Pennsylvania's SHSP reflect the activities and programs in the HSP.

1. Reducing Impaired Driving
2. Increasing Seat Belt Usage
3. Infrastructure Improvements
 - a. Lane Departures
 - b. Intersection Safety
4. Reducing Speeding & Aggressive Driving
5. Reducing Distracted Driving
6. Mature Driver Safety
7. Motorcycle Safety
8. Young & Inexperienced Driver Safety
9. Enhancing Safety on Local Roads
10. Improving Pedestrian Safety
11. Improving Traffic Records Data
12. Commercial Vehicle Safety
13. Improving Emergency/Incident Influence Time
14. Improving Bicycle Safety
15. Enhancing Safety in Work Zones
16. Reducing Vehicle-Train Crashes

The SHSP was used in the development of the safety initiatives identified in the Performance Plan which defines how the Commonwealth will utilize Federal Section 402 highway safety funds and other NHTSA incentive and special funding sections. The current SHSP document was published online in March 2017 and can be found at: <http://www.penndot.gov/safety>.



FFY 2017 Performance Report

PENNSYLVANIA HIGHWAY SAFETY PLAN



pennsylvania

DEPARTMENT OF TRANSPORTATION

2. FFY 2017 Performance Report

Table 2.1 provides the results of Pennsylvania’s progress in meeting the core performance measures identified in the FFY 2017 HSP.

Table 2.1 Progress in Meeting NHTSA Core Performance Measures Identified in FFY 2017 HSP

NHTSA Core Performance Measures	2012-2016 Performance Target	Status	Comments
Traffic Fatalities	1,201	The average number of traffic fatalities from 2012 to 2016 was 1,220 per year	In 2016, Pennsylvania saw the lowest number of traffic fatalities on record—1,188.
Suspected Serious Injuries ^a	3,280	The average number of suspected serious injuries from 2012 to 2016 was 3,434 per year.	The increase in this category is due to a change in standard of injury classification effective January 1, 2016.
Unrestrained Passenger Vehicle Occupant Fatalities	452	The average number of unrestrained occupant fatalities from 2012 to 2016 was 420 per year.	The 5-year average has decreased annually since 2006.
Drivers Age 20 or Younger Involved in Fatal Crashes	197	The average number of young driver fatalities from 2012 to 2016 was 147 per year.	The 5-year average young driver fatalities has decreased annually since the Graduated Driver Licensing Law took effect in 1999.
Fatalities Involving Driver or Motorcycle Operator with ≥ 0.08 BAC	344	The average number of alcohol-impaired fatalities from 2012 to 2016 was 345 per year.	There were 119 fewer ≥ 0.08 BAC fatalities in 2016 than 2015. This resulted in a 32.7 percent reduction.
Speeding-Related Fatalities	598	The average number of speeding-related fatalities from 2012 to 2016 was 544 per year.	The 5-year average has decreased annually since 2008.
Motorcyclist Fatalities	184	The average number of motorcyclist fatalities from 2012 to 2016 was 189 per year.	The 5-year average declined from the previous year’s calculation.
Number of Unhelmeted Motorcyclist Fatalities	94	The average number of unhelmeted motorcyclist fatalities from 2012 to 2016 was 95 per year.	The 5-year average declined from the previous year’s calculation.
Pedestrian Fatalities	125	The average number of pedestrian fatalities from 2012 to 2016 was 159 per year.	The annual pedestrian fatality count has fluctuated over the past few years.
Seat Belt Usage ^b	85.0%	The rate of seat belt use for 2016 was 85.2 percent.	The 5-year average for unrestrained fatalities has decreased annually since 2006. Survey sites will be reselected in 2017.
Fatalities per 100 MVMT ^c	1.22	The average annual fatality rate from 2012 to 2016 was 1.22.	The projected 1.18 fatalities per 100 MVMT rate of 2016 would be the lowest rate on record.
Bicyclist Fatalities	14	The average number of bicyclist fatalities from 2012 to 2016 was 16 per year.	There was no change in the number of bicyclist fatalities from 2015 to 2016.

Source: Pennsylvania State Crash Reporting System data.

Table 2.1 Progress in Meeting NHTSA Core Performance Measures Identified in FFY 2017 HSP (continued)

Citations recorded during Grant funded Enforcement (no targets set)				
Enforcement Report Data	2013	2014	2015	2016
Speeding Citations	142,623	140,467	156,773	178,461
Seat Belt Citations	18,415	17,473	15,655	21,674
DUI Arrests	9,728	8,685	9,633	11,305

Source: dotGrants reports and grantee quarterly reporting.

^a Please note that beginning January 1, 2016, PennDOT adopted the MMUCC standard for collecting injury severity data. The field descriptions and definitions changed from the state standard that had been in use for decades. This resulted in a substantial shift in severity levels. Therefore, comparison of the “Suspected Serious Injury”, “Suspected Minor Injury” and “Possible Injury” categories will not be consistent for crashes taking place before versus after the adoption of the new standard.”

^b Seat belt usage is determined annually in accordance with 23 U.S.C. § 402. The annual targets established in the HSP are used for performance measurement as the SHSP does not include a usage target.

^c 2015 VMT data was used for calculating the 2012-2016 fatality rate (2016 incomplete).

As shown in Table 2.1, speeding citations, seat belt citations, and DUI arrests have increased annually over the past few years in almost every category. Representing roughly 63 percent of all municipal police departments in Pennsylvania, participating agencies are responding to enhanced operational planning guidance. The resulting increases, although not tracked formally for performance measurement, can be attributed to efforts to continually improve evidence-based enforcement programs in Pennsylvania. The costs to conduct enforcement have increased over time due to inflation while the available federal funds for programs have remained relatively constant. The gains in productivity despite a growing gap in investment value further reinforces the effectiveness of this planning practice.

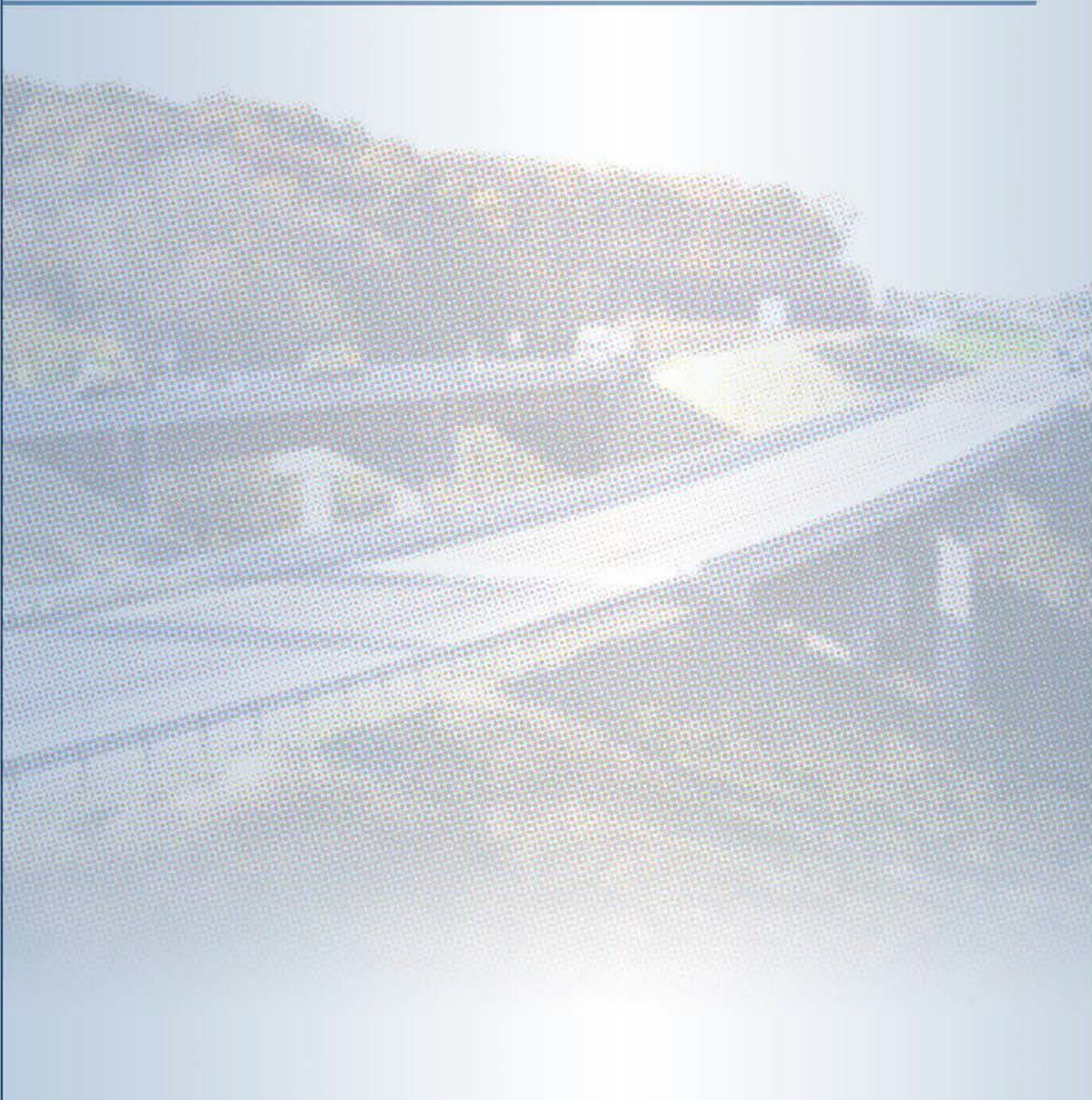
Participation in the National high-visibility law enforcement mobilizations during the fiscal year also greatly influences the positive returns from Pennsylvania’s evidence-based enforcement programs. Table 2.2 highlights information regarding mobilization participation in Fiscal Year 2016.

Table 2.2 Highlights during Pennsylvania’s Participating in National High-Visibility Enforcement Mobilizations in FFY 2016

HVE Mobilization	Agencies Participating and Reporting (Municipal and PSP)	Enforcement Activity/Citations Issued	Media
U Text U Drive U Pay National Distracted Driving Mobilization	251	11,283 Speeding Citations 36 Texting Citations Reported	State committed \$375,000 for Paid Media efforts. Earned Media completed at the Regional level.
Click it or Ticket National Enforcement Mobilization	352	3,535 Seat Belt Citations 495 Child Passenger Citations	State committed \$250,000 for Paid Media efforts. Earned Media completed at the Regional level.
National Impaired Driving Enforcement Mobilization	446	532 total DUI Citations 46 DUI-Drug Citations	State committed \$200,000 for Paid Media efforts. Earned Media completed at the Regional level.



Highway Safety Performance Plan



PENNSYLVANIA HIGHWAY SAFETY PLAN



pennsylvania

DEPARTMENT OF TRANSPORTATION

3. Highway Safety Performance Plan

PROBLEM IDENTIFICATION PROCESS

Crash Reporting System

Pennsylvania utilizes a data-driven approach to highway safety by analyzing crash data. The HSS is responsible for the Commonwealth’s Crash Reporting System (CRS). Pennsylvania has placed high importance on the availability of crash data; 2016 data was made publicly available April of 2017 via the Pennsylvania Crash Information Tool (PCIT) (<http://dotcrashinfo.pa.gov>). The goal for completion of 2017 crash data is April of 2018. Currently, there is no backlog entering crash report forms; most are entered within two weeks of being received.

The Highway Safety Office staff, utilizing the CRS end-user application CDART, reviews fatality and serious injury trends by each program area to focus investments. Crash location criteria can be reviewed by high-crash clusters, alcohol-related crashes, locations for unbelted fatalities, aggressive driving crash locations, heavy truck crashes, pedestrian and bicycle crashes, motorcycle crashes, and distracted, young, and mature driver crashes. The crash location data can be focused by county, district office, Metropolitan Planning Organizations, and municipality. The data can be further analyzed by ages, types of vehicles, holiday periods, etc. Examples of crash location maps are shown in the Evidence-Based Traffic Safety Enforcement Program section of Highway Safety Countermeasures and Projects for FFY 2018 (Figures 4.1-4.6). Table 3.1 shows the percent by which each program area contributes to total fatalities and suspected serious injuries in Pennsylvania.

Table 3.1 Percent of Contributing Crash Factors

Program Area	Fatalities		Serious Injuries		Total Fatalities and Serious Injuries	
	2012-2016 Average	Percent of Statewide Total	2012-2016 Average	Percent of Statewide Total	2012-2016 Average	Percent of Statewide Total
Statewide Total	1,220	100%	3,434	100%	4,654	100%
Impaired Driving	414	34%	928	27%	1,341	29%
Occupant Protection	420	34%	849	25%	1,269	27%
Speeding	544	45%	1,130	33%	1,674	36%
Distracted Driving	62	5%	257	7%	319	7%
Mature Drivers (65+)	280	23%	541	16%	821	18%
Motorcyclists	189	15%	537	16%	726	16%
Young Drivers (≤20)	147	12%	578	17%	725	16%
Pedestrians	159	13%	345	10%	504	11%
Bicyclists	16	1%	64	2%	80	2%
Heavy Trucks	153	13%	224	7%	377	8%

Source: Pennsylvania State Crash Reporting System Data.

Data Analysis

The system can identify high-crash cluster areas to address particular types of crashes. The definition of a cluster can vary based on the problem identified. For example, a particular length of roadway is reviewed, and if five (5) or more crashes occurred within the required length of roadway over a 3- to 5-year period, it may be considered a cluster. A decision can then be made to determine if education, enforcement, engineering, or a combination of these components is needed to resolve the problem. The Community Traffic Safety Project Coordinators and District Safety Press Officers are encouraged to utilize PCIT or contact HSTOD to obtain localized crash data to better assist in implementing educational programs and work with police departments to address high-crash problem areas.

HSTOD provides five years of alcohol-related crash data on a yearly basis for distribution to each of the approximately 50 impaired driving enforcement and police traffic services projects. This data enables project coordinators to pinpoint significant high-crash target roadways for directing sobriety checkpoints and roving patrols. Additionally, State and local police rely upon local road data for targeting enforcement events such as non-reportable alcohol-related crashes, alcohol-related incidents and DUI arrests in the site selection process.

Unbelted crash and fatality statistics and seat belt observational use data are used to determine low seat belt use locations for occupant protection education and enforcement programs.

A NHTSA Aggressive Driving Crash is any crash where there were two (2) or more aggressive driving crash causation factors (speeding, red light running, tailgating, passing in a no passing zone, careless passing, etc.) noted in the crash report. High-visibility enforcement should raise awareness of this concern and lead towards safer driving practices.

All proposals for highway safety grants must address critical safety needs by analysis of crash data as a principal basis for their safety programs and utilize proven safety countermeasures as the principal tools to address the identified problems. Since a data-driven approach is mandated, applicants are encouraged to reference both the Pennsylvania Crash Information Tool (PCIT) and NHTSA's Countermeasures that Work publication for evidence-based countermeasures to address traffic safety problem areas when formulating proposals. How and why specific tasks and countermeasures were selected for funding and implementation should be clearly articulated in the work plan. Additional data may also be utilized to sufficiently tie broad program area targets to the specific countermeasures proposed in the application, such as injury data; license, registration and conviction data; as well as demographic, geographic, and other pertinent data from various sources.

Additional Sources of Data

In addition to crash records, PennDOT relies on other data sources to identify traffic safety problems and select countermeasures. Using a comprehensive approach towards problem identification ensures that funding is invested towards programs that provide the greatest return in traffic safety benefits.

PennDOT analyzes citation and arrest data from overtime police enforcement conducted with Federal funding during grant operations. Grantees are required to report these results through the dotGrants website.

While targets are not based on reaching citation and arrest targets, the data provides a snapshot of enforcement's effectiveness. To acquire citation and arrest data from non-overtime and non-grant-funded police details, PennDOT must contact the Administrative Office of Pennsylvania Courts (AOPC). Data from the AOPC is especially important when selecting law enforcement agencies for grant-funded activity where PennDOT has no prior arrest data. PennDOT also utilizes AOPC data to fill various media requests.

Court Reporting Network (CRN) evaluations are also utilized to identify data trends for refining countermeasure implementation. In accordance with Title 75, individuals charged with a DUI are required to be evaluated using CRN tools to determine the offender's involvement in alcohol or drugs prior to sentencing. There were nearly 48,000 CRN evaluations conducted during 2016. According to these evaluations, 2016 year-end statistics show that 74 percent of all arrests for DUI offenders were male, 16.7 percent were in the 21-24 age group, 77.4 percent were white, 52.9 percent were single or not married, and the average BAC for all offenders at the time of arrest was 0.17 percent. In addition to selecting countermeasures to address impaired driving, PennDOT utilizes the CRN evaluation results in planning the media component of high-visibility enforcement mobilizations, as seen within the Paid Media project within the Impaired Driving section of this report.

Conviction and recidivism rates are also reviewed to support Judicial Outreach and DUI Court program planning. As noted in the DUI Court project description on page 54, convictions for a second or subsequent DUI offense account for 57 percent of all DUI convictions in 2016. Jurisdictional-specific reports are often prepared to strengthen relationships with local judges and to prioritize outreach efforts.

Census data is used to identify locations where bilingual materials, programs, and media should be implemented. PennDOT provides these materials to grantees and partners for use in areas with larger populations of non-English-speaking individuals. In Philadelphia and Chester Counties (21.9 percent and 12.1 percent, respectively, non-English speaking households), bicycle and pedestrian safety programs are implemented for Spanish-speaking communities using bilingual instructors. The Bureau of Driver Licensing's Knowledge Test can be given in oral form and in Spanish, Arabic, Chinese (Mandarin), French, Hindi, Korean, Russian, Ukrainian and Vietnamese languages upon request.

Registration and licensing data is used to identify emerging trends, such as increases in mature drivers and motorcycle operators. Mature drivers make up 21.5 percent of the Pennsylvania driving population. As this percentage is expected to increase moving forward, it is imperative that traffic safety planning shifts focus towards this driving population. The number of licensed motorcyclists has risen roughly 7 percent over the past 10 years. Over the same period there has been a 10 percent increase in the number of registered motorcycles. To address this growing increase in motorcycle riders, PennDOT invests over \$5 million annually to support motorcycle training and awareness programs. PennDOT also partners with mature driver and motorcycle rider stakeholders to collaborate a comprehensive planning effort within these safety focus areas.

STATEWIDE DEMOGRAPHICS AND CRASH TRENDS

The Commonwealth of Pennsylvania consists of 67 counties. Each county includes local municipalities, a combination of cities, boroughs, first class townships, and/or second class townships. In total, there are approximately 2,500 municipalities throughout the 67 counties. One of these municipalities, the Town of Bloomsburg in Columbia County, is the only official “town” in Pennsylvania.

Pennsylvania has over 120,000 miles* of roads and highways; 33% (39,756 miles*) are state highways maintained by the Pennsylvania Department of Transportation (PennDOT), and the remaining 67% (80,334 miles*) are maintained by local municipalities and other entities.

Motor-vehicle traffic crashes that occur on Pennsylvania roads and highways are investigated and reported by both the Pennsylvania State Police and the approximately 1,300 local municipal police departments. The valuable information originating from these police crash reports is the basis for the statistics that are presented throughout this booklet.

In 2016, there were 129,395 reportable traffic crashes in Pennsylvania. These crashes claimed the lives of 1,188 people and injured another 82,971 people. To add some perspective, the 2016 total of reportable traffic crashes is the thirteenth lowest total since 1950 when 113,748 crashes were reported.

Last year, there were approximately 100.9 billion vehicle-miles* of travel on Pennsylvania’s roads and highways. The 2016 fatality rate of 1.18 fatalities per hundred million vehicle-miles of travel* was the second lowest ever recorded in Pennsylvania since the department started keeping records of this in 1935.

On Average in Pennsylvania:

- Each day 355 reportable traffic crashes occurred (about 15 crashes every hour).
- Each day 3 persons were fatally injured in reportable traffic crashes (one fatality every 7 hours).
- Each day 227 persons were injured in reportable crashes (about 9 injuries every hour).

Based on Pennsylvania’s 2016 population (12,784,227 people):

- 1 out of every 43 people was involved in a reportable traffic crash.
- 1 out of every 10,761 people was fatally injured in a reportable traffic crash.
- 1 out of every 154 people was injured in a reportable traffic crash.

¹ http://www.penndot.gov/TravelInPA/Safety/Documents/2016_CFB_linked.pdf

Table 3.2 Fatalities and Injuries
5-Year Trends

	2012	2013	2014	2015	2016
Reported Crashes	124,092	124,149	121,317	127,127	129,395
Total Fatalities	1,310	1,208	1,195	1,200	1,188
Total Injuries	86,846	83,089	79,758	82,004	82,971
Suspected Serious Injury	3,458	3,254	3,042	3,030	4,397
Suspected Minor Injury	13,519	12,662	12,075	12,503	26,284
Possible Injury	43,441	41,755	40,071	40,364	23,050
Unknown Injury Severity	26,428	25,418	24,570	26,107	29,240
Pedestrian Fatalities	168	151	166	153	172
Pedestrian Injuries	4,548	4,413	3,985	4,002	4,218
Motorcyclist Fatalities	210	181	186	179	192
Motorcyclist Injuries	3,919	3,322	3,207	3,312	3,321
Bicyclist Fatalities	16	11	19	16	16
Bicyclist Injuries	1,377	1,374	1,298	1,268	1,298
Heavy Truck-Related Fatalities	159	147	151	149	162
Alcohol-Related Fatalities	404	381	333	345	297
Speed-Related Fatalities	371	322	312	302	316
Billions of Vehicle-Miles Travelled [†]	100.2	99.5	98.6	99.8	100.9
Deaths per 100 Million Vehicle-Miles Travelled [†]	1.31	1.21	1.21	1.20	1.18

Source: 2016 Pennsylvania Crash Facts and Statistics

Note: Speed-Related Fatalities only count those crashes where speed was considered the prime contributing factor in the crash.

* Vehicle mileage uses the prior years' vehicle mileage information (because at the time of publication, the current year's vehicle mileage is not available).

Age Group

Looking at the 2016 Pennsylvania driver data, as driver age groups increased in age, the percentage of Pennsylvania total drivers involved in crashes within each age group decreased considerably. Note the percentage of 16-year old drivers involved in crashes. This number is significantly lower than other young driver age groups due to a law enacted in December 1999 that required a mandatory six month waiting period between obtaining a Learner's Permit and testing for licensure. It also reflected the limited time 16-year old drivers used the roads and the more controlled situations in which they are permitted to drive during the permit process. Driver inexperience and less cautious driving often are attributed characteristics given to the reason all young driver ages have higher rates.

Table 3.3 Drivers in Crashes by Age Group

Age Group	Pennsylvania Drivers Involved in Crashes	Pennsylvania Total Drivers ^a	Percent Involved in Crashes
16	1,942	72,452	2.70%
17	4,732	107,468	4.4%
18	5,588	118,741	4.7%
19	5,268	125,537	4.2%
20	5,334	130,034	4.1%
21	5,503	134,293	4.1%
22-24	16,393	421,070	3.9%
25-29	23,599	742,730	3.2%
30-39	33,810	1,416,209	2.4%
40-54	42,273	2,252,847	1.9%
55-59	13,103	880,245	1.5%
60-64	10,463	807,428	1.3%
65-69	7,751	679,976	1.1%
70-74	5,337	484,490	1.1%
75 and Over	8,037	770,185	1.0%
Unknown	33	N/A	N/A

^a Pennsylvania Total Drivers includes total Pennsylvania Licensed Drivers and Pennsylvania Drivers who have their Learner’s Permit (no driver’s license).

Mature drivers are over-represented in multiple vehicle crashes, due in part to the loss of physical and cognitive abilities. Younger drivers are also over-represented in multi-vehicle crashes as younger drivers are more easily distracted while driving.

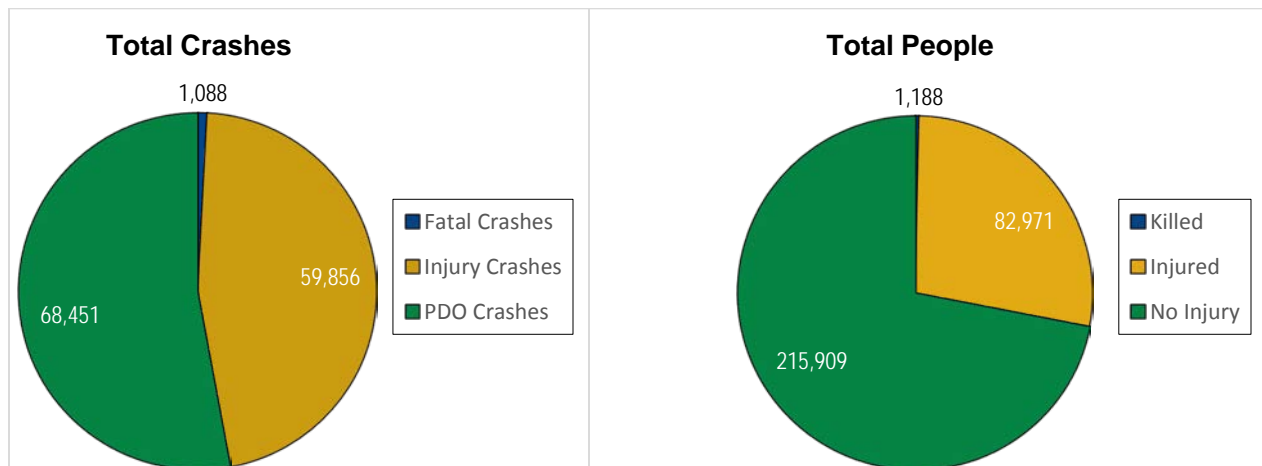
Table 3.4 Single and Multiple Vehicle Crashes of Young and Mature Drivers

Number of Vehicles	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
Single-Vehicle Crash	44.1%	37.1%	20.4%	20.2%
	56,940 crashes	10,742 crashes	2,779 crashes	1,668 crashes
Multiple-Vehicle Crash	55.9%	62.9%	79.6%	79.8%
	72,258 crashes	18,186 crashes	10,840 crashes	6,572 crashes

Severity

Crashes involving fatalities and major injuries are always devastating to the family and friends of the victims. Thankfully, the vast majority of crashes are not fatal. Most crashes, however, do cause varying types of injuries. Of the total people involved in crashes in Pennsylvania in 2016, most were not injured. The 1,188 fatalities in 2016 represent the lowest number of fatalities in Pennsylvania motor vehicle crashes over the last 86 years.

Figure 3.1 Severity of Crashes



Type of Vehicles

Passenger cars were involved in more crashes than all other vehicle types combined. Coupled with light trucks, vans, and SUVs they accounted for the vast majority of crashes and occupant fatalities. Compared with previous years, light truck, van, and SUV vehicles in 2016 were involved in a higher percentage of crashes. Occupant fatalities of motorcycles increased from 179 in 2015 to 192 in 2016.

Table 3.5 Vehicles Involved in Crashes

	Vehicles	Occupant Deaths
Passenger Car	120,817	494
Light Truck/Van/SUV	80,599	265
Heavy Truck	7,366	26
Motorcycle	3,547	192
Bicycle	1,316	16
Commercial Bus	593	1
School Bus	349	0
Other	1,648	22

Crash Locations

Road Type

Pennsylvania has approximately 1,867 miles of Interstate highway, 39,756 miles of U.S. and state highway, 554 miles of Turnpike, and 78,186 miles of local roads. The majority of crashes, injuries, and fatalities take place on U.S. and state highways or on local roads. These two types of roads not only account for the majority of roadway miles, they also have much higher rates of crashes, injuries, and fatalities. Local roads have the highest rate of crashes and injuries, and U.S. and state highways have the highest fatality rate per vehicle-mile traveled. The Turnpike was Pennsylvania’s safest road in every category.

Table 3.6 Crashes by Road Type

	State Highway (Interstate)	State Highway (Other)	Turnpike	Local Road	Other
Crashes	10,688	83,882	2,498	32,309	18
Persons Fatally Injured	107	884	17	180	0
Persons Injured	6,147	55,908	1,076	19,834	14
Miles of Maintained Road	1,374	39,206	554	79,765	-
100 MVMT Traveled	201.1	567.8	60.1	180.4	-
Crashes/MVMT	0.53	1.48	0.42	1.79	-
Persons Fatally Injured/100 MVMT	0.53	1.56	0.28	1.00	-
Persons Injured/MVMT	0.31	0.98	0.18	1.10	-

Note: MVMT = million vehicle-miles.

Counties

The highest number of crashes occurred in counties with the highest populations. Fifty-four percent of all crashes took place in 10 counties. Traffic deaths do not correspond as well to county population because fatal accidents are more likely to occur in suburban or rural areas where traffic is more free-flowing and speeds are higher.

Table 3.7 Top 10 Counties by Crashes, Fatalities, and Serious Injury Crashes

County	Metropolitan Area	Crash	Fatality	Injury Crashes
Philadelphia	Philadelphia	●	●	●
Allegheny	Pittsburgh	●	●	●
Montgomery	Philadelphia	●	●	●
Bucks	Philadelphia	●	●	●
Delaware	Philadelphia	●		●
Lancaster	Lancaster	●	●	●
Chester	Philadelphia	●		●
York	York	●	●	●
Berks	Reading	●	●	●
Lehigh	Allentown-Bethlehem	●		●
Westmoreland	Pittsburgh		●	
Luzerne	Scranton-Wilkes Barre		●	
Butler	Pittsburgh		●	

When Crashes Occur

Month

There was not much variance in the number of crashes per month. There was an increase from October to December; while the highest number of crashes took place in December. Crashes in January and February were the least likely to result in a fatality. May, June and September were the months in which a crash was most likely to result in a fatality. June was the most dangerous month, with 10.1 percent of fatalities.

Table 3.8 Crashes by Month

Month	Crashes		Deaths	
	Count	%	Count	%
January	11,137	8.6%	78	6.6%
February	10,533	8.1%	80	6.7%
March	9,107	7.0%	81	6.8%
April	10,006	7.7%	89	7.5%
May	10,522	8.2%	116	9.8%
June	10,430	8.1%	120	10.1%
July	10,288	8.0%	96	8.1%
August	10,588	8.2%	105	8.8%
September	10,490	8.1%	116	9.8%
October	11,854	9.2%	113	9.5%
November	12,001	9.3%	112	9.4%
December	12,409	9.6%	82	6.9%
Total	129,395	100.0%	1,188	100.0%

Holiday

Crashes increased during holiday periods due to the volume of traffic on the roadway. Many times, the weekend before and the weekend after the holiday have nearly as many crashes and fatalities, and sometimes more. The highest number of holiday crashes and fatalities happened around Thanksgiving, Memorial Day, and Independence Day.

Day of Week and Time of Day

More crashes occurred on Thursday and Friday. The number of fatalities on weekends (Saturday and Sunday) is proportionally greater than the number of crashes. This could be attributed to alcohol use.

Some hours of the day are more dangerous than others with regard to crashes and fatalities. Not surprisingly, crashes and deaths were higher during peak traffic times. Some hours of the day experience a low percentage of crashes, but they are much more deadly. For example, only 4.3% of all crashes in 2016 occurred in the 7:00 PM hour, but 5.1% of all fatalities—the fourth highest percentage—occurred then. The higher volume of traffic itself is a factor during peak traffic hours, particularly the rush-hours.

Crash Factors

Driver Error

Some form of poor/degraded driver performance is present in the majority of crashes. Alcohol use and speeding continue to be big contributors to fatal crashes. Other common causes of crashes are not following roadway rules (improper turning, proceeding without clearance) and distracted driving.

Table 3.9 Crashes Involving Driver Error

Contributing Factor	Crashes	Fatal Crashes
Speed-Related	31,083	458
Drinking Driver	9,221	150
Distracted Driver	16,036	61
Improper Turning-Related	14,123	61
Proceeded Without Clearance	9,004	60
Careless/Illegal Passing	4,665	41
Drowsy Drivers	2,625	25
Tailgating	6,879	7

Behavioral Survey

NHTSA Core Performance Measures evaluation requires that funds to be used for an annual survey of public highway safety attitudes and behavior. The survey includes questions addressing the core measures to satisfy Federal requirements and incorporates questions related to highway safety concerns particular to Pennsylvania's state programs.

The survey included a core set of NHTSA identified questions and a few supplementary questions that were identified as specific highway safety concerns in the Commonwealth. The attitude and awareness survey covers a variety of highway safety topics such as impaired driving, seat belt use, speeding, motorcycles, and distracted driving. The survey results help PennDOT gain valuable information from drivers for use in prioritizing its highway safety efforts and will be evaluated further in the Annual Report.

The FFY 2016 survey period was 3 weeks, beginning August 2, 2016, and remained open until August 23, 2016. To administer the survey, PennDOT developed a web-based survey tool and utilized PennDOT's website, <http://www.penndot.gov/>, as the host for respondent traffic. To help promote the survey PennDOT issued a statewide press release and heavily promoted the survey through social media.

In an attempt to ensure the data received was the target audience, Pennsylvania drivers, questions inquiring whether the respondent was a "licensed driver" and their County were included in the survey.

Summary Evaluation:

In all, 6,619 individual responses were received from the public. This number of responses indicates that the results provide an overall picture of Pennsylvania drivers' perception of highway safety measures relative to speeding or aggressive driving, impaired driving, distracted driving, and occupant protection (seat belt use) with less than a two percent margin of error. It should be noted that 2015 had just over 850 respondents. The 6,619 respondents in 2016 represents almost 8 times more than 2015.

- The counties reporting the most responses were Allegheny, Bucks, Montgomery, and York with the total number of responses received from these counties ranging from 323 to 683. Nearly 28 percent of the total responses received statewide came from residents in these four counties.
- Fewer than 12 survey responses were received from each of the following counties: Cameron, Elk, Forest, Fulton, Juniata, Snyder, Sullivan, Warren, and Union. Of these counties, Forest returned zero survey responses.
- Nearly 60 percent of survey respondents noted they would support a law making it a primary offense for not wearing a seat belt in the front seat of a vehicle.
- Fifty-three percent of survey respondents would support granting local police departments the ability to use radar for speed enforcement, and 57 percent would support a law permitting camera-based automated speed enforcement in roadway work zones.
- The majority of motorcycle operators (nearly 64 percent) are opposed to a mandatory helmet law for all motorcycle riders.

Additional survey data, including the response results for each of the survey questions, can be found in the FFY 2016 Pennsylvania Annual Report, Appendix 1.¹

Key Results

Overall, the survey responses suggest a high level of public awareness relative to driver safety. Respondents indicated that:

- 84 percent always use seat belts
- 84 percent² never drive within two hours after drinking alcoholic beverages
- 70 percent* rarely or never exceed the speed limit by more than 10 miles per hour
- 90 percent rarely or never drive while talking on a hand-held cell phone
- 94 percent indicated that they rarely or never text or check email while driving
- For those instances when a driver must talk on a cell phone while driving, 37 percent indicated they always use a hands-free device, while nearly 30 percent indicated they never use a hands-free device
- Distracted Driving continued to be considered most important in 2016, with Impaired Driving remaining in second-most important. Both focus areas were considered more important than Speeding & Aggressive Driving as well as Occupant Protection/seat belt use.
- A clear correlation between message awareness and expectation of receiving a ticket can be seen from the survey responses. For example, two-thirds of respondents indicated they have seen alcohol impaired driving enforcement messages with the same ratio believing they would receive a ticket 'Most of the time' or 'Half of the time'. Two-thirds of respondents had not heard anything about seat belt law enforcement which reflected in roughly the same percentage believing they would receive a ticket 'Rarely' or 'Never'.

¹ https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/pa_fy16_annual_report.pdf

² Indicates the combined total of motorists and motorcycle operators

LEGISLATIVE UPDATES

On May 25, 2016, the Governor signed Senate Bill 290 into law as Act 33 of 2016. This new law requires ignition interlock for first time offenders who had a BAC of 0.10 or higher at the time of arrest and continues ignition interlock requirements for repeat offenders under the previous ignition interlock law. Individuals convicted of a second or subsequent DUI offense are required to have an ignition interlock limited license for one year. This one year interlock restricted period follows a preceding one year term license suspension. The new law requires a much shorter license suspension period for high BAC first time offenders, but allows for an ignition interlock limited license shortening the licenses suspension. The law will go into effect in August 2017.

Senate Bill 1152 was signed into law on June 13, 2016, as Act 43. This bill requires any person who is operating a passenger car, Class 1 truck, classic motor vehicle, antique motor vehicle or motor home and who transports a child under two years of age anywhere in the motor vehicle to fasten such child securely in a rear-facing child passenger restraint system, to be used until the child outgrows the maximum weight and height limits designated by the manufacturer.

On November 4, 2016, the Governor signed House Bill 2025 into law, amending the general transportation bill. The new Pennsylvania law provides for two-year sentences for causing “serious bodily injury” while texting. Causing a death can bring a five year term.

PERFORMANCE TRENDS AND TARGETS BY PROGRAM AREA

The National Highway Traffic Safety Administration has identified 15 Core Performance Measures for states to use to judge the effectiveness of its program. The measures are total fatalities and total suspected serious injuries and total fatalities according to common crash factors. Table 3.10 presents Pennsylvania’s FFY 2018 program area trends and targets for the State’s core performance measures. The trends provide insight into how the targets were selected. **Measures and targets reflect 2016 state data for this plan, as 2016 FARS data was unavailable at the time of publication.**

Table 3.10 Performance Trends and Targets

Performance Measures	2012	2013	2014	2015	2016	2013-2017 Target ^b	2014-2018 Target ^b
Traffic Fatalities	1,310	1,208	1,195	1,200	1,188	–	–
5-Year Moving Average	1,329	1,277	1,265	1,240	1,220	1,191.0	1,176.6
Number of Suspected Serious Injuries ^a	3,455	3,248	3,040	3,030	4,397	–	–
5-Year Moving Average	3,556	3,432	3,340	3,235	3,434	3,604.8	3,799.8
Unrestrained Passenger Vehicle Occupant Fatalities	498	421	371	402	408	–	–
5-Year Moving Average	500	474	459	438	420	399	381
Drivers Age 20 or Younger Involved in Fatal Crashes	194	139	126	142	135	–	–
5-Year Moving Average	204	187	172	160	147	131	118
Fatalities Involving Driver or Motorcycle Operator with ≥ 0.08 BAC ^c	407	360	349	364	245	–	–
5-Year Moving Average	425	398	388	376	338	332	314
Speeding-Related Fatalities	614	552	509	540	506	–	–
5-Year Moving Average	657	623	598	566	544	513	484
Motorcyclist Fatalities	210	182	185	178	192	–	–
5-Year Moving Average	215	204	200	191	189	180	174
Unhelmeted Motorcyclist Fatalities	102	94	100	89	92	–	–
5-Year Moving Average	108	103	103	96	95	91	88
Pedestrian Fatalities	163	147	161	151	172	–	–
5-Year Moving Average	145	147	153	154	159	161	163
Bicyclist Fatalities	16	11	19	16	16	–	–
5-Year Moving Average	14	15	16	15	16	16	16
Seat Belt Usage ^{c,d}	84%	84%	84%	83%	85.2%	84%	85%
Fatalities per VMT ^e (5-Year)	1.30	1.28	1.27	1.25	1.22	1.182	1.158
Fatalities per VMT Rural (5-Year)	1.93	1.86	1.84	1.80	–	–	–
Fatalities per VMT Urban (5-Year)	0.96	0.96	0.96	.94	–	–	–
Grant Funded Speeding Citations	141,956	142,623	140,467	156,773	178,461	N/A	N/A
Grant Funded Seatbelt Citations	17,641	18,415	17,473	15,655	21,674	N/A	N/A
Grant Funded DUI Arrests	7,328	9,728	8,685	9,633	11,305	N/A	N/A

Source: Pennsylvania State Crash Reporting System Data and FARS.

Note: For 2016, Pennsylvania crash data are used.

a As of January 1, 2016, PennDOT adopted the Federal (MMUCC) standard for collecting injury severity data. More info can be found in Table 2.1, footnote a.

b Annual Targets are based on 5-year rolling average trend projections for 2017 and 2018. For more details see specific program sections.

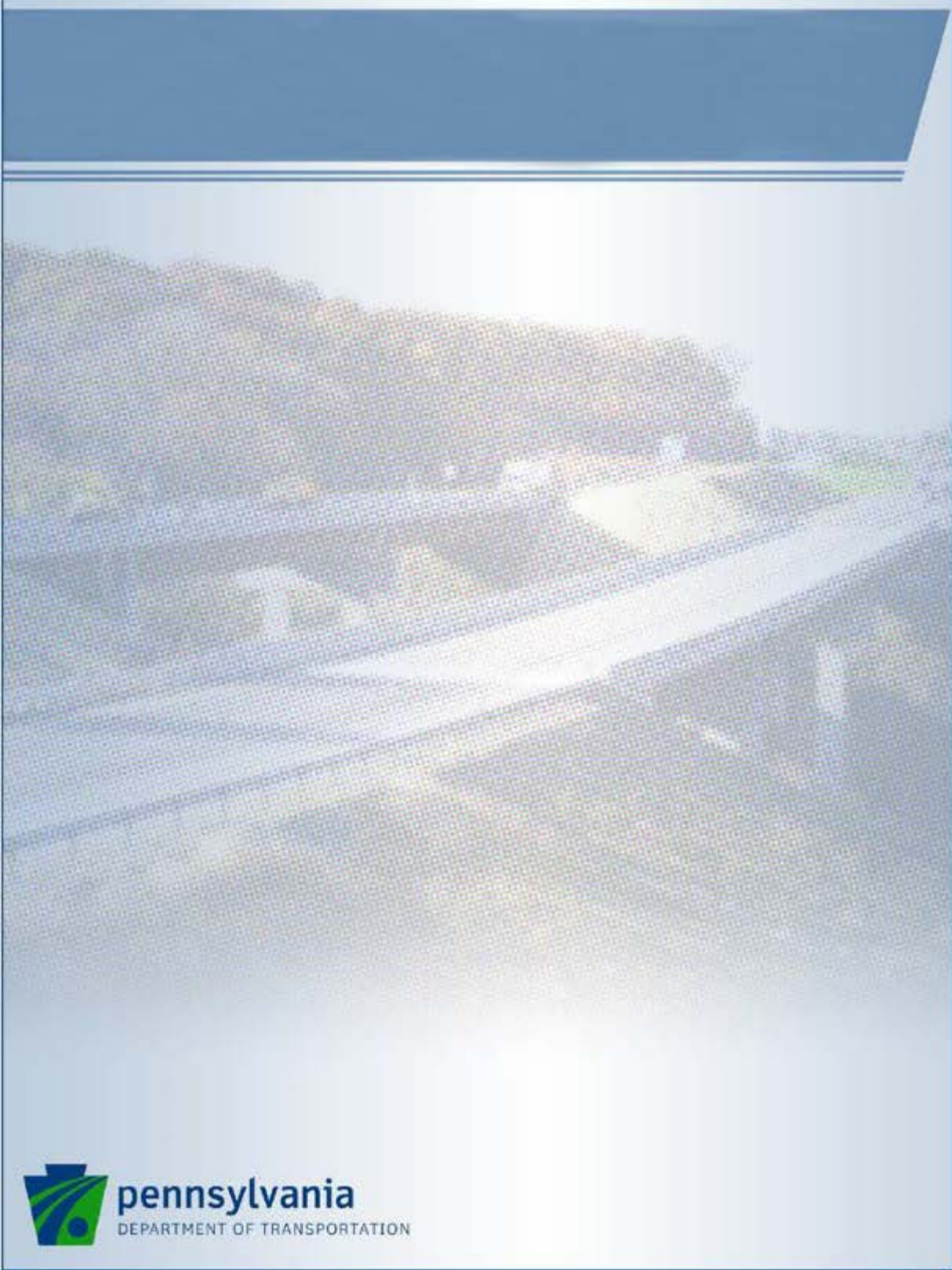
c The annual targets established in the HSP are used for performance measurement as the SHSP does not include a target for this performance measure.

d Seat belt usage is determined annually in accordance with 23 U.S.C. § 402.

e 2015 VMT data was used for calculating the 2012-2016 fatality rate (2016 incomplete).



PENNSYLVANIA HIGHWAY SAFETY PLAN



pennsylvania

DEPARTMENT OF TRANSPORTATION

4. Highway Safety Countermeasures and Projects for FFY 2018 (by Program Area)

The statewide safety partners work to achieve Pennsylvania's safety targets through the use of proven countermeasure activities that address crashes and fatalities in the safety focus areas. The following section shows what activities will take place in fiscal year 2018. The information is presented by safety focus area. Each section contains the following information:

- **Safety Focus Area:** The areas of highway safety that will be focused on in FFY 2018 are taken from the priorities set in the SHSP and approved by the Safety Advisory Committee.
- **Problem Identification:** A description of the problem using state crash and demographic data that provides justification for including the program area and guides the selection and implementation of countermeasures to address the problem in a way that is specific to Pennsylvania.
- **Annual Targets:** The targets for total annual crashes, suspected serious injuries, and fatalities by safety focus area are set in this plan based on 5-year linear trend projections for 2017 and 2018.
- **Countermeasures:** Strategies that will be implemented in the next year by the highway safety office and the safety partners are proven effective nationally, have been successful in Pennsylvania, and are appropriate given the data in the problem identification and the resources available.
- **Programs and Projects:** Data-driven activities that will be implemented in the next year to achieve the identified countermeasures for each program area.

EVIDENCE BASED TRAFFIC SAFETY ENFORCEMENT PROGRAM

Overview of Approach and Problem ID Process

Conducting evidence-based enforcement requires three main components. It begins with an analysis of relevant data to form problem identification. The second phase is deployment of proven countermeasures targeted at the problems identified during the analysis, and lastly, evidence-based enforcement relies on continuous follow-up and necessary adjustments to the plan. Correctly identifying roadways and their law enforcement agencies to participate in enforcement initiatives requires a data-driven process and careful resource analysis. We must ensure the selected departments have particular enforceable roadways with the best opportunity to effectively reduce crashes, injuries, and deaths. Funding levels are also based on a jurisdiction's proportion of the overall contribution or piece of the problem within each safety focus area. For example, the City of Pittsburgh accounts for almost 4.5 percent of all impaired driving crashes resulting in an injury or fatality reported by local police departments. Therefore, data shows they should receive approximately four and a half percent of the impaired driving enforcement 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.

PennDOT provides crash data information to clearly identify and target roadways and jurisdictions where crashes are occurring. Thresholds are established to provide the level where roadways will be identified. Thresholds are constantly modified to reflect the number of roadways necessary to reach Pennsylvania's reduction target or funding resources available.

In addition to providing locational data to our partners, our enforcement allocated grants use a formula that takes into account a five year look back of crashes, fatalities, and suspected serious injuries among established partner municipalities. According to the PennDOT Crash Records System, from 2012 to 2016 local police departments reported 21,650 crashes involving an impaired driver which resulted in an injury or fatality. In this example, an impaired driver crash is described as a crash involving at least one driver who at the time of the crash was suspected by the officer to be impaired in at least one or a combination of the following categories: alcohol, illegal drugs, alcohol and drugs, or medication. In order to be the most effective with limited grant funding, the HVE program involving local police departments needs to remain data-driven and conduct enforcement in the appropriate geographic areas identified by crash data. As such, grant funds are targeted at local police departments who reported 18,395 of the 21,650 impaired driver crashes. In other words, 85 percent of the impaired driver related crashes resulting in an injury or fatality are covered by grant funded enforcement programs in FFY 2018.

Analysis of statewide crashes using PennDOT's Crash Data Analysis Retrieval Tool (CDART) helps identify roadway segments and locations with high occurrences of crashes based on current and prior year crash data. As an example, the thematic map below shows alcohol-related crash road segments in Altoona. The five other maps provided are examples of the problem identification process for different program areas.

Figure 4.1 Map Depicting Alcohol Related Crashes in Altoona to Target Enforcement Efforts

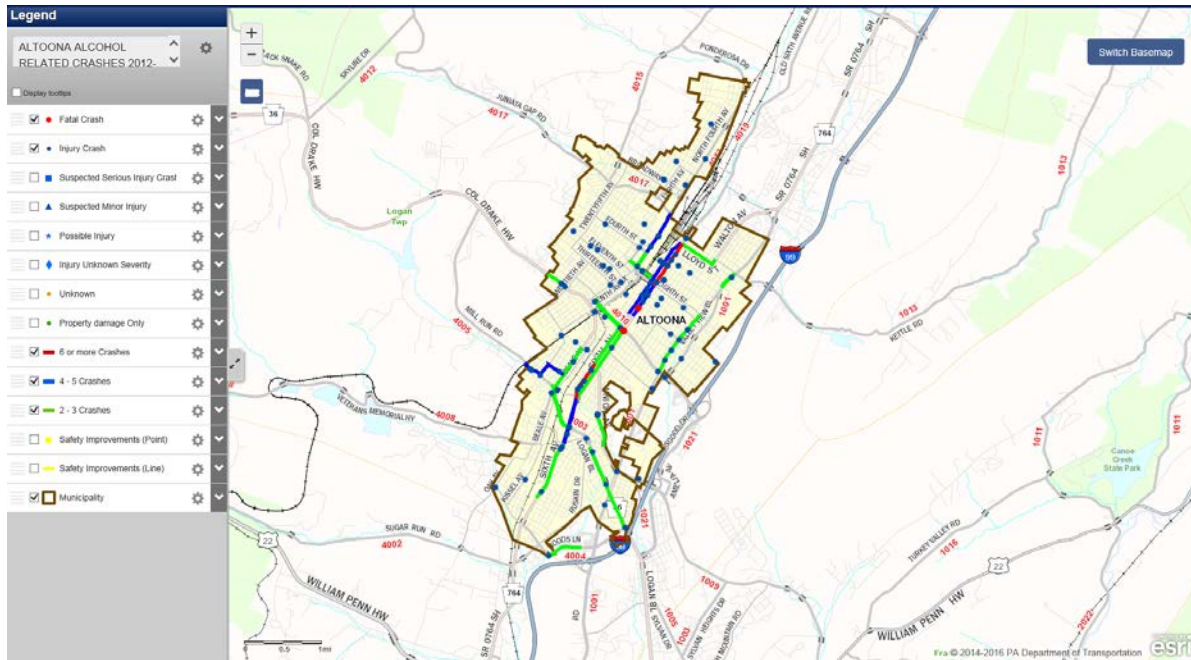


Figure 4.2 Map Depicting Unbelted Crashes in Adams County to Target Enforcement Efforts

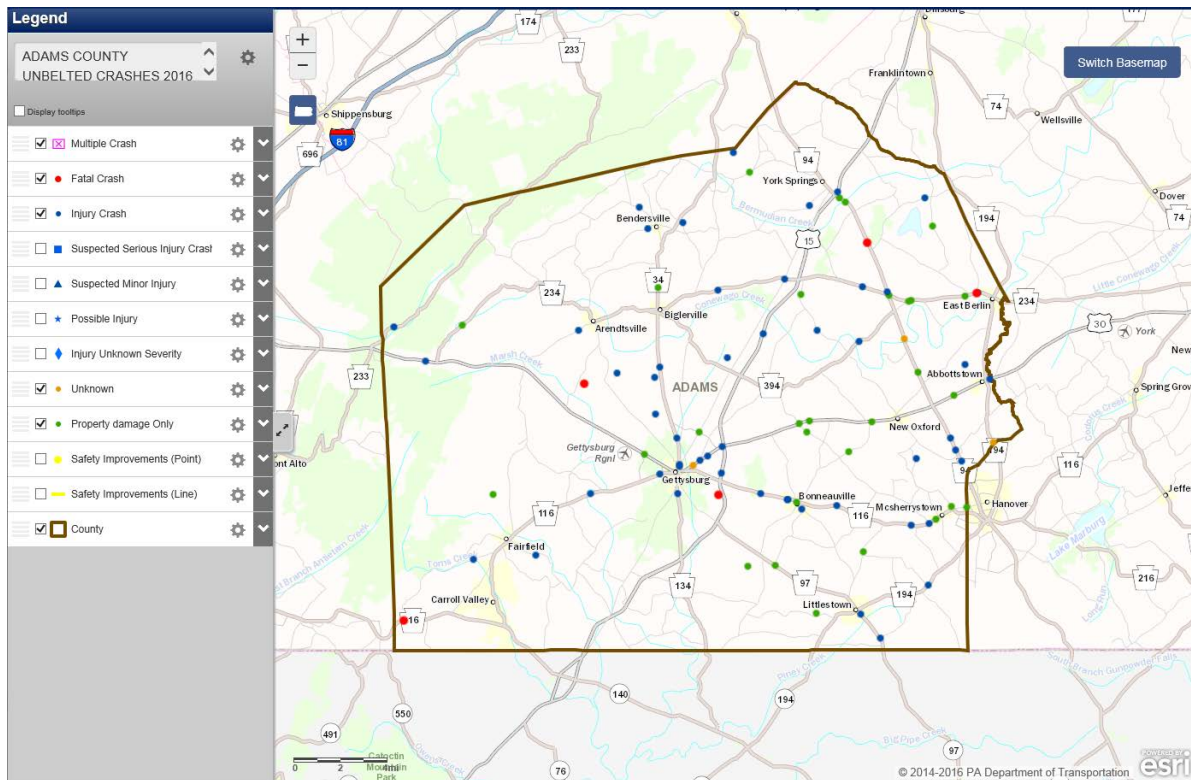


Figure 4.3 Map Depicting Aggressive Driving Crashes in Monroe County to Target Enforcement Efforts

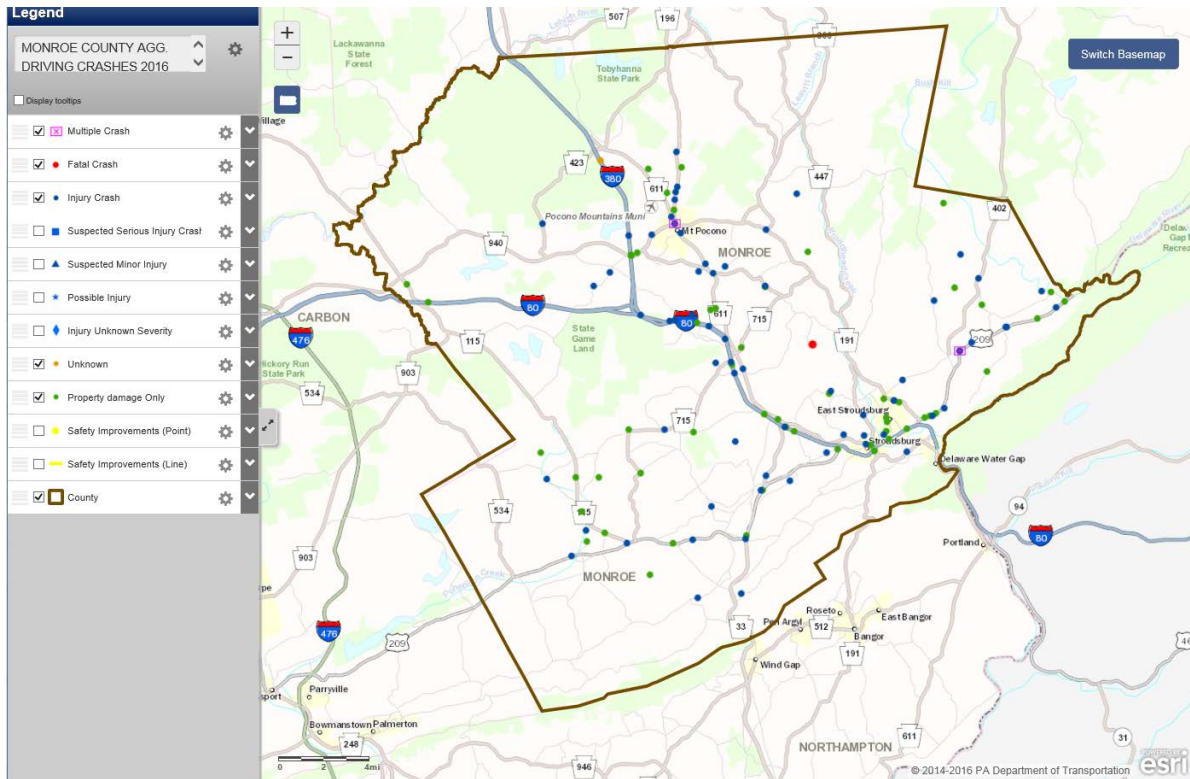


Figure 4.4 Map Depicting Motorcycle Crashes in York County to Target Enforcement Efforts

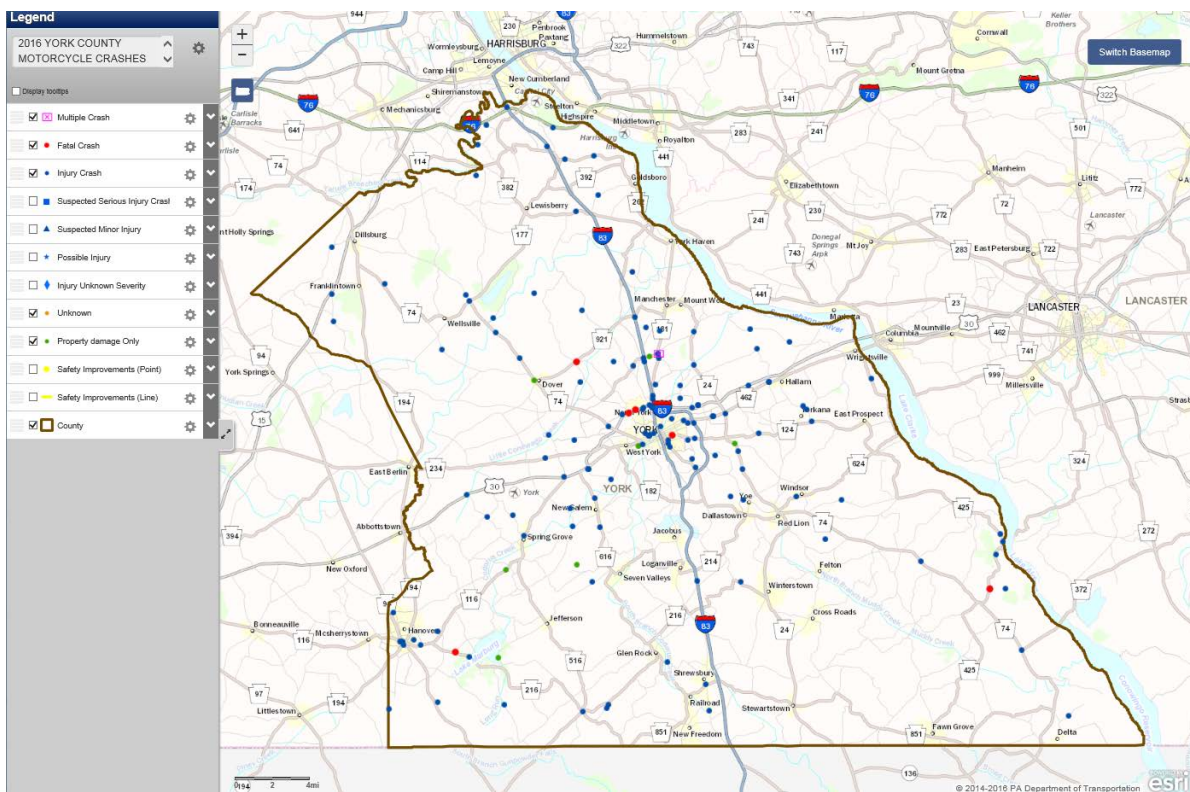


Figure 4.5 Map Depicting Pedestrian Crashes in Philadelphia to Target Enforcement Efforts

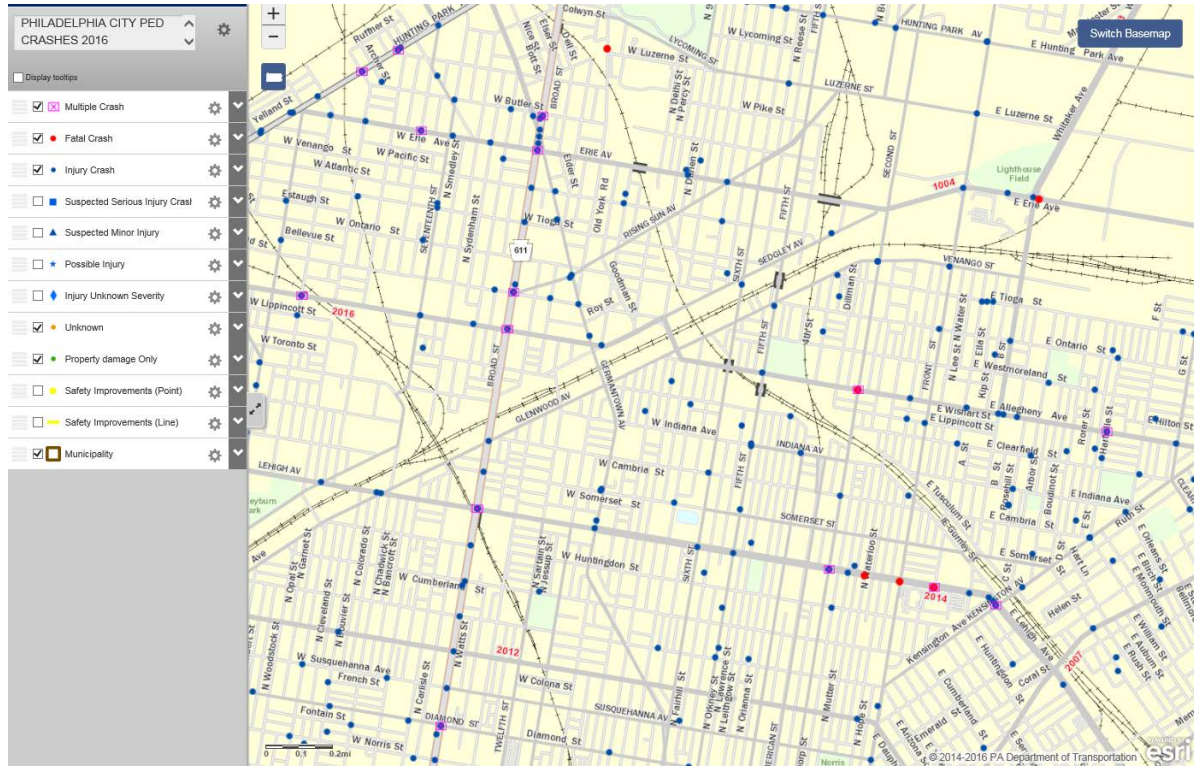
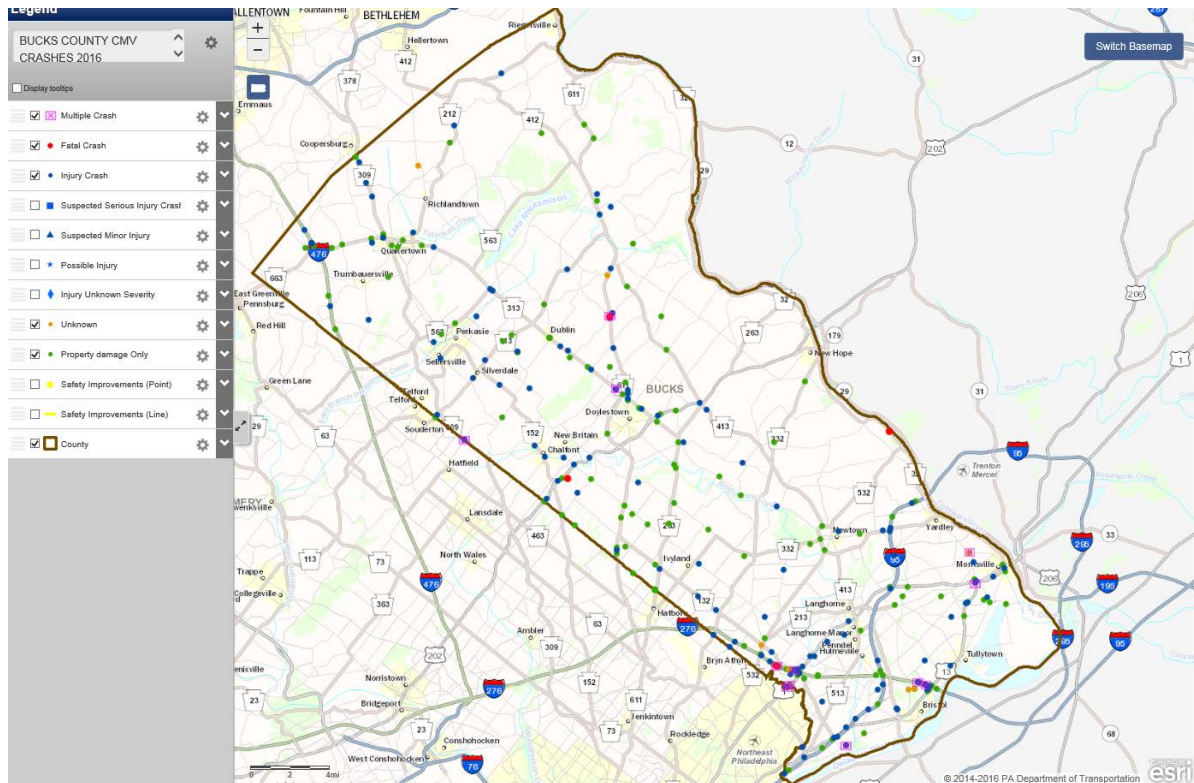


Figure 4.6 Map Depicting Commercial Vehicle Crashes in Bucks County to Target Enforcement Efforts



In addition to the CDART maps, PennDOT has the ability to provide additional road profile information through CDART outputs. For this particular roadway information (below), the enforcing police department can clearly see that the highest percentage of crashes occur at 2 p.m. during Fridays in October. The agency must identify what makes that time of day and week more dangerous than others and what local issues contribute to this problem.

MONTH OF YEAR													DAY OF WEEK							
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	SUN	MON	TUE	WED	THR	FRI	SAT	
CRASHES	23	15	21	23	25	25	23	17	22	29	24	28	20	41	30	35	41	58	40	270
PCT	8%	5%	8%	8%	9%	9%	8%	6%	8%	11%	9%	10%	6%	15%	13%	13%	15%	21%	14%	100%

HOUR OF DAY																									
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
CRASHES	3	3	2	2	3	6	3	11	9	14	14	13	24	17	25	30	25	10	10	7	14	10	4	9	275
PCT	1%	1%	1%	1%	1%	2%	1%	4%	3%	5%	5%	5%	8%	6%	9%	11%	9%	7%	4%	3%	5%	4%	1%	3%	100%

The department can supplement their internal data with this data to organize enforcement patrols that best fit the problem they are trying to address. Additional profile information (below) can inform the department that the majority of collisions for this roadway are “angle” crashes. “Too fast for conditions” and “running red lights” are prominent specific driver actions. (“No Contributing Action” is commonly the top action so the 2nd and 3rd actions provide a better picture.)

COLLISION TYPE		CRASH SEVERITY LEVEL		SEVERITY COUNT		DRIVER ACTIONS	
	CRASHES	PCT		CRASHES	PCT		PERSONS
ANGLE	118	42%	FATAL	1	0%	FATALITIES	1
REAR END	104	38%	MAJOR	4	1%	MAJOR	4
HIT FIX OBJ	25	9%	MODERATE	22	8%	MODERATE	31
SAME DIR SS	11	4%	MINOR	68	25%	MINOR	98
PEDESTRIAN	8	3%	UNK SEVERITY	45	16%	UNK SEVERITY	73
NON COLL	6	2%	PDO	136	49%	UNK IF INJURED	5
HEAD ON	3	1%	TOTAL	276	100%		
OPP DIR SS	2	1%					
UNKNOWN	1	0%					
TOTAL	276	100%					

	ACTIONS	PCT
NO CONTRIBUTING ACTION	313	45%
TOO FAST FOR CONDITION	73	10%
RUNNING RED LIGHT	71	10%
DRIVER WAS DISTRACTED	32	5%
IMPROPER/CARELESS TURN	29	4%
OTHER IMPROPER DRIVING	29	4%
FAILURE TO RESPOND TO CD	19	3%
TAILGATING	19	3%
AFFECTED PHYSICAL COND	17	2%
FAILR MAINT PROP SPEED	16	2%
UNKNOWN	16	2%
SPEEDING	13	2%
OTHERS	49	7%
TOTAL	698	100%

After enforcement waves are completed, PennDOT analyzes the enforcement’s effectiveness by looking at crash-reduction data. Although no citation targets are established, PennDOT requests that all departments meet a performance measure of an annual average of two contacts for every enforcement hour. In the aggressive driving enforcement chart below, departments meeting the target are noted in green.

	Region	County	Department	Contacts/Hour
1				
2	Region 4	Bradford	Athens Township Police Department	3.56
3	Region 4	Bradford	Towanda Police Department	1.76
4	Region 4	Columbia	Bloomsburg Police Department	1.75
5	Region 4	Columbia	Briar Creek Township Police Department	2.83
6	Region 4	Columbia	Hemlock Township Police Department	1.12
7	Region 4	Columbia	Locust Township Police Department	1.15
8	Region 4	Columbia	Orangeville Area Police Department	1.5
9	Region 4	Columbia	Scott Township Police Department	2
10	Region 4	Columbia	South Centre Township Police Department	1.71

If a department is falling significantly below meeting the two contacts per enforcement hour rate, did not participate in the mobilization, or otherwise failed to meet minimum enforcement standards, PennDOT and/or its Regional Law Enforcement Liaisons will contact the department.

For local police departments, a Performance Action Plan will be jointly developed to include: a deficit indicator, measurable targets, activities to achieve measurable outcomes, a timeline for completion, and outcomes. Upon completion of a Performance Action Plan assessment, one of the following actions will be taken: no action, follow up monitoring, retraining/administrative meeting, grant budget reduction, or grantee termination. Funds available upon the conclusion of mobilizations are either redirected to departments selected to replace terminated grantees or are redistributed based on the original allocation formula utilized.

PennDOT will monitor Pennsylvania State Police Troop performance jointly with the Bureau of Patrol. Quarterly and interim enforcement reports will be reviewed along with feedback from Troopers to determine corrective actions. Adjustments to current year and future enforcement plans will be made during scheduled and periodic monitoring visits.

Interim and annual evaluation of enforcement performance and crash data helps PennDOT best utilize available resources and continuously modify planning efforts.

SUSTAINED TRAFFIC SAFETY ENFORCEMENT PROGRAM

Successful traffic safety enforcement programs utilize a combination of enhanced deployment for specific enforcement operations and sustained efforts to provide year-long attention to traffic safety and increase public perception that traffic violations can be ticketed at any time. PennDOT coordinates its annual High-Visibility Enforcement Campaign Schedule to align with national and state communication calendars and provide funded activity throughout the year. As noted in the following tentative schedule for FFY 2018, every month includes targeted campaigns.

FFY 2018 Pennsylvania High-Visibility Enforcement Campaign Schedule

Major Campaigns	Date(s)	Estimated Police Participation		Comments
		Local (Depts)	State	
CIOT Teen Mobilization	10/16-10/28	80	No	In coordination with National Teen Driver Safety Week. Earned Media Theme: Teen Driver Laws
Halloween Impaired Driving Campaign	10/20-10/31	200	Yes	In coordination with National Collegiate Alcohol Awareness Week. Earned Media Theme: Underage Drinking
Aggressive Driving Wave	11/1-11/19	300	Yes	Earned Media Theme: Left Lane Law/Speeding/Tailgating
Fall CIOT Mobilization	11/20-12/3	250	Yes	Earned Media Theme: Operation Safe Holiday
Impaired Driving Campaign - Holiday Season	12/1-12/31	200	Yes	Earned Media Theme: Operation Safe Holiday/Drugged Driving
Super Bowl Impaired Driving	1/31-2/4	100	Yes	Earned Media Theme: Responsible Party Hosting/Designated Driver
Impaired Driving Campaign - St. Patrick's Day	3/9-3/18	300	Yes	Earned Media Theme: Impaired Driving Myths/Ignition Interlock
Aggressive Driving Wave	3/19-4/30	300	Yes	In coordination with Distracted Driving Awareness Month and National Work Zone Awareness Week. Earned Media Theme: Distracted Driving and Work Zone Awareness
CIOT - Spring	5/14-6/3	330	Yes	Earned Media Theme: Border to Border Enforcement
Impaired Driving Campaign - July 4th	6/25-7/4	350	Yes	Earned Media Theme: Boating Under the Influence
Aggressive Driving Wave	7/5-8/26	300	Yes	In coordination with National Stop on Red Week. Earned Media Theme: Red Light Running, Stop Signs, and Speeding
Impaired Driving Campaign - National Crackdown	8/15 - 9/3	400	Yes	Earned Media Theme: Drugged Driving
CIOT - Child Passenger Safety Campaign	9/16-9/30	25	Yes	In coordination with Child Passenger Safety Week and Seat Check Saturday. Earned Media Theme: Proper Child Seat Usage
Other Campaigns				
Impaired Driving-Fat Tuesday	2/13	5	No	Projects and Police Departments are encouraged to participate if their local community has a celebration
Impaired Driving-Cinco de Mayo	5/5	15	No	Projects and Police Departments are encouraged to participate if their local community has a celebration

In addition to a robust High-Visibility Enforcement Campaign Schedule evidence of sustained enforcement can be observed through the percentage of citations and arrests occurring outside of grant-funded operations. In 2016 roughly 58 percent of seatbelt and speeding citations and 21 percent of DUI arrests occurred outside of grant-funded operations.

Local police report in-kind traffic enforcement hours throughout the year. In 2016, over 23,000 hours of in-kind traffic safety enforcement was reported by local police. In-kind hours and the resulting citations and arrests reinforce a dedication towards year-long traffic safety enforcement in Pennsylvania.

IMPAIRED DRIVING

Problem Identification and Analysis

Reducing the number of impaired driving-related crashes, fatalities, and injuries occurring on the highways of the Commonwealth continues to remain a top safety focus area for Pennsylvania. Impaired driving-related crashes accounted for approximately 10 percent of the total crashes in 2016 and resulted in 29 percent of all fatalities in 2016. Impaired driving-related crashes proved three times more likely to result in a fatality than non-DUI crashes 2016. Approximately one out of every 37 impaired driving-related crashes resulted in a fatality during 2016.

Drivers aged 21-34 accounted for nearly 48 percent of all drinking-drivers involved in reportable crashes. Male drinking-drivers account for nearly three times the number of crashes as female drinking-drivers. Of particular note are the more than 600 drinking-drivers aged 16-20 involved in reportable crashes. Data from arrests for impaired driving support the crash data which reveals males account for nearly 75 percent of the arrests, nearly 50 percent of the arrests are in the 21-34 year old age group, and the time period of midnight to 4:00 AM account for nearly 50 percent of the DUI crashes. According to the same data, the average BAC at time of arrest was 0.17 and only 27 percent of the DUI arrests in 2016 were made as a result of a crash investigation.

The Commonwealth is experiencing a year-after-year increase in arrests stemming from impaired driving due to drugs. This increase is most likely due to the amount of effort being placed in drugged driving recognition training for law enforcement. DUI-D arrests have increased over 90 percent in the past five years and 220 percent since the beginning of the DRE program in Pennsylvania in the past ten years. The majority of law enforcement training in drugged driving recognition is through the advanced roadside impaired driving enforcement (ARIDE) course. This course is targeted towards officers that are already NHTSA SFST certified. Thousands of law enforcement officers in Pennsylvania have received ARIDE training. The number of crashes due to a drugged driver in 2016 has increased 25 percent in the past five years. Also increasing is the percentage of DUI charges for drug impairment compared to alcohol impairment. Over the past five years, DUI charges for drug impairment have increased from 16 to 31 percent of all charges while DUI charges for the highest alcohol tier have decreased from 21 to 17 percent of all charges filed.

A contributing factor to the rise in both drug-impaired driving arrests and crashes is the continual increasing efforts towards training law enforcement to better detect the drug-impaired driver. The thousands of officers who have received ARIDE training and the nearly 175 DREs are directly related to the increase in arrests. Other issues such as the national opioid epidemic as well as the push to legalize recreational marijuana have increased the number of drugged drivers on the Commonwealth's highways. The PennDOT State Highway Safety Office participated in the NHTSA Regions 1 and 2 Impaired Driving Summit held in March 2017. Part of that summit was the development of individual state work plans. The plan for Pennsylvania contained two initiatives aimed at combating drug-impaired driving. The first item is the implementation of electronic tablets to greatly expedite the required submission of DRE evaluation data to the national database. This will allow for quicker review of DRE data for program adjustment and training opportunities. The second item is the addition of more state-level DRE coordinators. Pennsylvania currently has only one DRE coordinator that manages the entire program. Our workplan includes expanding the number of DRE

coordinators to one coordinator position for the state police DREs, one coordinator position for the municipal police DREs, and a state-level coordinator position for the entire program. One benefit from increasing coordination will be the expanded training for DREs and the training they conduct for the rest of the police community of drug-impaired driving enforcement.

Annual Targets

Fatalities, suspected serious injuries, and crashes involving a driver or motorcycle operator with at least one driver with a BAC ≥ 0.08 have declined steadily for the past several years. Success in reducing these crashes since 2010 is driving a downward trend in fatalities and suspected serious injuries. The trend analysis suggests further reduction in all three categories in 2017 and 2018. The 5-year average targets proposed in this section for 2017 and 2018 are based on the linear trend line over the period from 2012 to 2016 and shows an achievable 16.5 percent decrease in fatalities from the baseline of 376 in 2011-2015 to the 2014-2018 target of 314. Similar downward trends have been seen for suspected serious injuries and crashes, so an 11.8 percent decrease in suspected serious injuries between 2011-2015 and 2014-2018 and a 12 percent decrease in crashes for the same periods are achievable. The 5-year rolling average of drugged driver crashes is trending upwards, partially due to both increases in the number of drugged drivers and better detection and reporting of this practice by law enforcement. As the trendline for drugged driver crashes is increasing, the 5-year average targets for 2013-2017 and for 2014-2018 were determined by halving the slope of the trendline from 2012-2016 forward.

Figure 4.7 Fatalities Involving Driver or Motorcycle Operator with ≥ 0.08 BAC 2012-2018

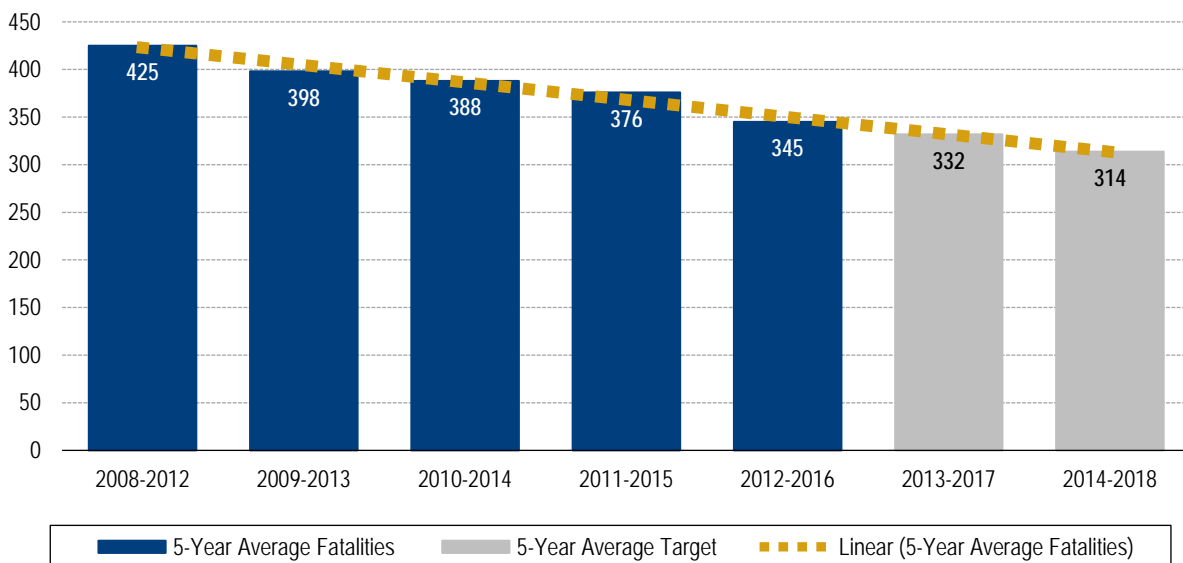


Figure 4.8 Suspected Serious Injuries in Crashes Involving Driver or Motorcycle Operator with ≥ 0.08 BAC 2012-2018

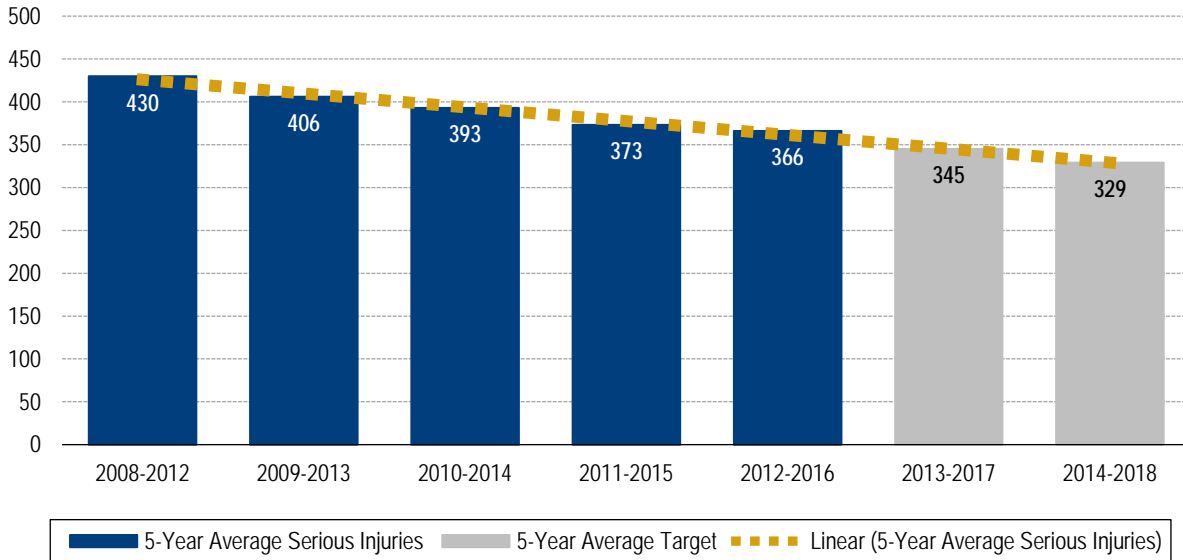


Figure 4.9 Crashes Involving Driver or Motorcycle Operator with ≥ 0.08 BAC 2012-2018

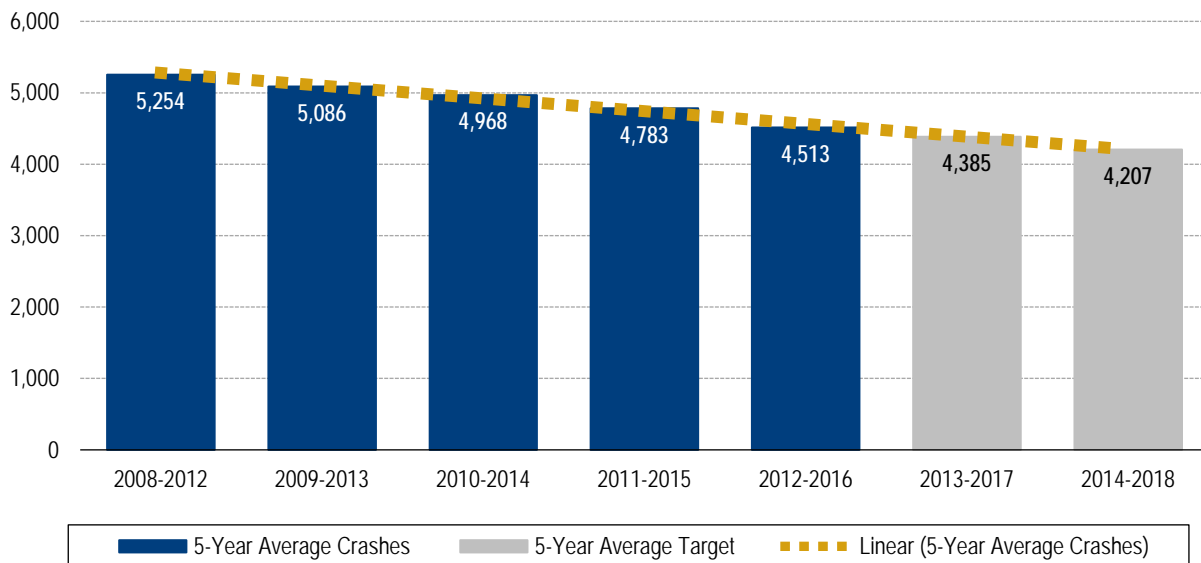
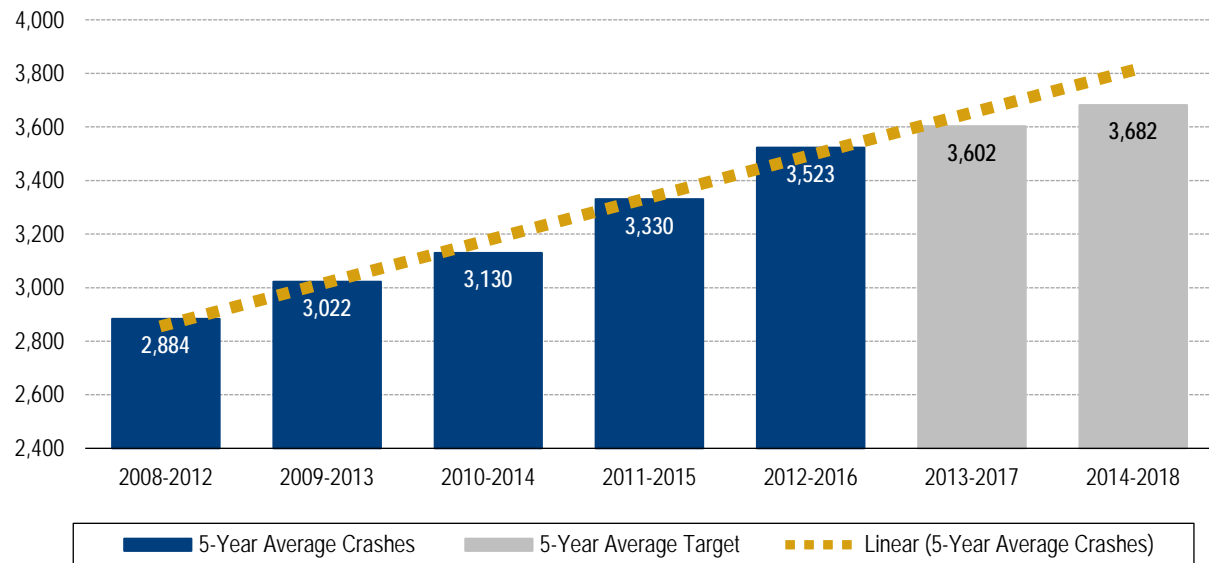


Figure 4.10 Drugged Driver Crashes
2012-2018



List of Countermeasures (Programs and Projects)

1. High-Visibility Sobriety Checkpoints and High-Visibility Saturation Patrols

Publicized checkpoint and saturation patrol programs, using specially trained officers and equipment, have been proven effective in reducing alcohol-related fatal, injury, and property damage crashes up to 20 percent each. Over the past several years, PennDOT has distributed nearly five million dollars annually in Federal grant funds to both state and local police to conduct high-visibility impaired driving enforcement. Grant-funded overtime enforcement in FFY 2016 resulted in nearly 185,000 vehicle contacts and just over 3,400 of those motorists were arrested for DUI.

According to the PennDOT Crash Records System, during 2012 to 2016 local police departments reported 21,650 crashes involving an impaired driver which resulted in an injury or fatality. In this example, an impaired driver crash is described as a crash involving at least one driver who at the time of the crash was suspected by the officer to be impaired in at least one of the following categories: alcohol, illegal drugs, alcohol and drugs, or medication. In order to be the most effective with limited grant funding, the HVE program involving local police departments needs to remain data-driven and conduct enforcement in the appropriate geographic areas identified by crash data. As such, grant funds are targeted at local police departments who reported 18,395 of the 21,650 impaired driver crashes. In other words, 85 percent of the impaired driver related crashes resulting in an injury or fatality are covered by grant funded enforcement programs in FFY 2017.

Please see the FFY 2018 Pennsylvania High-Visibility Enforcement Campaign Schedule on page 46.

Evidence-Based Traffic Safety Enforcement Program

Coordination for the events is done by the six Highway Safety Regions and their bimonthly planning meetings. At these meetings, team members follow up on completed mobilizations and use the results to

adjust the coordination of the next effort. The data used in planning enforcement includes examination of jurisdictions for high DUI crash, injury, and fatality locations, crashes by time of day, type of vehicle, and age/sex of drivers.

Evidence of Effectiveness: CTW, Chapter 1: Sections 2.1, 2.2, 2.3, 5.2, 7.1

Project Number: M5HVE-2018-01-00-00 Federal

Project Title: Pennsylvania State Police DUI Enforcement Program

Allocation Methodology: The PennDOT State Highway Safety Office supplies the state police with crash data in support of a data-driven approach to the high-visibility enforcement program. As such, crash data for the previous five years was queried to identify impaired driving related crashes which resulted in an injury or fatality. By removing crashes reported by local police, the data was able to be organized by reporting state police troop and station. Suggested grant funding amounts are supplied, presented by troop and station, which are proportionate to the crash problem for location.

Project Description: Under its Impaired Driving Enforcement and Initiatives, the Pennsylvania State Police (PSP) conduct high-visibility enforcement operations on a sustained basis and in coordination with mobilizations. Approximately 40 percent of crashes from 2012 to 2016 involving an impaired driver which resulted in an injury or fatality were reported to PennDOT by the PSP. Through coordination with its Troops and Stations, the PSP are able to coordinate statewide high-visibility impaired driving enforcement. The Troops use their own enforcement and crash data to identify the most problematic locations which are suitable for sobriety checkpoints and roving DUI patrols. In an effort to further support this enforcement, PennDOT is able to provide analyzed impaired driving crash data back to PSP which highlights locations and times of day within each Troop. Enforcement efforts will be conducted on a sustained basis throughout the year and also concentrated during mobilizations such as the national crackdown on impaired driving. Publicized checkpoint and saturation patrol programs, using specially trained officers and equipment, have been proven effective in reducing alcohol-related fatal, injury, and property damage crashes up to 20 percent each. Grant-funded high-visibility DUI enforcement conducted by the PSP in FFY 2016 resulted in over 40,000 vehicle contacts and more than 1,500 of those motorists were arrested for impaired driving.

As stated in the introduction to this section, the number of crashes due to a drugged driver in 2016 has increased in the past five years. The number of DUI charges for drug impairment have increased over the same time period. The training and certification of officers in the Drug Recognition Expert (DRE) program has been, and will continue to be, critical to reduce impaired driving. DRE certification enables officers to recognize drugged driving and to properly collect and process evidence. Studies have shown DRE judgments of drug impairment are corroborated by toxicological analysis in 85 percent or more of cases.

The DRE program is currently coordinated by a Bureau of Patrol Corporal in the State Police who reports all DRE activity to the International Association of Chiefs of Police which oversee the program at a national level. The DRE coordinator in Pennsylvania is also responsible for organizing the initial certification training and subsequent recertification requirements. Activities under the DRE program are categorized into three categories; DRE travel and training, DRE equipment, and DRE call-out overtime. The travel and training costs will include all necessary activities related to (re)certification of the nearly 175 DREs in the state as well costs associated with sending the state coordinator along with three other DREs to the annual

IACP National DRE Conference. Upon completion of the initial DRE certification, all DREs will be supplied with the necessary equipment to conduct evaluations which includes items such as a stethoscope, pen light, and thermometer. The large majority of costs and activities under this program are the DRE evaluations themselves. Similar to DUI enforcement conducted on an overtime basis, off-duty DREs who respond to evaluation requests will be reimbursed for the time to conduct an evaluation when an on-duty DRE is not available. Please note on-duty DREs will be utilized when possible. Both state and local law enforcement have been instructed to request a DRE during a DUI stop when any type of drug impairment is suspected, especially in any DUI crash involving an injury or fatality.

In direct support of the DRE program, a majority of law enforcement training in drugged driving recognition is through the Advanced Roadside Impaired Driving Enforcement (ARIDE) course. This course is targeted towards officers that already are NHTSA SFST certified. Thousands of law enforcement officers in Pennsylvania have received ARIDE training.

Metric: Conduct 175 sobriety checkpoints, 1,500 roving DUI patrols.

Metric: Certify 20 officers as Drug Recognition Experts and conduct 20 ARIDE courses.

Performance Target: Reduce the 5-year average number of Drugged Driving Crashes to 3,682 for the 2014-2018 period.

Project Budget: \$2,300,000 (DUI Enforcement - \$2,050,910; DRE Program - \$249,090)

Indirect: TBD

MOE: \$0

Match: \$350,000

Project Number: M5HVE-2018-02-00-00 Federal

Project Title: Municipal DUI Enforcement Programs

Allocation Methodology: As part of the data-driven approach to reducing impaired driving, an allocation method was created to efficiently and effectively distribute grant funding to our municipal DUI enforcement programs. Crash data for the previous five years was queried to identify impaired driving related crashes which resulted in an injury or fatality. By removing crashes reported by the state police, the data was able to be organized by reporting local police agency. A percentage was calculated for each of the more than 1,200 local police departments in the state based on the proportion of total impaired driving crashes in the state. The nearly 50 DUI enforcement grant programs which are comprised of more 700 participating local police agencies were assigned a grant funding amount based on their proportion of the problem. Grant amounts were then slightly adjusted based on factors such as past grantee performance or availability of manpower. Non-grant program participating police agencies with a large percentage of crashes are contacted by the law enforcement liaisons and encouraged to participate in the program. Some of the reasons for non-participation range from availability of manpower to lack of local government support.

Project Description: PennDOT will offer enforcement grants that will fund nearly 700 municipal police departments that encompass the road segments with the highest DUI crash numbers statewide. Participating departments conduct DUI enforcement operations, including sobriety checkpoints, roving patrols, phantom

checkpoints, and Cops in Shops operations. Enforcement is coordinated throughout the year to correspond with both national and local mobilizations. Police departments now have access to the Pennsylvania Crash Information Tool (PCIT) to assist them in identifying high-risk areas to target enforcement. The municipal departments also have at their disposal local arrest records and crash data to reference. At a minimum, enforcement agencies receiving grant funding are required to participate in the national crackdown surrounding the Labor Day holiday. DUI law enforcement liaisons will ensure police department have access to the NHTSA Law Enforcement Action Kit through a password protected website. Grant-funded high-visibility DUI enforcement conducted by local police in FFY 2016 resulted in over 143,000 vehicle contacts and more than 1,800 of those motorists were arrested for impaired driving.

Metric: Conduct 275 sobriety checkpoints, 850 roving DUI patrols, and 30 Cops in Shops operations.

Project Budget: \$2,593,000.00

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M5HVE-2018-01-00-00 State

Project Title: Paid Media

Project Description: The PennDOT Central Press Office will use state funds to buy media in support of HVE during the DUI mobilizations. Outreach efforts for state and local checkpoint and saturation patrol programs target high-risk populations and vehicle types. State data reveals the most prevalent group of drinking-drivers involved in crashes are male drivers age 21-30. Male drivers in this age group accounted for nearly 30 percent of all drinking driver crashes in 2016.

Metric: Conduct two paid media campaigns to support high-visibility enforcement.

Project Budget: \$400,000.00

Indirect: \$0

MOE: \$0

Match: \$400,000

2. Court Support

Prosecution and adjudication strategies, including DUI courts, can be shown to change offender's behavior by identifying and treating their alcohol problems and by holding offenders accountable for their actions. An increasing number of DUI court program evaluations across the country are displaying low DUI recidivism rates for successful graduate and reductions in long-term system cost as offenders spend less time in jail. Including DUI courts as part of a comprehensive DUI program can be expected to greatly contribute to reductions in impaired driving behavior.

Evidence of Effectiveness: CTW, Chapter 1: Sections 3.1, 3.2, 3.3, 3.4

Project Number: M5CS-2018-01-00-00 Federal

Project Title: DUI Courts

Project Description: During 2016 in Pennsylvania, there were more than 16,500 convictions for a second or subsequent DUI offense. The convictions accounted for over 55 percent of all DUI convictions in 2016. PennDOT provides counties with grants for DUI Court to address recidivism. The DUI Court model is similar to the preexisting Drug Court model and much of the same infrastructure is used between the two. The repeat offender will go through a series of parole and treatment phases until the judge decides proper progress has been made and a change in behavior has occurred. DUI Court grants from PennDOT are renewed for three years and are intended as start-up funds. Studies and evaluations have shown that DUI courts are successful and reduce DUI recidivism.

Metric: Fund one DUI Court.

Project Budget: \$150,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: AL-2018-01-00-00 Federal

Project Title: DDAP/PennDOT DUI Intervention Project

Project Description: According to Pennsylvania statute, individuals who are convicted or plead guilty for an impaired driving offense must undergo a full drug and alcohol assessment prior to sentencing if any of the following apply; the individual has a prior DUI offense, or if indicated by the pre-screening evaluation, or if the BAC at time of arrest was 0.16 or greater. The intent is to properly identify those individuals who have an alcohol or drug addiction and ultimately lead to a reduction in DUI recidivism by including treatment as a component of the court sentencing. This is a crucial factor in the success of the combined health/legal approach to reducing impaired driving. In 2016, the pre-screening evaluation of DUI offenders recommended that more than 88 percent of those offenders undergo a full drug and alcohol assessment. Of all the DUI convictions in 2016, more than 55 percent were for a second or subsequent conviction. The burden of ensuring compliance with this statute lies within each county court and compliance has a direct impact on recidivism. According to court data and the state Supreme Court case, *Comm. v. Taylor*, the county courts are failing to universally comply with this statute. This project will evaluate the programs within the county court systems to review compliance with statute, as well as to identify best practices to share with non-compliant counties.

Metric: Complete evaluation of all 67 County Court DUI Programs and submit final report.

Project Budget: \$100,000.00

Indirect: TBD

MOE: \$0

Match: \$0

3. Training the Police and Highway Safety Communities

PennDOT supports training programs and employs technical experts to support activities designed to reduce impaired driving crashes on Pennsylvania roadways. These trainings and technical experts ensure participating police departments and DUI Court programs have sufficient knowledge and certifications to successfully complete program objectives in accordance with the most recent case law, best practices, and standardized curriculum.

Evidence of Effectiveness: CTW, Chapter 1: Sections 2.1, 2.2, 2.3, 3.1, 3.2, 3.2, 3.3, 3.4, 4.1, 5.1, 7.1; HSP Guidelines No. 8, II E, III A+B

Project Number: M5TR-2018-01-00-00/PT-2018-03-00-00 Federal

Project Title: Institute for Law Enforcement Education

Project Description: PennDOT relies heavily on police officers to conduct enforcement strategies focusing on highway safety. As a result, PennDOT provides training in the area of impaired driving enforcement, including standardized field sobriety testing, sobriety checkpoints, evidentiary breath testing, and other pertinent focus areas. The training allows the officers to better implement enforcement strategies that can bring down DUI crash totals. PennDOT finances the training through a Memorandum of Understanding (MOU) with the Department of Education. Each year, more than 4,000 law enforcement personnel receive training under this agreement.

Metric: Hold 25 breath test-related trainings.

Metric: Perform 20 sobriety checkpoint-related trainings.

Metric: Train 4,000 law enforcement officers in highway safety-related disciplines.

Metric: Perform 25 SFST-related trainings.

Project Budget: \$955,000 (\$630,000 – §405d; \$325,000 – §402)

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M5TR-2018-02-00-00 Federal

Project Title: Traffic Safety Resource Prosecutor (TSRP)

Project Description: More than 50,000 individuals are arrested for impaired driving each year in Pennsylvania, comprising more than 100,000 charges filed. Proper prosecution and adjudication of DUI arrests supports and strengthens the effectiveness of enforcement efforts. The TSRP under this contract acts as both a trainer and legal expert on DUI matters for law enforcement officers and prosecutors statewide. Tasks under this position include providing trainings ranging from case law to case presentation, and serving as an on-demand resource for legal issues in DUI cases. The TSRP also provides timely opinions on changes in case law stemming from recent DUI court cases.

Metric: Fund 1 Traffic Safety Resource Prosecutor.

Project Budget: \$200,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M5TR-2018-03-00-00 Federal

Project Title: Judicial Outreach Liaison (JOL)

Project Description: Pennsylvania funds a state-sanctioned Judicial Outreach Liaison with the main focus of involving the judicial community in the highway safety community. During this time the PennDOT State Highway Safety Office granted with a Common Pleas Judge and established a program for judicial outreach in the Commonwealth primarily focusing on impaired driving issues. Every year in Pennsylvania the courts process more than 50,000 cases stemming from impaired driving. In some counties, DUI cases comprise up to half of the total cases heard in the courtroom. Questions stemming from recent DUI caselaw and individual DUI issues arise from the judiciary; the JOL serves as that technical resource in a peer to peer exchange of information between judges. The JOL also serves as the liaison between the highway safety community and the judiciary as a whole, offering insight, sharing concerns, participating in stakeholder meetings, providing training, and promoting best practices such as DUI courts and other evidence based best practices.

Metric: Fund 1 Judicial Outreach Liaison.

Project Budget: \$55,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M5TR-2018-04-00-00 Federal

Project Title: DUI Law Enforcement Liaisons (LEL)

Project Description: Each Federal fiscal year, PennDOT law enforcement grantees conduct approximately 2,500 DUI enforcement operations resulting in 185,000 contacts and nearly 3,500 DUI arrests. LEL support services are a crucial requirement of the high-visibility enforcement program and also act as a technical resource for the nearly 50 DUI enforcement grants statewide which reach almost 700 local police departments as well as the state police. Their tasks include providing technical assistance to the impaired driving task forces, relay proper case law regarding various aspects of impaired driving, and to act as an extension of PennDOT for our law enforcement partners.

Of the more than twenty individual tasks included in this project, the vast majority are categorized as either training or technical support. Law enforcement officers must be properly trained in order to maintain an effective high-visibility enforcement program. The DUI LELs will serve as trainers for trainings which include sobriety checkpoints, standardized field sobriety testing (SFST), advanced roadside impaired driving

enforcement (ARIDE), and drug evaluations and classification trainings. Activity under this project also provides technical assistance to the impaired driving HVE grantees by distributing case law updates, on-site quality assurance of sobriety checkpoints, review of standard operating procedures, and providing responses to law enforcement inquiries on complex DUI issues. The most crucial role served by the DUI LELs is acting as the bridge between the state highway safety office and the law enforcement community.

Project Budget: \$595,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M5TR-2018-05-00-00 State

Project Title: Pennsylvania DUI Association Technical Services Program

Project Description: Alcohol Highway Safety Program (AHSP) – The AHSP is managed by the Pennsylvania DUI Association through a contract PennDOT. The 2 main components of the AHSP are the Alcohol Highway Safety School (AHSS) and the Court Reporting Network (CRN). In Pennsylvania, attendance in an alcohol highway safety school is mandatory prior to license restoration for all convicted DUI first and second offenders. Alcohol Highway Safety School is a structured educational program with a standardized curriculum to teach DUI offenders about the problems of alcohol and drug use and driving. It provides opportunities to learn and implement behavioral changes that can eliminate future driving after drinking. Alcohol Highway Safety School curriculum and instructors are certified through PennDOT.

Through the CRN, DUI offenders are evaluated for alcohol or drugs dependency prior to sentencing. This involves completing a questionnaire and an interviewing with a state-certified counselor. The information collected is presented to the judge prior to determine if drug and alcohol treatment are necessary. The judge has the option of ordering drug or alcohol dependency treatment which will help reduce repeat DUI offenses by getting people the help they need to address the root of their DUI problem. PennDOT is tasked with certifying the CRN evaluators.

Metric: (Re) Certify 180 AHSS Instructors.

Metric: (Re) Certify 225 CRN Evaluators.

Project Budget: \$425,000

Indirect: TBD

MOE: \$0

Match: \$425,000

4. Ignition Interlock Program

Primary components of Pennsylvania's criminal justice system are laws which establish effective consequences. Ignition interlock laws are effective penalties designed to achieve both specific and general deterrence. Interlock devices are highly effective in allowing a vehicle to be started by sober drivers but not by alcohol-impaired drivers.

Evidence of Effectiveness: CTW, Chapter 1: Section 4.2; HSP Guidelines No. 8, III A+B

Project Number: M5II-2018-01-00-00 State

Project Title: Ignition Interlock

Project Description: The Pennsylvania DUI Association provides quality assurance and technical assistance to PennDOT on interlock issues. Interlock devices prohibit a vehicle from being operated by a drinking driver and helps ensure that convicted offenders are not able to drive until their drinking abuse problem is under control. Currently, there are over 6,000 Pennsylvania residents with an ignition interlock license. In 2016, more than 50,000 vehicle ignition starts were prevented by ignition interlock devices statewide. On August 25, 2017, Pennsylvania's new ignition interlock law for first time high-BAC offenders becomes effective. As a result, both the number of devices installed and vehicle ignition starts prevented will increase.

These state funds are counted towards the Maintenance of Effort (MOE) requirement for 23 U.S.C. 405(d) impaired driving funds.

Metric: Perform 300 (or at least 100 percent of operations existing in Pennsylvania) monitoring site visits of certified ignition interlock service centers.

Project Budget: \$640,000

Indirect: TBD

MOE: \$640,000 (405d)

Match: \$640,000

OCCUPANT PROTECTION

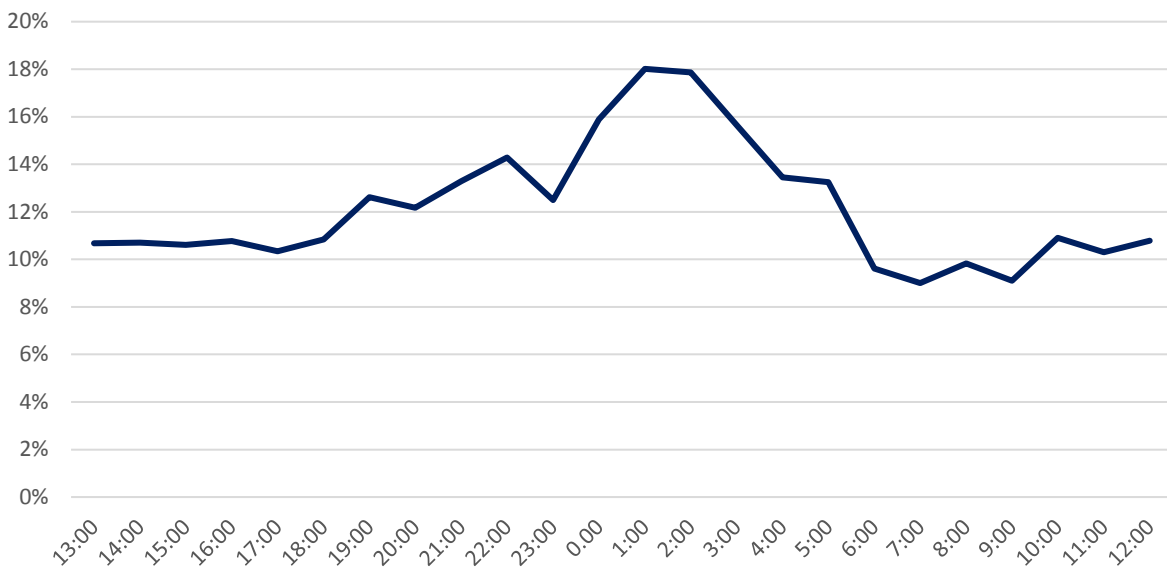
Problem Identification and Analysis

Proper and consistent use of seat belts and child safety seats is known to be the single most effective protection against death and a mitigating factor in the severity of traffic crashes. Historical data shows that the Pennsylvania seat belt use rate increased significantly when the state’s first seat belt law was passed in 1987 and afterward there was a steady increase in use. The use rate spiked in 2009 at 88 percent, and since then has held steady around 84 percent with a slight increase to 85.2% in 2016. In 2016, 6.9 percent of crashes involved at least one unbelted person, and 52.2 percent of all people who died in crashes were not wearing seat belts. From 2012-2016, 82 percent of the children aged 0-4 who were involved in crashes and restrained in a child seat sustained no injury.

In 2016, the number of unrestrained fatalities decreased from 413 to 408 the previous year. Unrestrained suspected serious injuries increased for the first time since 2011, from 734 in 2015 to 1,007 in 2016. Crashes involving an unrestrained passenger also increased for the first time since 2011.

Thirty-four percent of the fatalities and suspected serious injuries that resulted from unrestrained crashes occurred between the hours of 10:00 p.m. and 5:00 a.m. The chart below shows unrestrained crashes as a percent of total crashes in Pennsylvania. There is a significant increase in unrestrained crashes during these hours.

Figure 4.11 Unrestrained Crashes as Percent of Total Crashes by Hour of the Day 2016



As shown below in Table 4.1, over 6.7 percent of the reported teen driver crashes were unrestrained for 2012-2016. Additionally, the percentage of unrestrained drivers in the 20 to 29 age range remained above the state average. This is a concerning trend noticed in Pennsylvania. Our state media contractor has run targeted messaging to increase outreach to this age group. The Highway Safety Office has also placed an emphasis on media and enforcement of teen drivers in the hopes of establishing good driving behaviors early to seed future gains in the subsequent decade of life. Community Traffic Safety Projects have enhanced outreach efforts to colleges and universities towards reaching young drivers in the 20-29 age group to help support the idea of maintaining safe driving habits as they leave the teenage years. Also of concern is the number of crashes reported as ‘Other/Unknown’. Often the reporting officer has insufficient or conflicting information to make a decision when documenting belt use. PennDOT will continue reaching out to police departments which display higher than average usage of ‘Other/Unknown’ on crash reports to explore training opportunities which could increase the decision-making capabilities of reporting officers. Last year’s efforts resulted in a 2% reduction in the use of ‘Other/Unknown’ based on percentage of total applicable crashes.

Table 4.1 Drivers in Reportable Crashes of Applicable Units by Age Group and Restraint Usage
2012-2016

Age	Restrained	Unrestrained	Other/Unknown	Total	Percent Unrestrained ^a
16-19	75,836	6,057	8,549	90,442	6.70%
20-24	114,664	12,822	21,001	148,487	8.64%
25-29	90,105	9,542	19,262	118,909	8.02%
30-34	71,281	6,814	14,985	93,080	7.32%
35-39	59,887	5,121	11,891	76,889	6.66%
40-44	59,921	4,604	10,746	75,271	6.12%
45-49	61,705	4,251	10,456	76,412	5.56%
50-54	61,187	4,048	10,086	75,321	5.37%
55-59	54,449	3,207	8,494	66,150	4.85%
60-64	42,412	2,215	6,401	51,028	4.34%
65-69	30,988	1,537	4,248	36,773	4.18%
70-74	21,310	1,117	2,837	25,264	4.42%
75-79	14,650	832	1,837	17,319	4.80%
80-84	10,698	642	1,368	12,708	5.05%
85-89	6,423	360	800	7,583	4.75%
90-94	1,675	124	237	2,036	6.09%
>94	607	1,423	13,996	16,026	8.88%
Total	777,788	64,716	147,194	989,698	6.54%

Note: Applicable Units include automobiles, small and large trucks, vans, and SUVs.

^a Percent Unrestrained is the number of unrestrained drivers where restraint usage is known.

Annual Targets

Unrestrained fatalities, suspected serious injuries, and crashes have trended downward over the past several years. The trend analysis suggests reduction in all three categories in 2017 and 2018. The 5-year average targets proposed in this section for 2017 and 2018 are based on the linear trend line over the period from 2012 to 2016 and shows an achievable 13 percent decrease in fatalities from the baseline of 438 in 2011-2015 to the 2014-2018 target of 381. Similar downward trends have been seen for suspected serious injuries and crashes, so a 6.5 percent decrease in suspected serious injuries between 2011-2015 and 2014-2018 and a 6 percent decrease in crashes for the same periods are achievable.

Figure 4.12 Unrestrained Passenger Vehicle Occupant Fatalities
2012-2018

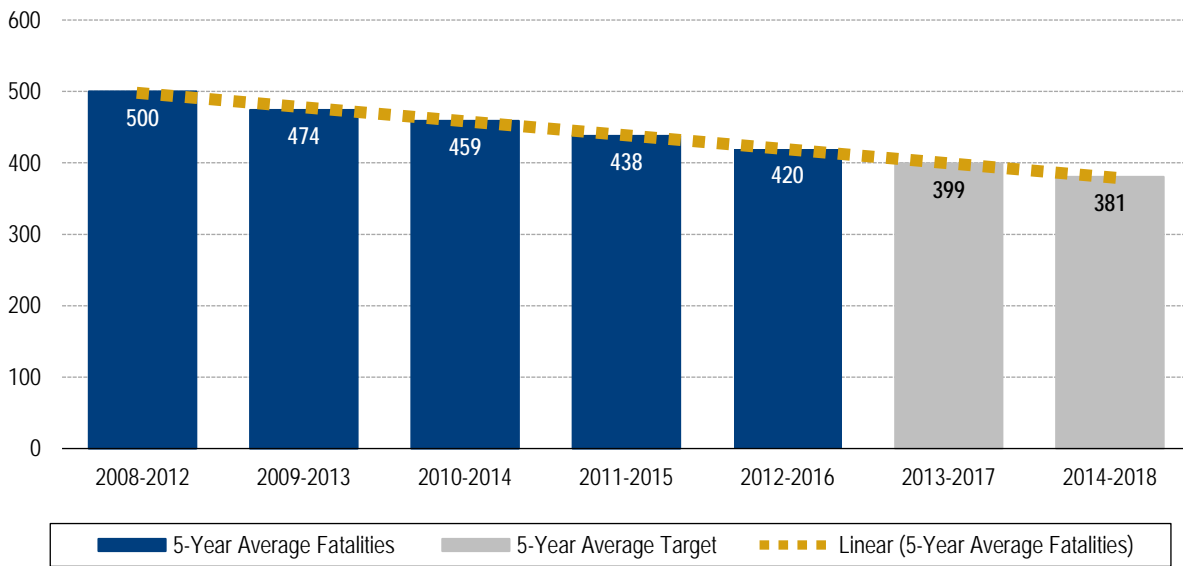


Figure 4.13 Unrestrained Passenger Vehicle Occupant Suspected Serious Injuries 2012-2018

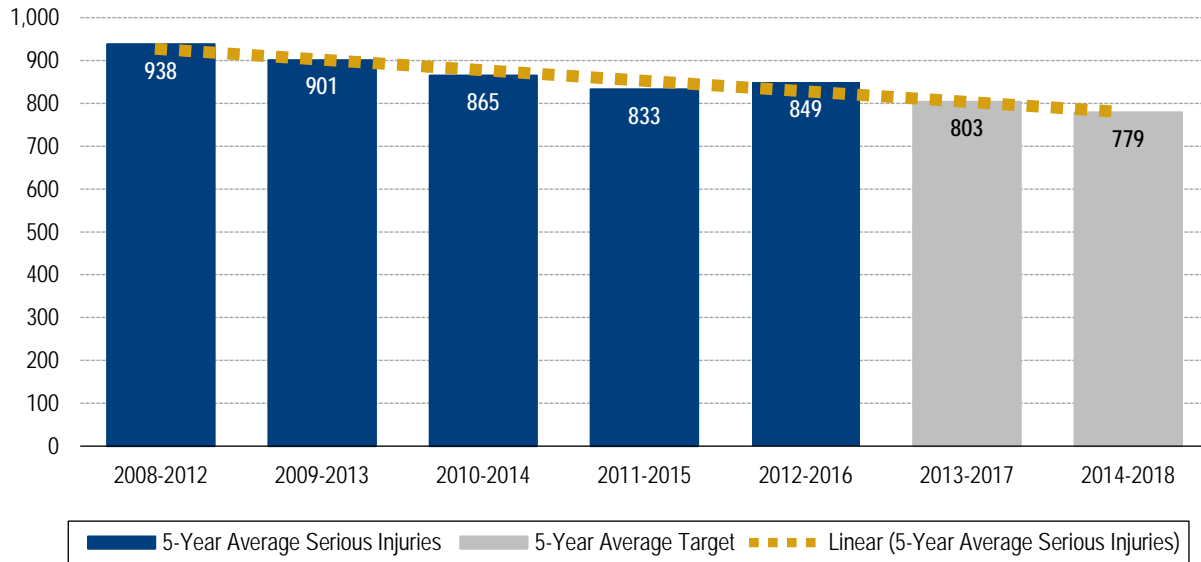
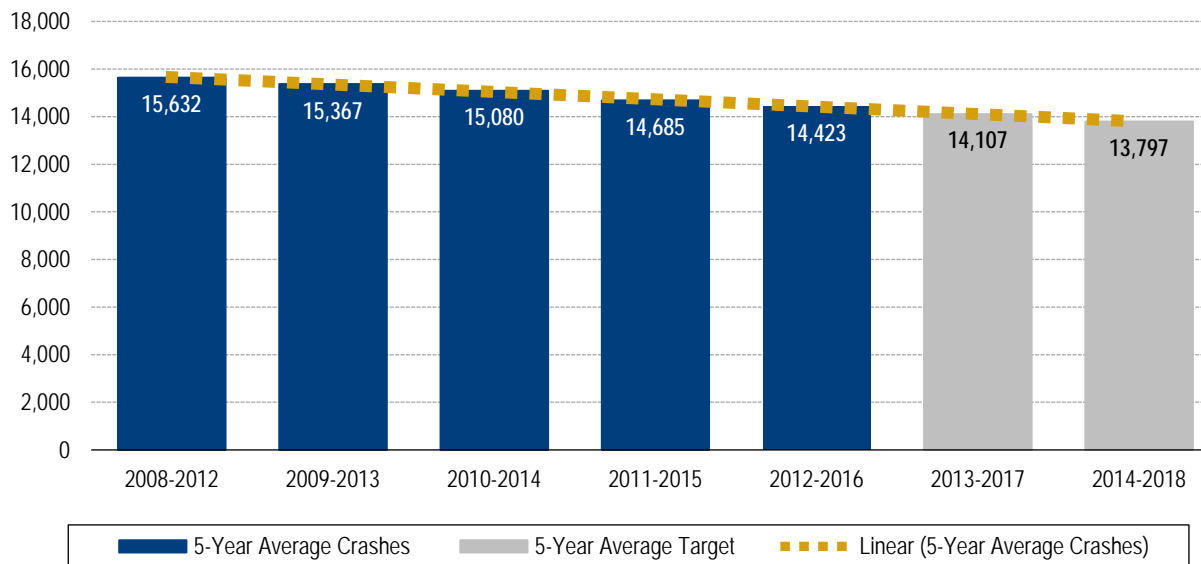


Figure 4.14 Unrestrained Passenger Vehicle Occupant Crashes 2012-2018



List of Countermeasures (Programs and Projects)

1. High-Visibility Seat Belt Law Enforcement

Publicized seat belt law enforcement programs, using specially trained officers and equipment, have been proven effective in increasing belt use and reducing occupant protection-related fatal, injury, and property damage crashes. A comprehensive approach using both periodic and sustained enforcement operations to address general and high-risk populations provides a greater opportunity for long-term program impact.

Periodic High-Visibility Belt Law Enforcement

Decreasing unbelted crashes depends upon identifying high crash locations and planning and implementing interventions and countermeasures to address the problem. The PennDOT Highway Safety Office will facilitate the creation, implementation, and monitoring of a statewide strategic seat belt plans covering every county for the Thanksgiving 2017 and May Click It or Ticket 2018 mobilizations and for the targeted Teen Seat Belt and Child Passenger Safety Week mobilizations. Each mobilization will have a detailed action plan created for implementing the enforcement and post enforcement reporting. These plans will be accompanied by earned and in some cases state funded media planned statewide in the state media plan and regionally by the highway safety teams.

Sustained Belt Law Enforcement

Departments receiving grant money during enforcement mobilizations will be required to conduct in-kind overtime enforcement during a designated month of the year. In-kind enforcement is scheduled so that seat belt enforcement is being done in every month. Law enforcement agencies participating in the designated mobilization periods are strongly encouraged to take a “zero tolerance” stance on drivers and passengers who ride unbuckled during both funded and in-kind operations. The importance of enforcing the seat belt laws as a tool to decrease traffic injuries and fatalities is emphasized to law enforcement partners at every opportunity. Pennsylvania State Police (PSP) policy indicates “[m]embers are strongly encouraged to adopt a zero-tolerance policy towards any violation of the Commonwealth’s seat belt and child passenger restraint laws.”

Nighttime (10 p.m. to 5 a.m.) Seat Belt Enforcement

As shown above in Figure 4.11, the rate of unrestrained crashes, suspected serious injuries, and fatalities increases at night. To target this problem, a percentage of mobilization enforcement will be conducted at nighttime. Additionally, coordinated communication and enforcement plans will be distributed to Impaired Driving Projects. This media strategy will run during the Thanksgiving and May Seat Belt Mobilizations. The goal of this effort is to reduce both unbelted and impaired crashes and fatalities through coordinated enforcement and media plans. There will be no consolidation of funding sources for these efforts between the different types of enforcement. In the past, grantees have been required to conduct all enforcement during the Thanksgiving mobilization at night and 50 percent of Memorial Day mobilization enforcement at night. For FFY 2018 similar rates of nighttime enforcement is planned.

Teen Seat Belt Enforcement

A high-visibility enforcement and education mobilization aimed at teen drivers will be conducted as a low use population countermeasure. Activities will include education programs in high schools, roving patrols, minicade informational sites, and earned media. Short-term, high-visibility enforcement campaigns have been shown to increase belt use more among traditionally lower belt-use groups, including young drivers, than among higher belt-use drivers. Enforcement operations focusing on teen drivers can be expected to improve belt usage within the targeted age group and provide lasting impact to reduce the immediate increases observed in unrestrained crashes for ages 20 to 29 seen in Table 4.1.

Please see the FFY 2018 Pennsylvania High-Visibility Enforcement Campaign Schedule on page 66. Projected participating municipal police departments are in the FFY 2018 §405b application.

Evidence-Based Traffic Safety Enforcement Program

Coordination for the events is done by the six Highway Safety Regions and their bimonthly planning meetings. At these meetings, team members follow up on completed mobilizations and use the results to

adjust the coordination of the next effort. The data used in planning enforcement includes examination of jurisdictions for high unrestrained crash, injury, and fatality locations, crashes by time of day, type of vehicle, and age/sex of drivers. Data related to high-risk areas and demographics also is provided to target the NHTSA paid media buy for Memorial Day Mobilization and other identified campaigns.

Evidence of Effectiveness: CTW, Chapter 2: Sections 2.1, 2.2, 2.3, 3.1, 3.2, 5.1, 6.1, 7.1

Project Number: M2HVE-2018-01-00-00 Federal

Project Title: Pennsylvania State Police Occupant Protection Enforcement and Education Program

Allocation Methodology: The PennDOT State Highway Safety Office supplies the state police with crash data in support of a data-driven approach to the high-visibility enforcement program. As such, crash data for the previous five years was queried to identify unbuckled crashes which resulted in an injury or fatality to the unrestrained. By removing crashes reported by local police, the data was able to be organized by reporting state police troop and station. Suggested grant funding amounts are supplied presented by troop and station which are proportionate to the crash problem for location.

Project Description: The Pennsylvania State Police (PSP) will participate in seat belt enforcement programs targeting roadway segments with relatively high occurrences of unrestrained crashes. Activities will include saturation patrols, conducting press events and preparing press releases, and reporting results of enforcement and educational efforts. The emphasis of the activities will be on seat belt use, with some activity aimed at the proper use of child passenger safety restraints.

Guidelines for enforcement activities, along with targets and objectives, will be provided to Troop or Area Commanders. The commanders will then use multiple data sources to decide when and where to conduct overtime enforcement. Data sources include historical data, evaluations of previous enforcement campaigns, direct knowledge of incidents in the area, and analysis of incident reports to identify high crash corridors.

Metric: Participation from all 16 Pennsylvania State Police Troops in periodic and ongoing enforcement campaigns, including Child Passenger Safety Week.

Project Budget: \$1,782,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: OP-2018-02-00-00 Federal

Project Title: Municipal Occupant Protection Enforcement and Education Programs

Allocation Methodology: As part of the data-driven approach to reducing unbuckled fatalities, an allocation method was created to efficiently and effectively distribute grant funding to our municipal occupant protection enforcement departments. Crash data for the previous five years was queried to identify

unbuckled crashes which resulted in an injury or fatality to the unrestrained occupant. By removing crashes reported by the state police, the data was able to be organized by reporting local police agency. A percentage

was calculated for each of the more than 1,200 local police departments in the state based on the proportion of total unbuckled crashes in the state. Approximately 350 participating local police agencies were assigned a grant funding amount based on their proportion of the problem. Grant amounts were then slightly adjusted based on factors such as past grantee performance or availability of manpower. Non-grant program participating police agencies with a large percentage of crashes are contacted by the law enforcement liaisons and encouraged to participate in the program. Some of the reasons for non-participation range from availability of manpower to lack of local government support.

Project Description: Municipal police participation in occupant protection enforcement operations will be coordinated, supported, and administrated through a statewide project offered by PennDOT. Enforcement subgrants will use an allocation formula based on unrestrained crash data along with an assessment of individual LEA capacity to fulfill the grant requirements. This process will ensure that LEAs funded for seat belt enforcement will represent at least 70 percent of the statewide unrestrained crashes.

This project will also provide Law Enforcement Liaison support services to provide training and technical assistance to law enforcement agencies, assist in the selection of enforcement areas and municipal police departments, coordinate multi-jurisdictional enforcement efforts, monitor the performance of police during enforcement campaigns, and prepare reports as necessary.

Metric: Provide funding to municipal police departments based on number and severity of crashes to participate in Thanksgiving 2017 and May Click It or Ticket 2018 enforcement campaigns.

Metric: Dedicate 50 percent of funded enforcement hours to nighttime enforcement.

Metric: Provide funding to municipal police departments to participate in the Teen Seat Belt enforcement campaign (October 16-28, 2017).

Metric: Provide funding to municipal police departments to participate in Child Passenger Safety Week enforcement (September 16-30, 2018).

Project Budget: \$1,800,000 (HVE Enforcement - \$1,500,000; LEL Support - \$300,000)

Indirect: TBD

MOE: \$0

Match: \$270,000

Project Number: M2HVE-2018-01-00-00 State

Project Title: Paid and Earned Media

Project Description:

Paid Media Plans - PennDOT will use state funds for paid advertising during the May CIOT mobilization in the form of radio messages, on-line ads, and gas/convenience store advertising targeting males 18 to 54, nighttime drivers, and pickup truck drivers. Statistics have shown these demographics are the least likely to buckle up. There also will be CIOT campaign videos shown in Pittsburgh and Philadelphia high schools.

As roughly two-thirds of Attitude and Awareness survey respondents indicated they had not seen or heard

anything about seat belt law enforcement. PennDOT will reexamine methods used for reaching target audiences.

Metric: Conduct one paid media campaigns to support high-visibility enforcement during the May Click It or Ticket mobilization.

Project Budget: \$250,000

Indirect: TBD

MOE: \$0

Match: \$250,000

2. Child Occupant Protection Programs

State laws addressing younger children in vehicle restraints are different than those for adults in all states, as younger children require restraints appropriate to their size and weight. In addition to enforcement operations targeting compliance with child restraint laws, communication and educational programs designed to educate motorists on the proper installation and usage of child restraints have been shown to reduce the likelihood of injury due to improperly secured children in a crash.

Evidence of Effectiveness: CTW, Chapter 2: Sections 3.1, 3.2, 6.1, 6.2, 7.1, 7.2, 7.3

Project Number: OP-2018-01-00-00 Federal

Project Title: Pennsylvania State Police Child Passenger Safety Fitting Stations

Project Description: The fitting stations are staffed by trained technicians who provide hands-on instruction to parents and caregivers to address misuse of child passenger safety restraints. Proper use of child restraints provides better protection from injury or death in an accident, and studies have demonstrated those who have received instruction are likely to continue using the restraints. Pennsylvania State Police will continue to offer child passenger safety restraints in each PSP station statewide.

Metric: Perform at least 2,100 car seat checks total during the fiscal year.

Metric: Conduct at least 70 separate check-up events during each seat belt mobilization event; inspect at least 500 seats during each mobilization period.

Project Budget: \$100,000

Project Number: CP-2018-02-00-00 Federal; CP-2018-02-00-00 State

Project Title: Statewide Child Passenger Safety (CPS) Coordination

Project Description: PennDOT contracts with the Pennsylvania Chapter of the American Academy of Pediatrics (PA AAP) to deliver a statewide child passenger safety program through the Traffic Injury Prevention Program (TIPP). TIPP serves as the state's CPS resource center, maintaining an 800 number (1-800-227-2358), website, and a variety of print and video resources for Highway Safety agencies and the

public. The contract also provides for some specific deliverables in the broad categories of education, CPS technician certification, the state's child restraint loan program, and activities during Child Passenger Safety Week.

Child Passenger Safety Technician Certification Training: Implement and oversee the administration and the credibility of Child Passenger Safety Technician courses, taught statewide. The technicians staff the Child Restraint Inspection Stations statewide, which instruct the public on the proper installation and use. They are also police, firefighters, EMS, and community volunteers. Administer the update/refresher courses, special needs classes, and medical staff trainings. Conduct outreach to recruit new technicians and establish Inspection Stations based on current population data and recommended levels of service originally established by NHTSA as recommended follow-up from the Occupant Protection for Children Assessment conducted in 2005.
Public Education and Outreach Training: Provide educational and training programs to raise awareness of the benefits of using seatbelts and proper child restraints and of the penalties possible for not using them. The outreach is proved to the general public, hospitals, pre-schools and schools, law enforcement, and the child transport industry.

Car Seat Loaner Programs: The cost of obtaining child restraints can be a barrier to some families in using them. A Child Passenger Restraint Fund was established by legislation in the Pennsylvania Vehicle Code. According to this law, any fines associated with convicted violations of child passenger laws are collected in a fund that is used solely to purchase child restraint seats or child booster seats for loaner programs to distribute to qualified families. The Child Passenger Safety Project conducts outreach to establish new Loaner Programs based on population and poverty-level data. The project maintains a Loan Program Directory and distributes it to hospitals and the Injury Prevention Coordinators from the Department of Health. The directory is publicly available on the project's website.

The fines monies and supplemental Motor License Funds used for purchasing child restraints or child booster seats are counted towards the Maintenance of Effort (MOE) requirement for 23 U.S.C. 405(b) occupant protection funds.

Metric: Conduct 10 NHTSA Child Passenger Safety Technician Certification Training Courses, certify 100 new technicians.

Metric: Conduct 36 renewal and refresher courses for technicians.

Metric: Conduct Hospital Educational Trainings: CME/CMU – 30 courses, 300 participants; non-CME – 30 courses, 300 participants.

Metric: Conduct 55 programs for school staff, caregivers, and school transportation providers

Project Budget: \$945,000 Federal; \$455,000 State

Indirect: TBD

MOE: \$455,000 (405b)

Match: \$455,000

POLICE TRAFFIC SERVICES

Speeding and Aggressive Driving

Problem Identification and Analysis

Aggressive driving is a problem that all motorists witness on the roadways and may participate in without realizing their actions are aggressive. Aggressive driving behavior includes speeding, tailgating, red light running, frequent lane changes, failing to yield to the right-of-way, and passing improperly. On average, between 2012 and 2016, 12 percent of all fatalities and nine percent of all suspected serious injuries were a result of aggressive driving. During this same timeframe, 44 percent of all fatalities and 26 percent of suspected serious injuries were a result of speeding related crashes. In a crash that is deemed aggressive, speed is typically the most common contributing factor.

It is anticipated that the extra enforcement coupled with intensive media coverage will lead to greater public awareness, more responsible driving practices, and a lasting change in motorist behavior. Law enforcement agencies in Pennsylvania are provided overtime enforcement funding to implement proven and cost-effective traffic safety enforcement strategies.

Speeding and aggressive driving enforcement also is provided in specific problem areas. The Pennsylvania Aggressive Driving Enforcement and Education Project, (PA ADEEP) selects the top law enforcement agencies (LEA), who cover the most problematic aggressive driving and speeding crash/injury jurisdictions. Once a jurisdiction is selected, a .pdf file containing aggressive driving and speeding crash data is given to the applicable police department upon request. The police use this information for operational planning purposes.

Annual Targets

The 5-year average targets proposed in this section for 2017 and 2018 are based on the linear trend line over the period from 2012 to 2016 and shows an achievable 14.5 percent decrease in speed-related fatalities from the baseline of 566 in 2011-2015 to the 2014-2018 target of 484. The 5-year rolling average of speed-related suspected serious injuries and crashes is trending upwards. As the trendline for speed-related suspected serious injuries is decreasing, the trendline will still be used to set the targets for 2014-2018. As the trendline for speed-related crashes is increasing, the 5-year average targets for 2013-2017 and for 2014-2018 were determined by halving the slope of the trendline from 2012-2016 forward.

Figure 4.15 Speed-Related Fatalities
2012-2018

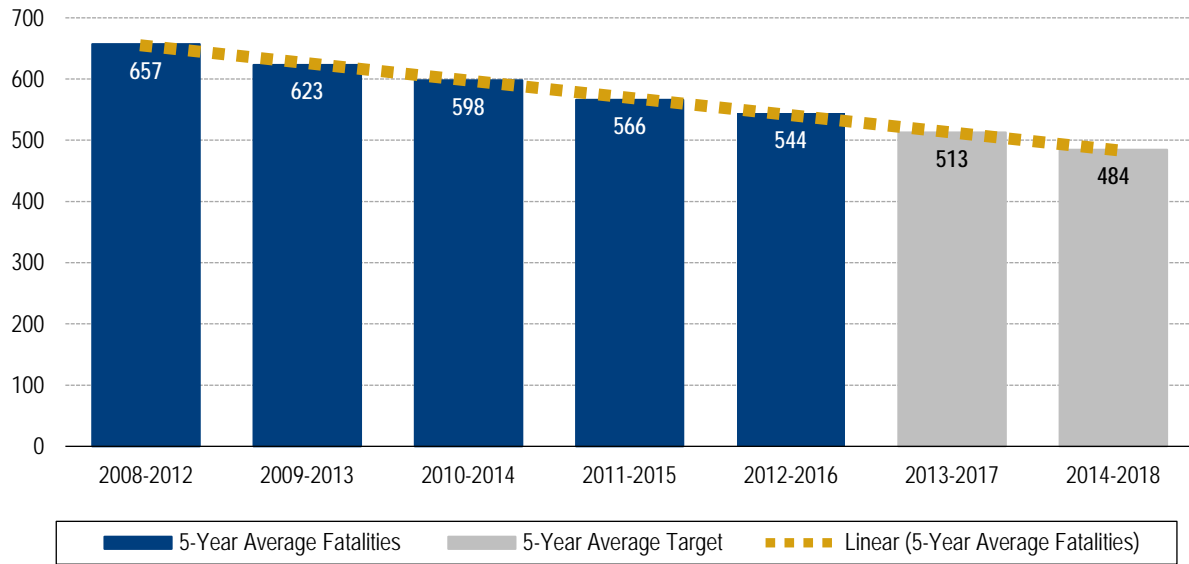


Figure 4.16 Speed-Related Suspected Serious Injuries
2012-2018

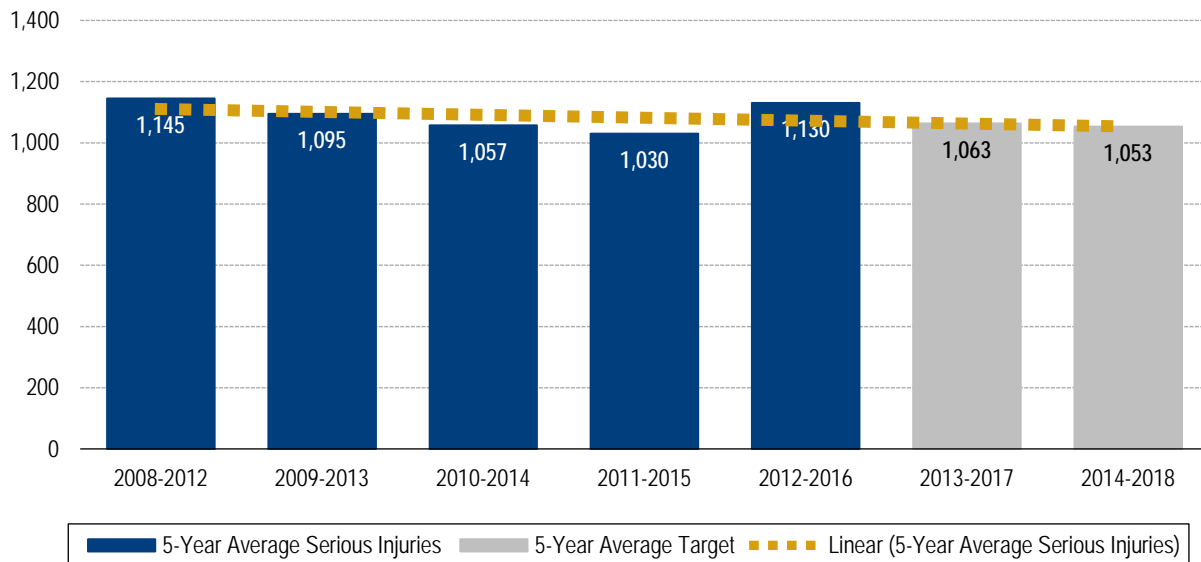
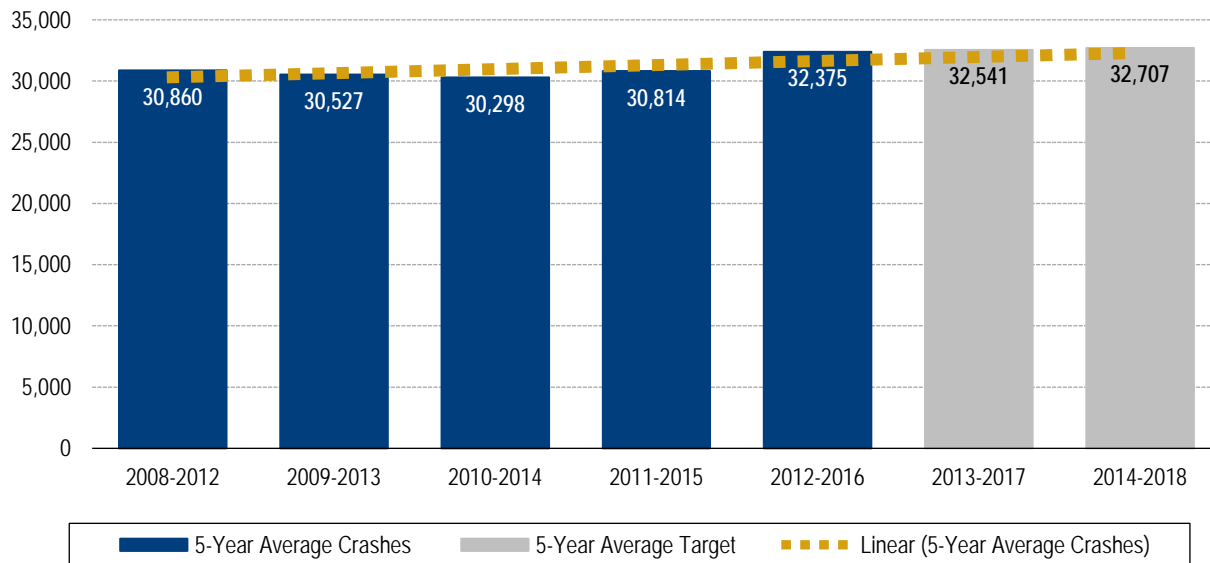


Figure 4.17 Speed-Related Crashes
2012-2018



Distracted Driving

Problem Identification and Analysis

State crash data shows an 8.4 percent increase in distracted driving crashes and a 4.5 percent increase in distracted driving fatalities from 2015 to 2016. It is believed that the actual number of distracted driving crashes is much higher, but many go unreported because the cause is not apparent to the investigating officer. Cell phone usage while driving is a major contributing factor in distracted driving crashes since brain activity needed to focus on the road is dangerously compromised. Besides texting and cell phone use, other factors such as drowsy driving, eating, drinking, talking to passengers, grooming, reading a navigation system or map, watching a video, and adjusting a radio/MP3/CD player also contribute to driver distraction. According to the NHTSA Teen Distracted Driver Data (2016) fact sheet, in 2015, about 9 percent of distracted drivers involved in fatal crashes were teens 15 to 19 years old.

Annual Targets

The 2017 and 2018 5-year average targets for fatalities is based on the linear trend line over the period from 2012 to 2016. While the 5-year rolling average of distracted driving fatalities has a level trend, suspected serious injuries and crashes are trending upwards. The 2017 and 2018 targets for fatalities are based on maintaining the trend in light of recent annual increases. This would result in a target of 61 for both the 5-year average annual increases, resulting in a target of 61 for both the 5-year averages for 2017 and 2018. As the trendline for distracted driver suspected serious injuries and crashes is increasing, the 5-year average targets for 2013-2017 and for 2014-2018 were determined by halving the slope of the trendline from 2012-2016 forward.

Figure 4.18 Distracted Driving Fatalities
2012-2018

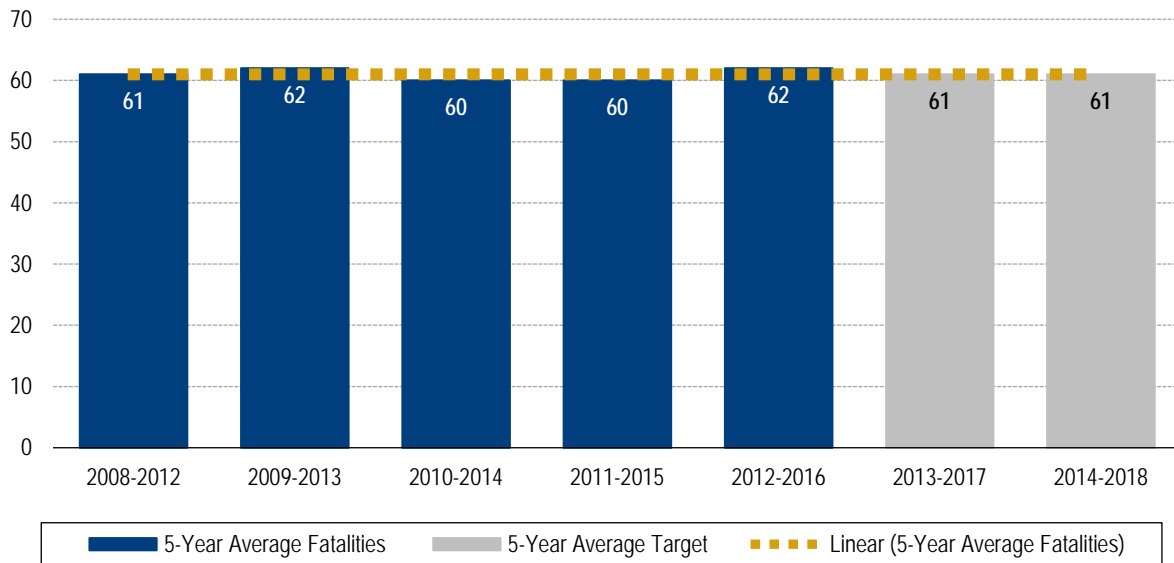


Figure 4.19 Distracted Driving Suspected Serious Injuries
2012-2018

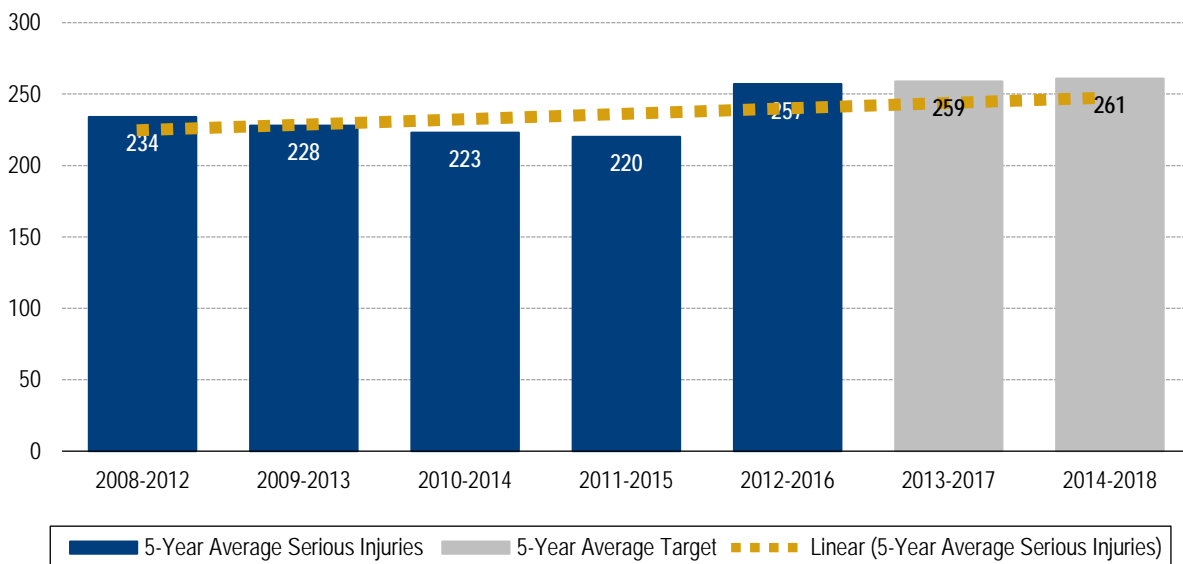
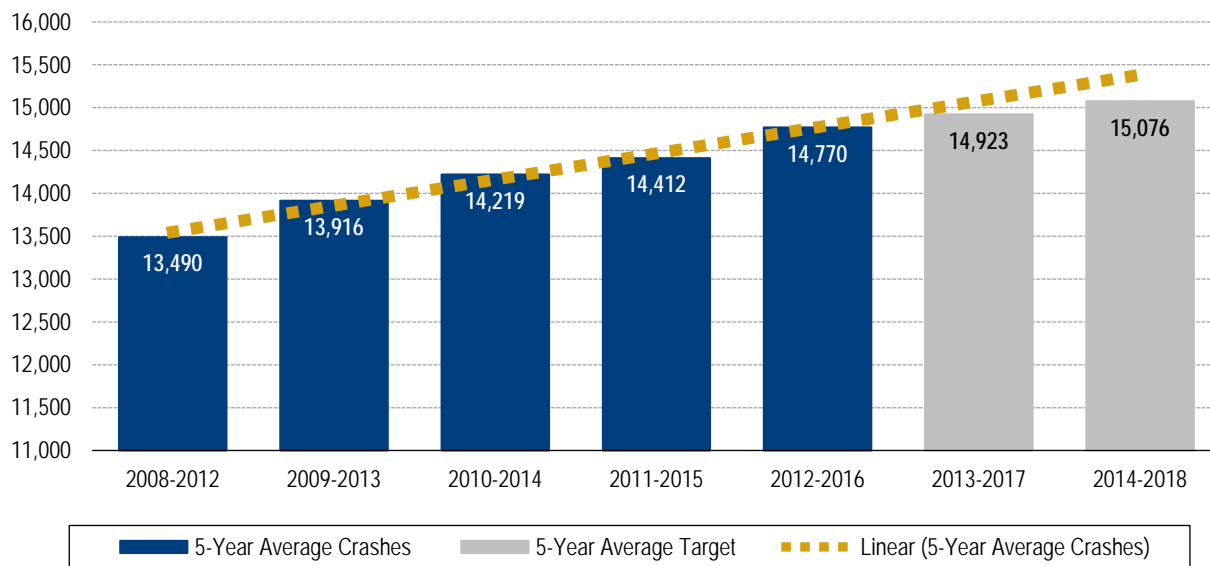


Figure 4.20 **Distracted Driving Crashes**
2012-2018



List of Countermeasures (Programs and Projects)

1. High-Visibility Traffic Law Enforcement

The basic behavioral strategy to address traffic law violations is high-visibility enforcement. Using the same principles as high-visibility impaired driving or occupant protection enforcement programs, locations for enforcement are directed towards high-crash or high-violation geographical areas.

Data-driven enforcement planning has been proven to reduce traffic crashes. Enforcement methods are dependent upon the focus of the campaign. Strategies to target speeding and other aggressive driving violations may vary from those to reduce distracted driving.

Please see the FFY 2018 Pennsylvania High-Visibility Enforcement Campaign Schedule on page 66. Projected participating municipal police departments will be determined at a later time.

Evidence-Based Traffic Safety Enforcement Program

Coordination for the events is done by the six Highway Safety Regions during their bimonthly planning meetings. At these meetings, team members will follow up on completed mobilizations and use the results to adjust the coordination of the next effort. The data used to plan enforcement includes examination of high aggressive driving, speeding, and distracted driving crash, injury, and fatality locations, crashes by time of day, type of vehicle, and age/ sex of drivers. In addition to the bimonthly meetings, special aggressive-driving subcommittee meetings will be conducted regionally prior to HVE campaigns to incorporate local data into jurisdiction selection and coordinate efforts among neighboring police departments.

Evidence of Effectiveness: CTW, Chapter 3: Sections 2.2, 2.3, 4.1

Project Number: PT-2018-01-00-00 Federal

Project Title: Pennsylvania State Police – Police Traffic Services

Allocation Methodology: The PennDOT State Highway Safety Office supplies the state police with aggressive driving crash data in support of a data-driven approach to the high-visibility enforcement program. As such, crash data for the previous five years is queried to identify aggressive driving and speeding-related crashes which resulted in an injury or fatality. By removing crashes reported by local police, the data is organized by reporting state police troop and station. Suggested grant funding amounts are proportionally supplied to the troop and station based on their percentage of the crashes happening in their jurisdiction.

Project Description: The Pennsylvania State Police (PSP) implement proven, widely accepted, cost-effective traffic safety improvement strategies to address common traffic law violations and other criminal driving behavior. The following tasks will be implemented by PSP in FFY 2018 under this section:

Aggressive Driving Enforcement and Education

- PSP will conduct sustained aggressive driving enforcement during four quarterly waves encompassing the entire fiscal year. Troop or Area Commanders will utilize historical crash data, and evaluations of previous enforcement campaigns to determine when and where to most effectively schedule the overtime enforcement initiatives.
- PSP personnel will work with and support participating municipal police departments during periodic campaigns.

Special Traffic Enforcement Program (STEP):

STEP is a State Police program designed to increase traffic safety and reduce the number of crashes through innovative traffic enforcement operations. Enforcement and media campaigns will be conducted during seven major holiday travel periods, including: New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. Statistics gathered during each wave will be compiled and reported statewide via media reports.

Metric: Participation from all 16 Pennsylvania State Police Troops in periodic and ongoing enforcement campaigns, providing support to participating municipal police departments.

Metric: Perform over 10,000 hours of STEP overtime enforcement.

Project Budget: \$2,050,000

Indirect: TBD

MOE: \$0

Match: \$1,200,000

Project Number: PT-2018-02-00-00 Federal

Project Title: Municipal Aggressive Driving Enforcement and Education Program

Allocation Methodology: As part of the data-driven approach to reducing aggressive driving and speeding-related crashes, an allocation method is created to efficiently and effectively distribute grant funding to the municipal police departments. Crash data for the previous five years is queried to identify aggressive driving and speeding-related crashes which resulted in an injury or fatality. By removing crashes reported by the state police, the data is organized by reporting local police agency. A percentage is then calculated for each of the more than 1,200 local police departments based on their proportion of aggressive driving and speeding-related crashes in the state. The nearly 230 local police agencies identified are assigned a grant funding amount based on their percentage of the crash problem. Grant amounts are then slightly adjusted after considering other factors such as past grantee performance or availability of manpower. Previously non-participating police agencies with a large percentage of crashes are contacted by the law enforcement liaisons and encouraged to participate in the program. Some of the reasons for non-participation range from availability of manpower to lack of local government support.

Project Description: Municipal police participation in aggressive driving enforcement operations will be coordinated, supported, and administrated through a statewide project offered by PennDOT. Enforcement subgrants will utilize an allocation formula based on aggressive driving-related data. Eligible governmental units are identified based on police jurisdictional coverage of high-crash areas and other data.

This project will also provide Law Enforcement Liaison support services to provide training and technical assistance to law enforcement agencies, assist in the selection of enforcement areas and municipal police departments, coordinate multi-jurisdictional enforcement efforts, monitor the performance of police during enforcement campaigns, and prepare reports as necessary.

The Aggressive Driving Enforcement and Education campaign will have one wave with a distracted driving theme. Drivers sometimes unknowingly commit aggressive driving actions while distracted. The officers doing the enforcement will be looking for distracted drivers along with aggressive drivers.

Metric: Mobilize 230 local police departments to provide enforcement in collaboration with the PSP.

Metric: Conduct one enforcement campaign with a distracted driving theme during FFY 2018.

Project Budget: \$2,200,000 (HVE Enforcement - \$1,834,500; LEL Support - \$365,500)

Indirect: TBD

MOE: \$0

Match: \$700,000

Project Number: PT-2018-04-00-00/M5HVE-2018-02-00-00 Federal

Project Title: Police Traffic Services Program

Project Description: PennDOT will offer enforcement grants for FFY 2018 that will fund municipal police participation in impaired driving, occupant protection, and aggressive driving enforcement countermeasures in a single agreement. Funding distribution utilizes an allocation formula based on crash data. Eligible

governmental units are identified by the Pennsylvania Highway Safety Office based on police jurisdictional coverage of high-crash areas. Currently the City of Philadelphia, the City of Pittsburgh, Bucks County, and Chester County are the only Police Traffic Service grant applicants. We plan to coordinate the Police Traffic Service program with all four agencies again in FFY 2018.

Metric: Provide a Police Traffic Service Program opportunity to four municipal police jurisdictions in FFY 2018.

Project Budget: \$1,000,000 (\$560,000 – \$402; \$440,000 – \$405d)

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: PT-2018-01-00-00 State

Project Title: Paid Media

Project Description: PennDOT Central Press Office will use state funds to conduct a media campaign on distracted driving in April. The campaign will feature on-line advertising, radio advertising, and social media. Teen drivers will be the primary target demographic. Distracted driving messages will also be incorporated into earned media during April's Aggressive Driving Enforcement and Education wave.

Metric: Coordinate one paid and earned media campaign during Distracted Driving Month (April). The campaign will incorporate resources from Distraction.gov.

Project Budget: \$150,000

Indirect: TBD

MOE: \$0

Match: \$150,000

2. Diversion and Plea Agreement Restrictions; Traffic Violator School

Traffic Violator Schools are sometimes offered for drivers who have accumulated a specific number of demerit points on their driver's licenses to reduce their punishment. Traffic offenses are often dismissed or removed from their driving record upon completion of the school. According to a review of over 30 group meeting programs, including Traffic Violator School, these group-meeting programs reduced subsequent crashes by 5% and violations by 8%.

Evidence of Effectiveness: CTW, Chapter 3: Sections 3.2

Project Number: DE-2018-01-00-00 Federal

Project Title: Implementation of a Driver Improvement School

Project Description: Upon accumulating six points on a driving record for moving violations, Pennsylvania drivers are required to attend a Special Points Examination at a PennDOT Driver License Center. If drivers accumulate six points for a second time they are required to attend Departmental Hearing. The Driver Safety Examiner may recommend one or more of the following actions as an outcome of the hearing, the person be required to attend a driver improvement school, the person undergo an examination as provided for in section 1508 (relating to examination of applicant for driver's license), or the person's driver's license be suspended for a period not exceeding 15 days. Currently, the department does not have the option of recommending the action of the attendance to a driver improvement school as one does not currently exist in Pennsylvania. This project would establish a Driver Improvement School program in Pennsylvania. Approximately 30,000 drivers are required to attend a Special Points Examination each year and 5,000 more drivers are required to attend a Departmental Hearing. A study of the Driver Improvement School program in the state of Massachusetts revealed an 80% decrease in the number of minor traffic violations amongst drivers who completed the school. Similar decreases were also found in major traffic violations and surchargeable violations.

Metric: Develop a Driver Improvement School

Project Budget: \$110,000

Indirect: TBD

MOE: \$0

Match: \$0

MATURE DRIVERS

Problem Identification and Analysis

Pennsylvania has just over 1.9 million licensed drivers aged 65 and older who make up 21.5 percent of the total licensed driving population. Citizens in this age range constitute the fastest growing segment of the population. Pennsylvania State Data Center statistics indicate that the number of residents 65 and older will continue to increase almost 15 percent between 2015 and 2020.

Fatalities in crashes that involved at least 1 mature driver totaled 267 in 2016. In other words, a driver over the age of 65 was involved in crashes accounting for approximately 22.5 percent of all traffic fatalities in Pennsylvania. These numbers do not determine fault of driver, but due to the human bodies increased fragility as we age, 158 drivers over the age of 65 died in 2016, or 59 percent of the total 267 mature driver related fatalities.

Annual Targets

Mature driver fatalities have decreased annually since 2014, while the number of crashes and suspected serious injuries involving a mature driver have been increasing. The 5-year rolling average of mature driver fatalities, suspected serious injuries and crashes is trending upwards. As the trendline for all three categories is increasing, the 5-year average targets for 2013-2017 and for 2014-2018 were determined by halving the slope of the trendline from 2012-2016 forward.

Figure 4.21 Fatalities in Crashes Involving a Mature Driver 2012-2018

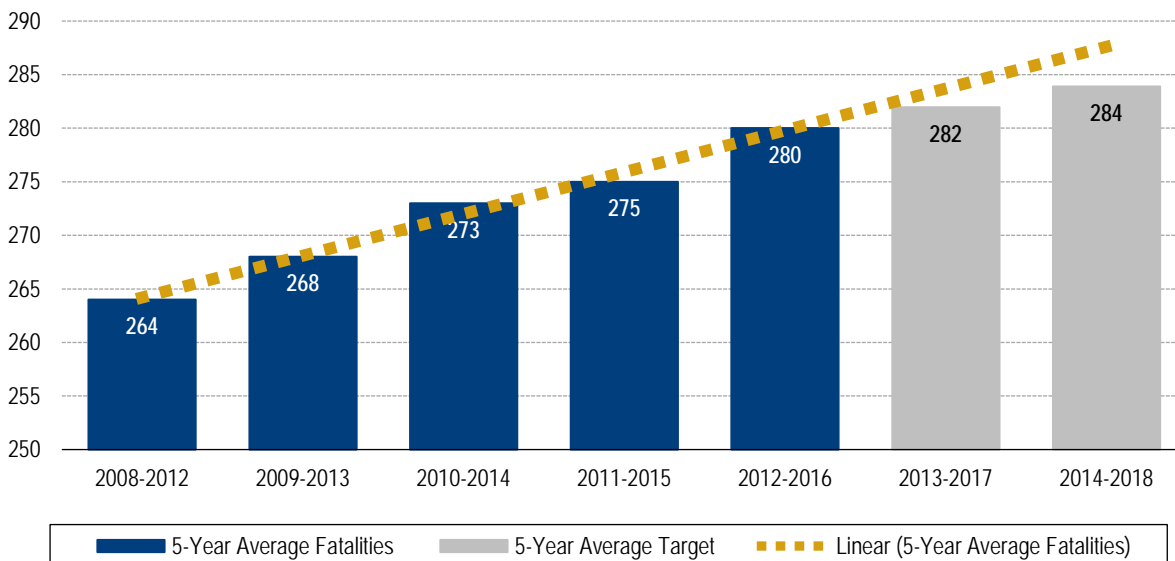


Figure 4.22 Suspected Serious Injuries in Crashes Involving a Mature Driver 2012-2018

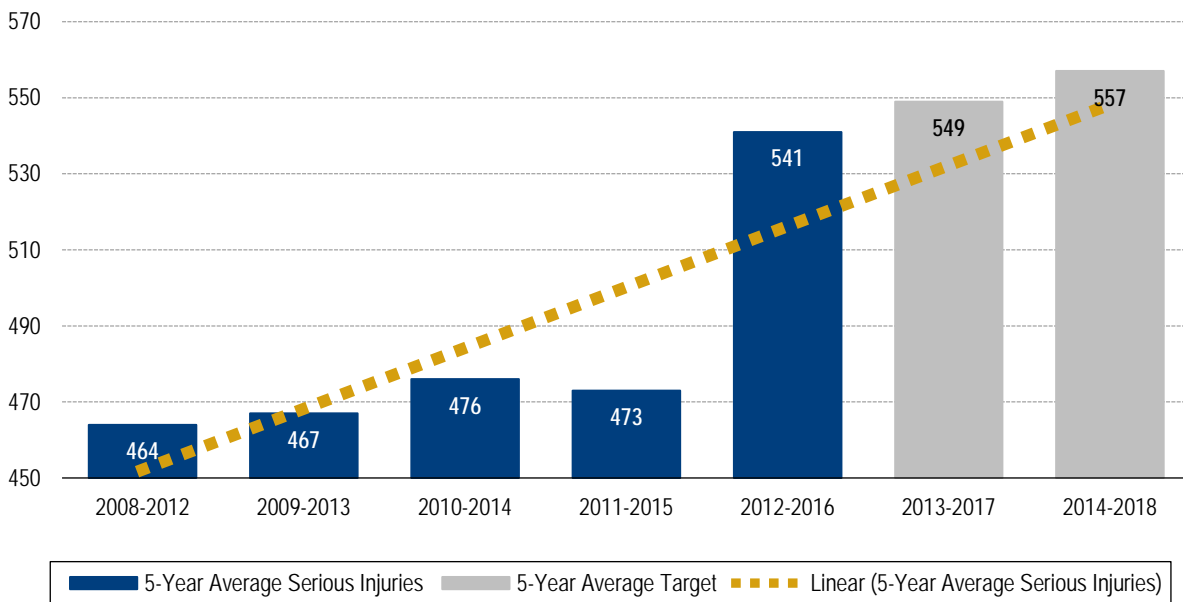
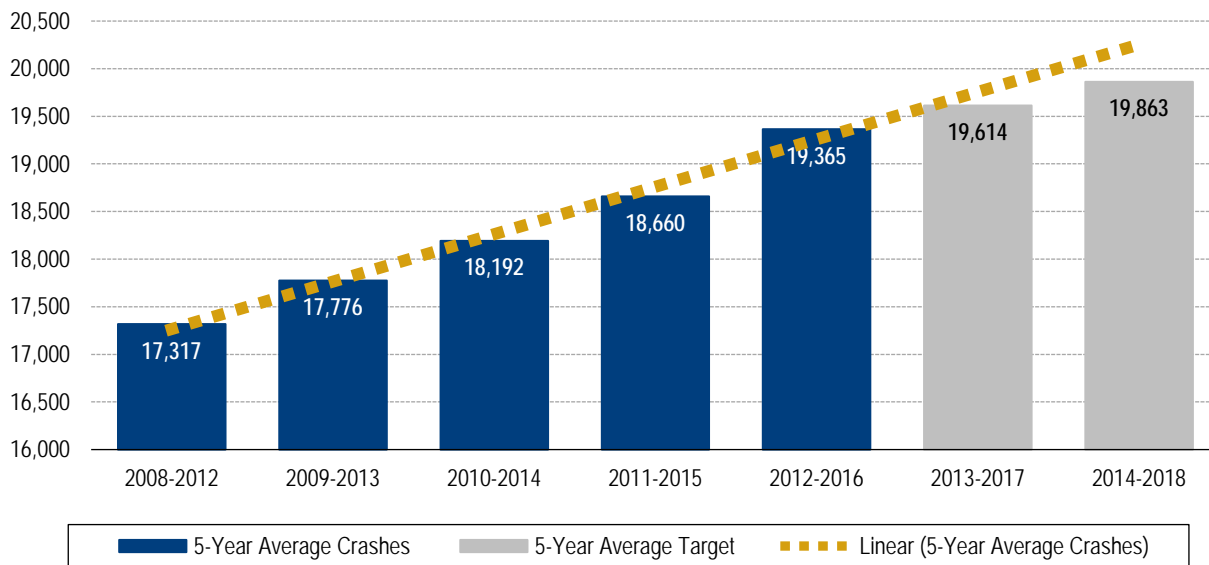


Figure 4.23 Crashes Involving a Mature Driver 2012-2018



List of Countermeasures

1. Mature Driver Education and Outreach

Formal courses are specifically designed to meet the standards of the Department of Transportation for drivers 55 years of age or older. There are four organizations that offer the PennDOT-approved Basic and Refresher Mature Driver Improvement Courses at various locations throughout the Commonwealth of Pennsylvania and on-line. These approved courses address the specific needs of the mature driver by helping them understand how aging affects driving abilities and providing insight about driving on today's roadways. There are no written or practical driving tests. The course fees are moderate, but vary with each organization.

Under Pennsylvania law (Section 1799.2 of the Pennsylvania Vehicle Code), drivers 55 and older are eligible to receive a five percent discount on their vehicle insurance by completing the Basic Mature Driver Improvement Course. In order to maintain the discount, individuals would have to take the Refresher Mature Driver Improvement Course every 3 years. Individuals should check with their insurance carrier for specifics of their program.

The following organizations offer PennDOT-approved Mature Driving Courses:

- AAA (check local offices for availability; <http://www.aaa.com>);
- AARP (888-227-7669; <http://www.aarp.org>);
- Seniors for Safe Driving (800-559-4880; <http://www.sfsd-pa.com>); and
- Safe2Drive (800-763-1297; <https://www.safe2drive.com>)

PennDOT will continue to follow-up on the efforts started in 2016 under the Mature Driver Safety Project to better adapt communication efforts to the needs of the mature driver community. Focus groups were conducted during the summer of 2016 soliciting input on areas such as: the type and frequency of transportation used in a typical week; if our mature drivers have thought about what they would do if they could no longer safely operate a vehicle; if they have done any planning for future mobility needs; feelings towards taking driver training through the Department's Mature Driver Safety Program or other training opportunities; what types of safety messages would this segment of drivers want to hear and in which types mediums should the messages be communicated.

This information was collected during a series of four focus groups throughout Pennsylvania representing the various geographic settings throughout the state. This information was collected and compared with a brief analysis of crash commonalities within the mature driver population in an effort to revise and develop materials geared toward the mature driver population, their families and friends, and the health care community. Information has subsequently been made available for mature drivers to allow them to make the best possible choices about their own driving.

Evidence of Effectiveness: CTW, Chapter 7: Section 1.1

2. Licensing

Licensing agencies in all states accept reevaluation referrals for drivers of any age. Historically, medical reporting by health care personnel has provided a highly effective mechanism for removing medically impaired drivers from our roads. In accordance with Section 1518(b) of the Pennsylvania Vehicle Code, all physicians and other persons authorized to diagnose or treat disorders and disabilities must report to PennDOT, in writing, every patient over 15 years of age, who has been diagnosed as having a condition that could impair his/her ability to drive safely.

PennDOT maintains a Medical Reporting Information Center on its Driver and Vehicle Services website (<http://dmv.pa.gov/Information-Centers/Medical-Reporting/Pages/MedicalReporting.aspx>). This website provides a variety of information on the medical reporting process in Pennsylvania.

PennDOT also coordinates a Medical Advisory Board (MAB) to make policy recommendations on what licensing actions are appropriate for people with specific medical conditions and to support PennDOT in evaluating people with medical conditions or functional limitations that may affect their ability to drive.

Additional details about the Medical Advisory Board may be found in Section 1517 of the Pennsylvania Vehicle Code.

For Drivers who wish to voluntarily turn in their licenses for medical reasons, PennDOT offers drivers a one-time free identification card. The normal fee is waived the first time an identification card is issued to a person turning in their license for medical reasons.

Evidence of Effectiveness: CTW, Chapter 7: Section 2.2, 2.4

Project Number: DL-2018-01-00-00 State

Project Title: Improving Mature Driver Safety

Project Description: Over the summer of 2016, PennDOT hosted a number of mature driver focus groups with individuals that were still actively driving and 65 years old and older. It was revealed by the participants that they do self-regulate their driving as studies suggest, specially limiting bad weather, nighttime and highway driving. They also made it very clear that they would rather have a discussion about their driving abilities (without stereotyping) with their doctor or family/friends before they receive a letter from PennDOT either questioning or recalling their driving ability. Participants also indicated that they rarely receive any information on law changes or information on driving safely as you get older. A number of the participants were also unaware that the Driver Improvement Program exists and that taking and passing one of these courses could help with a reduction on their driver's insurance.

The goal of this Mature Driver Safety initiative is to focus on educating mature drivers, the health care community as well as continuing to understand the needs of our mature driver as we continue to see the number of drivers 65 and over increase. The objectives of this project will include education of the healthcare community on the medical reporting requirements for all Pennsylvania drivers through a formalized training program, to educate and encourage mature drivers to take a course through the Mature Driver Improvement Program, which will provide mature drivers with updated information and provide driving tips for individuals as they age, and to reduce crashes and fatalities involving drivers who are 65

years old and older by working with a group of individuals whose interests are in mature driver safety and that will actively develop common communication strategies to meet this objective.

Metric: Develop a Mature Driver Safety Coalition.

Project Budget: \$200,000

Indirect: TBD

MOE: \$0

Match: \$0

3. Mature Driver Law Enforcement

In addition to enforcing traffic laws for motorists of all ages, law enforcement plays a vital role in mature driver safety by identifying mature drivers with potential driving impairments and providing information and education to the public.

NHTSA's Older Driver Law Enforcement Course is available through the International Association of Directors of Law Enforcement Standards and Training (IADLEST). PennDOT facilitates the implementation of this course in Pennsylvania to increase law enforcement awareness of mature driver issues. The training includes techniques for identifying drivers with potential impairments and referring them to PennDOT for further review. Trainings are scheduled based on identified need, the availability of training coordinators, and available funding.

Additionally, PennDOT and its grantees continue to provide training to law enforcement officers on the importance of reporting drivers to the PennDOT Medical Unit when the officer observes a driver that may be unsafe to drive due to a possible medical condition. The training program covers tips on identifying a driver that may have a medical condition, how to submit a report to PennDOT, and what happens to that report once it is submitted to the Department. PennDOT has also gained permission from the Training, Research and Education for Driving Safety (TREDS) organization to utilize their Driver Orientation Screening for Cognitive Impairment tool to aid officer in determining if someone is exhibiting cognitive symptoms and should be reported to PennDOT. Additional information about this tool can be found at: http://safety.fhwa.dot.gov/older_users/noteworthy/ch2.cfm.

Evidence of Effectiveness: CTW, Chapter 7: Section 3.1

MOTORCYCLE SAFETY

Problem Identification and Analysis

Motorcycles are becoming more common on the roads. From 2007 to 2016, Pennsylvania saw a 10.2 percent increase in motorcyclists and a 7 percent increase in registered motorcycles. Because of their size, motorcycles can be easily hidden in blind spots and are easily overlooked by other drivers. The majority of multivehicle crashes involving a motorcycle over the past four years have had a vehicle other than the motorcycle cited as the prime contributing factor in the crash. Therefore, it is important that drivers be aware of motorcycles sharing the road.

Pennsylvania's motorcycle helmet law was revised in 2003. Currently, motorcyclists in Pennsylvania who are 21 years of age or older with two years riding experience or who have successfully passed the State's free-of-charge Motorcycle Safety Program have the option to ride helmetless. In 2016, the number of students trained by the Motorcycle Safety Training Program decreased from 18,230 to 16,673. Efforts to increase attendance will be continued throughout the grant year through multiple media outlets and advisories.

Roughly 20 percent of all motorcycle operators killed in a crash in Pennsylvania were reported as suspected of drug and or alcohol impairment by law enforcement in 2016. Reducing motorcycle DUI by educating law enforcement on proper procedure is important in reducing crashes. Motorcycle fatalities totaled 192 in 2016, accounting for approximately 16 percent of all traffic fatalities in Pennsylvania.

Annual Targets

Motorcycle fatalities have fluctuated for the past several years, and were up slightly in 2016 after the previous 5-year low in 2013. Suspected serious injuries and crashes increased in 2016. The 5-year average targets proposed in this section for 2017 and 2018 are based on the linear trend line over the period from 2012 to 2016 and shows an achievable 8.9 percent decrease in fatalities from the baseline of 191 in 2011-2015 to the 2014-2018 target of 174. Similar downward trends have been seen for suspected serious injuries and crashes, so a 3 percent decrease in suspected serious injuries between 2011-2015 and 2014-2018 and a 7.8 percent decrease in crashes for the same periods are achievable.

Figure 4.24 Motorcyclist Fatalities
2012-2018

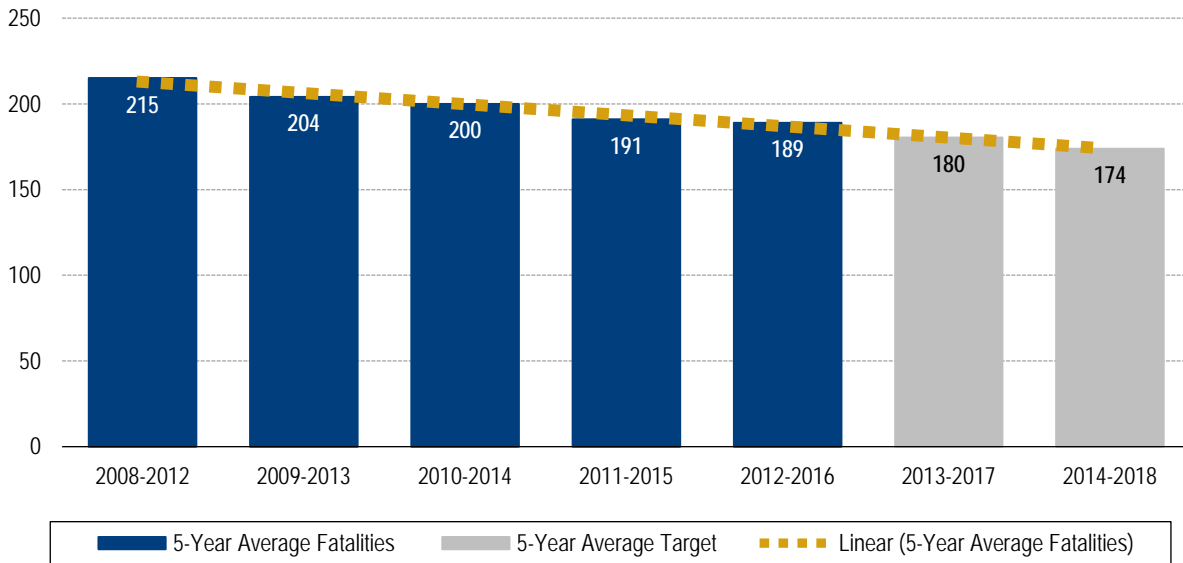


Figure 4.25 Motorcyclist Suspected Serious Injuries
2012-2018

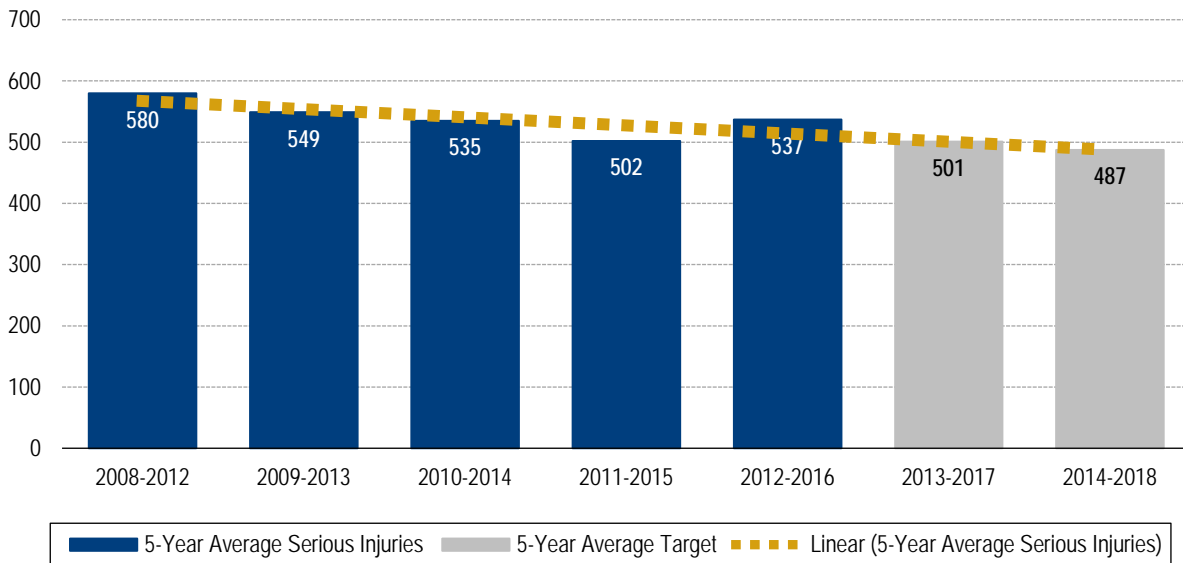
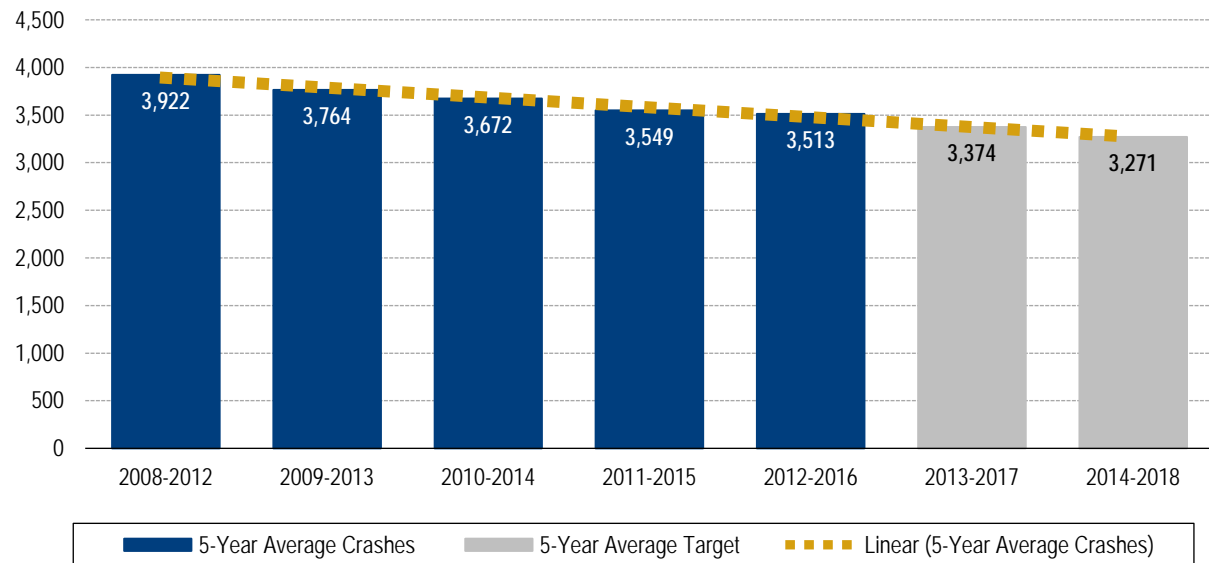


Figure 4.26 Motorcyclist Crashes
2012-2018



List of Countermeasures (Programs and Projects)

1. Motorcycle Rider Training

Motorcycle rider education and training is a vital strategy for ensuring both novice and experienced riders learn basic and advanced skills necessary to operate a motorcycle safely. Training should be made available on a timely basis to all who wish to take it.

The Pennsylvania Motorcycle Safety Program (MSP – <http://www.pamsp.com>) was established to teach riders of all skill levels the fundamentals needed to safely operate a motorcycle. The MSP was created from legislation in 1984 and began one year later. Now in its 32nd year of training, the MSP remains free to all Pennsylvania residents who hold a valid Class M license or motorcycle learner’s permit.

Evidence of Effectiveness: CTW, Chapter 5: Section 3.2

Project Number: M9MA-2018-01-00-00 State

Project Title: Pennsylvania Motorcycle Safety Program Trainings

Project Description: Pennsylvania offers 4 training courses free of charge at many sites across the state. The training provides new riders with skills needed to operate a motorcycle more safely and provides opportunity for more advanced riders to refresh and refine their skills. There are three levels of motorcycle training (Basic Rider Course, Basic Rider Course 2, and Advanced Rider Course) and a 3-Wheeled Basic Rider Course. In addition, there are abridged winter classroom programs for the Basic Rider Course and the Advanced Rider Course which allows riders to get a head start prior to completing a shortened version of the course in the spring. The advanced course was started with the help of Section 2010 funds in 2012 and is modeled after a military training course.



The Pennsylvania Motorcycle Safety Program (PAMSP) is the first motorcycle training program in North America to incorporate the use of the SKIDBIKE® into its training program. Through the use of “safety wings” the SKIDBIKE® allows the rider to focus on practicing the fine motor skills needed to ride a motorcycle rather than the need to keep the bike upright and balanced. Once a student learns those important skills, he/she will be able to move on to practicing with a regular two-wheel bike. Three SKIDBIKES® have been purchased for use in the west, central and eastern sections of Pennsylvania. These bikes are currently being evaluated and curriculum is being written to incorporate these bikes into beginner training. PennDOT expects to have a new course rolled out using the SKIDBIKE® during the 2017 riding season. In the meantime, the SKIDBIKE® is used at various motorcycle events throughout the state as part of PennDOT’s Live Free Ride Alive

motorcycle safety education program. At these events, individuals who are nervous about getting on a motorcycle for the first time or who may have been in a motorcycle crash and are nervous about getting back on a motorcycle, or just would like to try the bike out, are able to sit on the SKIDBIKE® and receive direction from a PAMSP instructor to learn what it feels like to balance a motorcycle, lean on a motorcycle, work the gears and begin to establish the fine motor skills necessary to operate a motorcycle, all while stationary. This also provides a non-rider with the opportunity to be better prepared and know what to expect if they decide to sign up for motorcycle training and ultimately obtain their motorcycle license.

Metric: Increase by 10 percent the overall number of students trained in all MSP training courses from 16,673 in 2016 to 20,053 in 2017.

Project Budget: \$3,700,000

Indirect: TBD

MOE: \$0

Match: \$3,700,000

2. Motorcycle Safety Communications and Outreach

Motorcycles are smaller vehicles and are often unseen by other motorists due to low conspicuity. Many states rely on communications and outreach campaigns to increase drivers’ awareness of motorcyclists. These campaigns often coincide with the summer riding season and include motorcyclist organization to promote peer-to-peer safety outreach. PennDOT supports motorcyclist awareness programs through its Motorcycle Safety Program.

Evidence of Effectiveness: CTW, Chapter 5: Section 4.2

Project Number: M9MA-2018-01-00-00 Federal

Project Title: Pennsylvania Share the Road Program

Project Description: Share the Road and Watch for Motorcycles is a public outreach program aimed at

raising awareness of motorcycles. Crashes involving motorcycles are often the result of the other drivers and it is believed the drivers often times do not see the motorcycle. By raising awareness and reminding drivers that motorcycles are on the road, some of these crashes may be avoided. Through the program, “Watch for Motorcycles” materials will be produced and distributed. Paid media with a safety message will be deployed during Motorcycle Safety month in May. PennDOT districts also will display motorcycle safety messages on fixed and variable message boards.

Metric: Distribute 25,000 lawn signs with the help of ABATE (Alliance of Bikers Aimed Toward Education).

Metric: Conduct one paid media campaign: Billboards running May through September in the markets covering the counties with the highest number of motorcycle crashes.

Project Budget: \$233,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M9MA-2018-01-00-00 State

Project Title: Live Free Ride Alive (LFRA) Program

Project Description: The LFRA program is designed to educate riders on the importance of being properly licensed, riding sober, use of all protective gear, and safe riding experiences. The grassroots effort of the program is PennDOT’s Live Free Ride Alive booth, which will visit six motorcycle events over the summer months to talk to riders about the importance of getting licensed, getting trained, and not speeding or riding impaired. The booth offers riders a chance to register for training courses and view a video presentation on the various training courses offered through the Department’s Motorcycle Safety Training Program. Additionally, LFRA posters, stickers, and other various materials will be distributed to dealerships, driver license centers, welcome centers and various tourism locations across the state.

The LFRA program also includes an extensive paid media component. This includes billboards and online promotion of the LFRA Facebook page. The LFRA Facebook page then promotes these same safety messages and encourages motorcyclists to learn more about riding their motorcycle safely at www.livefreeridealive.com, the program’s interactive website.

Metric: Attend six motorcycle rallies in calendar year 2017.

Metric: Increase “likes”, by 10 percent, to the LFRA Facebook page from 33,609 in April 2016 to 36,969 in April 2017.

Project Budget: \$500,000 State

Indirect: TBD

MOE: \$0

Match: \$500,000

YOUNG AND INEXPERIENCED DRIVERS

Problem Identification and Analysis

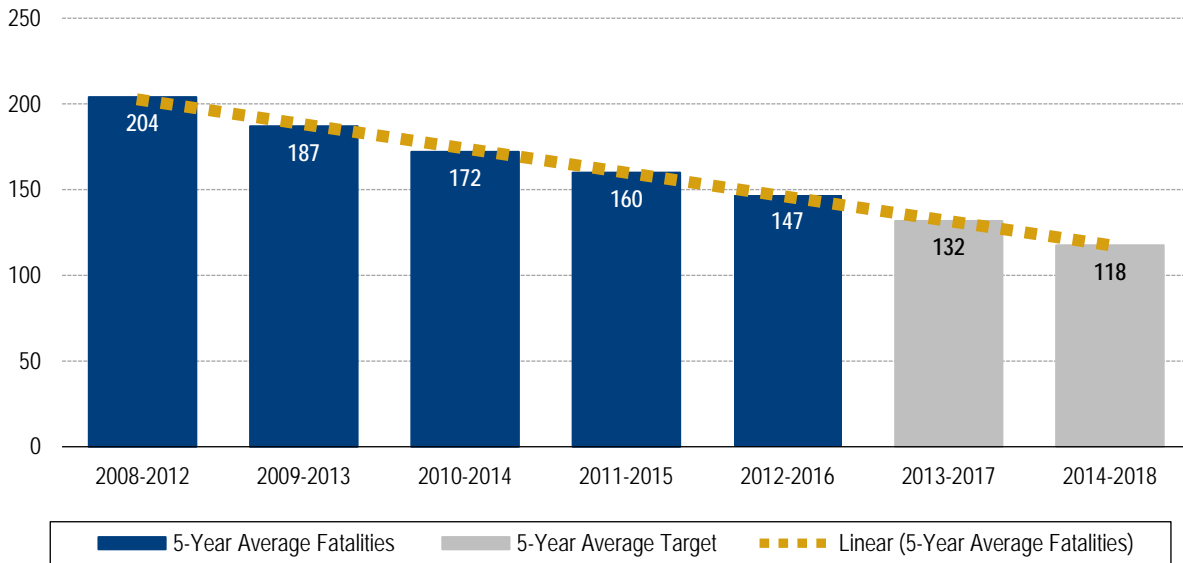
In 2016, 1,188 persons died on Pennsylvania roadways. Of the fatal crashes, 135 involved drivers and passengers aged 20 years or less. Young drivers are overrepresented in 2016 multivehicle crashes when comparing age groups, as 62.9 percent of drivers aged 16 to 21 were involved in crashes whereas the statewide average of all drivers was only 55.9 percent. Of particular concern is the involvement of drinking drivers under the age of 21. Twelve percent of the driver deaths in the 16 to 20 age group were drinking drivers. This number is up from 16 percent in 2015, so the area continues to be of concern to the Commonwealth.

Downward trends in young driver statistics can partially be attributed to a law passed in December 1999 that required a mandatory 6-month waiting period between obtaining a Learner's Permit and testing for licensure. It also reflected the limited time 16-year-old drivers used the roads and the more controlled situations in which they are permitted to drive during the permit process. Driver inexperience and less cautious driving often are attributed characteristics given to the reason all young driver ages have higher crash rates.

Annual Targets

Success in reducing young driver crashes since 2010 is driving a downward trend in fatalities and suspected serious injuries. The 5-year average targets proposed in this section for 2017 and 2018 are based on the linear trend line over the period from 2012 to 2016 and shows an achievable 26.2 percent decrease in fatalities from the baseline of 160 in 2011-2015 to the 2014-2018 target of 118. Similar downward trends have been seen for suspected serious injuries and crashes, so 20.5 percent decrease in suspected serious injuries between 2011-2015 and 2014-2018 and a 11.1 percent decrease in crashes for the same periods are achievable.

**Figure 4.27 Fatalities in Crashes Involving Drivers Age 20 or Younger
2012-2018**



**Figure 4.28 Suspected Serious Injuries in Crashes Involving Drivers Age 20 or Younger
2012-2018**

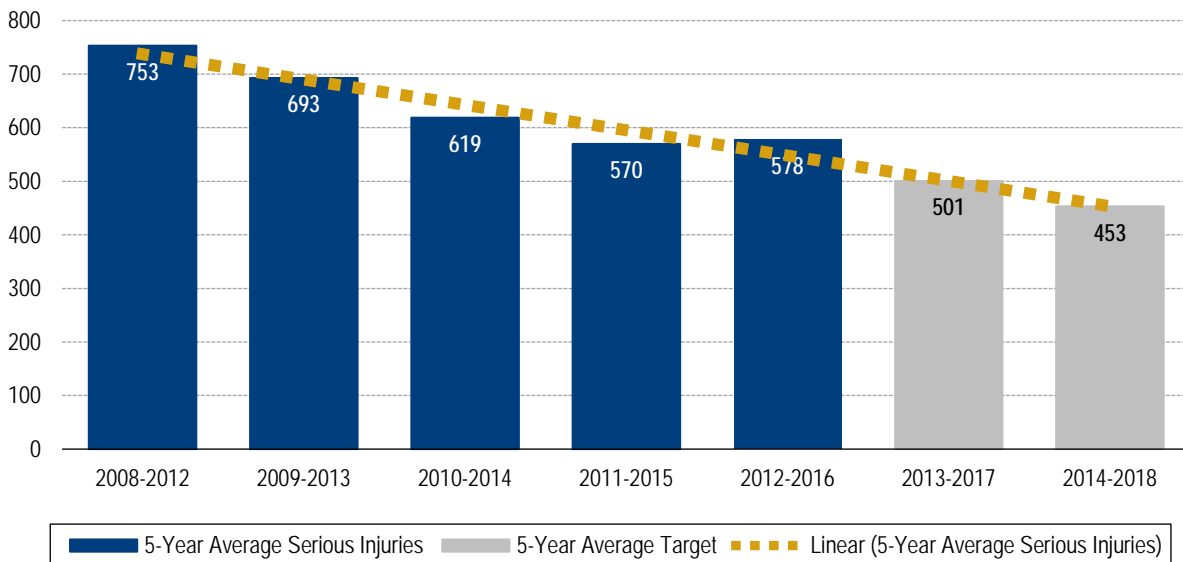
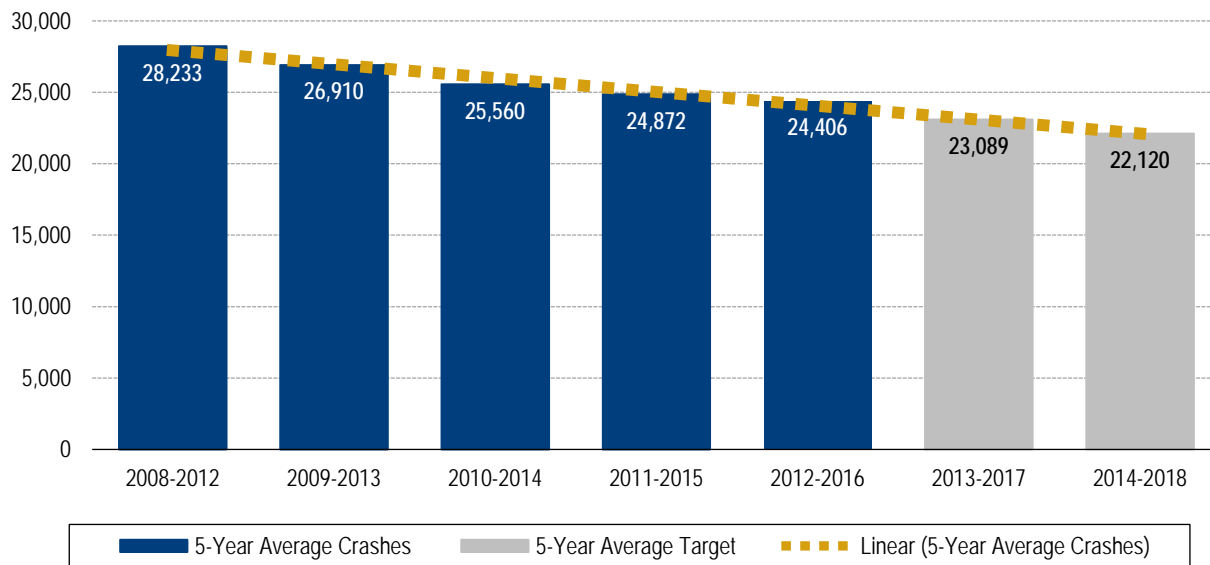


Figure 4.29 Crashes Involving Drivers Age 20 or Younger
2012-2018



List of Countermeasures (Programs and Projects)

Young Driver Education

As evaluations of formal driver education programs to date have found that driver education does not decrease crash rates, new strategies to promote safe driving habits by younger drivers are being explored. Authorized under 23 U.S.C. 402(m), Teen Traffic Safety Programs are structured to implement statewide efforts to improve traffic safety for teen drivers. It is anticipated that using peer-to-peer education and prevention strategies will prove effective over time to address emerging trends.

Additional strategies for younger driver traffic safety will continue to be evaluated for potential effectiveness in reducing crashes involving young drivers.

Evidence of Effectiveness: CTW, Chapter 6: Sections 2.1, 2.2

Project Number: TSP-2018-01-00-00 Federal

Project Title: Teen Driver Safety Program

Project Description: During FFY 2016 and FFY 2017, grant funds were made available for a dedicated Teen Driver Safety Program. The requirements for the funds included promoting partnerships and coordination between existing programs and stakeholders, providing “mini-grant” opportunities to high schools, school groups, and community groups for peer-to-peer teen driver education and prevention strategies, and performing educational outreach to parents/caregivers on all aspects of the graduated driver licensing law. PennDOT plans to provide this grant opportunity again in FFY 2018. Specific activities to be conducted include parent/caregiver workshops, mini-grants for peer-to-peer programs and development of youth traffic safety summits.

Impact Teen Drivers is a nationwide educational program that confronts the dangers and consequences of reckless and distracted driving. This program has developed evidence-based curricula that can be adjusted for different professional fields and target audiences. The “What Do You Consider Lethal?” campaign is a component of Impact Teen Drivers. This is an easy to use program for teachers, safety educators, law enforcement, students and concerned citizens. The goal of this program is to reduce preventable deaths of young drivers. “What Do You Consider Lethal?” is high-energy and interactive while bringing the facts about reckless and distracted driving to teens using innovative videos, materials, and curriculum while encouraging teens to take the lead in peer-to-peer messaging.

Metric: Conduct 10 parent caregiver workshops

Metric: Conduct three Train the Trainer workshops on the “Impact Teen Driver” program

Metric: Facilitate at least 20 mini-grants and 150 Teen Traffic Safety Kits to school/community based peer-to-peer groups to focus on the implementation of “What Do You Consider Lethal?” program

Project Budget: \$225,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: TPS-2018-01-00-00 State

Project Title: Young Driver Intervention Initiative

Project Description: Drivers aged 16 through 20 who receive a moving violation will receive a personal letter from the Secretary of Transportation reminding them of the importance of obeying the law and the consequences of poor driving habits so early in their driving experience. A formal analysis will be conducted to determine if secondary infractions decrease within two years following the first infraction. It is anticipated that this analysis will be completed in year 2020.

Metric: Reduction of secondary infractions within two years of first infraction by 10 percent for drivers included in the initial two years of this project compared with drivers prior to project implementation.

Project Budget: \$16,000 State

Indirect: TBD

MOE: \$0

Match: \$16,000

PEDESTRIAN AND BICYCLE SAFETY

Pedestrians

Problem Identification and Analysis

Pedestrian safety is an emerging focus area of highway safety. The 5-year rolling average of pedestrian fatalities has remained stubbornly high over the past few years. Pedestrian fatalities make up a significant part of the overall roadway fatalities, accounting for almost 14.5 percent.

Annual Targets

Pedestrian fatalities, suspected serious injuries and crashes increased from 2015 to 2016. The 5-year rolling average of pedestrian fatalities and suspected serious injuries is trending upwards. As the trendline for these two categories is increasing, the 5-year average targets for 2013-2017 and for 2014-2018 were determined by halving the slope of the trendline from 2012-2016 forward. The 5-year average target for pedestrian crashes is based on the linear trend line over the period from 2012 to 2016, so a 3.6 percent decrease is achievable.

Figure 4.30 Pedestrian Fatalities
2012-2018

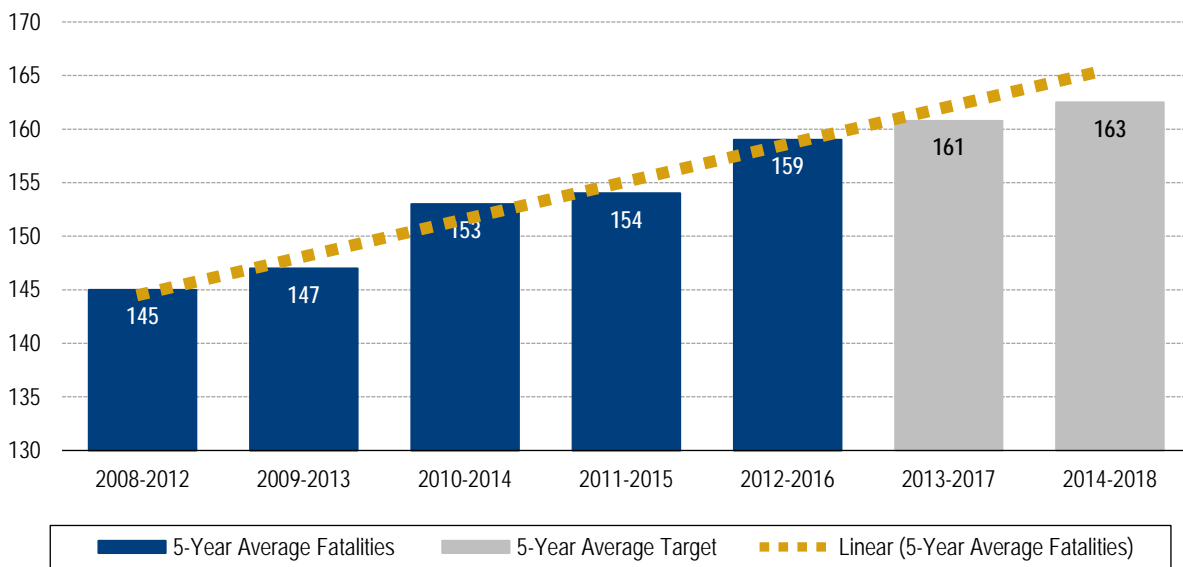


Figure 4.31 Pedestrian Suspected Serious Injuries
2012-2018

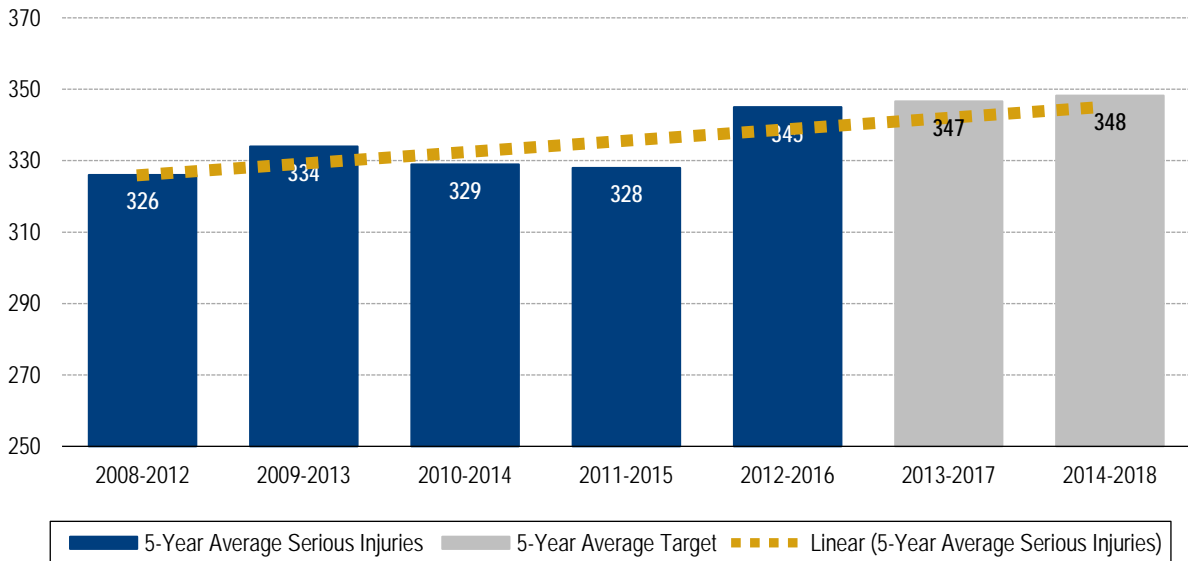
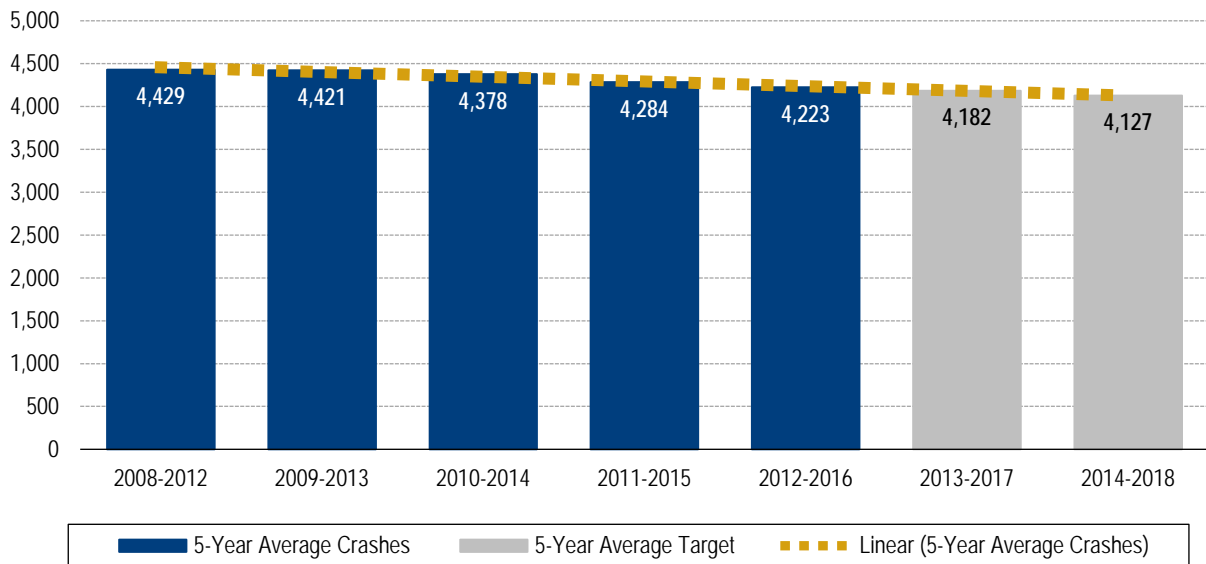


Figure 4.32 Pedestrian Crashes
2012-2018



Bicyclists

Problem Identification and Analysis

Bicycle riders may represent a small portion of the total crash picture in Pennsylvania but are not ignored by PennDOT. The emphasis is on ensuring that bicyclists understand the rules of the road and that they are predictable, consistent, and blend easily and safely with other roadway users. The attention begins with elementary school children, who are taught the basics of bicycling and the importance of wearing helmets, and continues with instructional publications and website information for teens and adults.

Despite recent downward trends in crashes and injuries, the 5-year average linear fatality trend has remained constant. PennDOT will continue to promote bicycle safety programs through a variety of avenues to stay ahead of this emerging issue.

Annual Targets

Bicycle fatalities remained the same from 2015 to 2016, but the 5-year average trend is increasing fatalities while the 5-year average for both suspected serious injuries crashes is decreasing. As the trendline for bicycle fatalities is increasing, the 5-year average targets for 2013-2017 and for 2014-2018 were determined by halving the slope of the trendline from 2012-2016 forward. The 5-year average targets proposed in this section for suspected serious injuries and crashes for 2017 and 2018 are based on the linear trend line over the period from 2012 to 2016, so a 5.2 percent decrease in suspected serious injuries between 2011-2015 and 2014-2018 and a 3.9 percent decrease in crashes for the same periods are achievable.

Figure 4.33 Bicyclist Fatalities
2012-2018

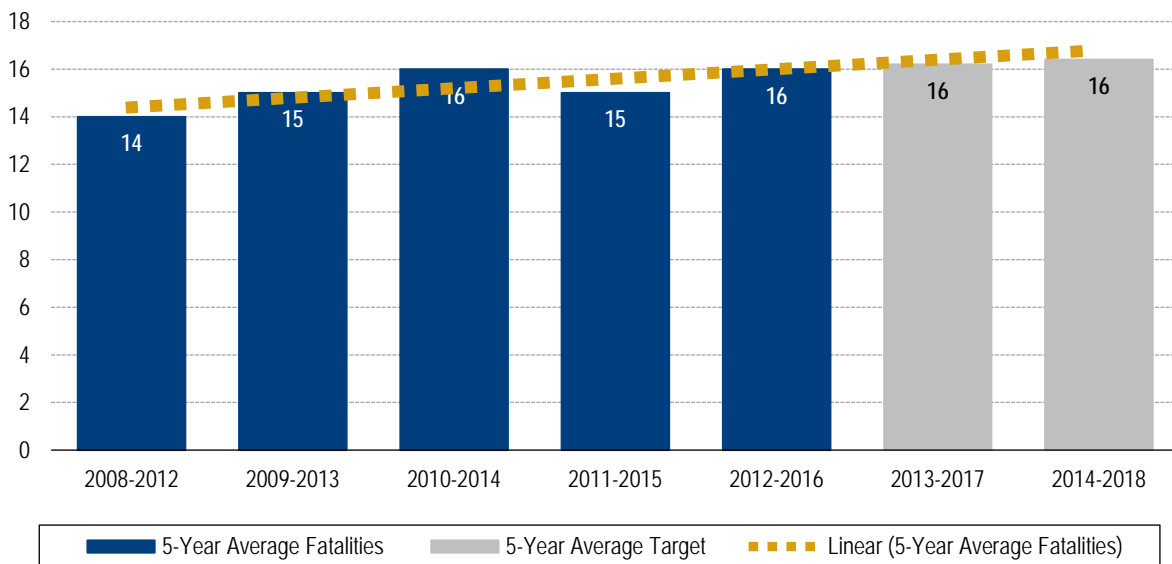


Figure 4.34 Bicyclist Suspected Serious Injuries
2012-2018

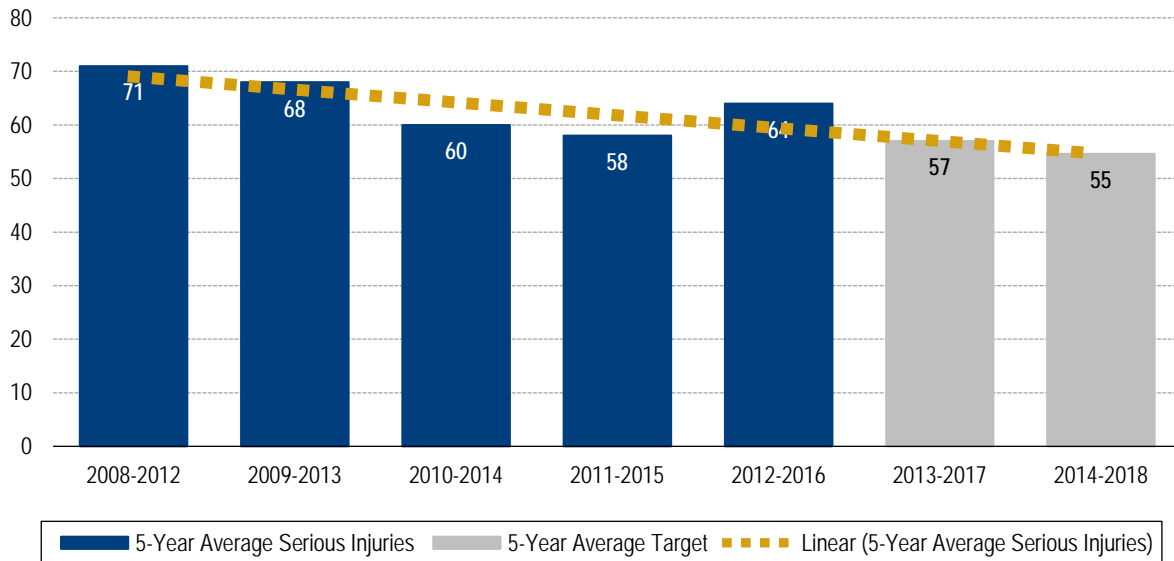
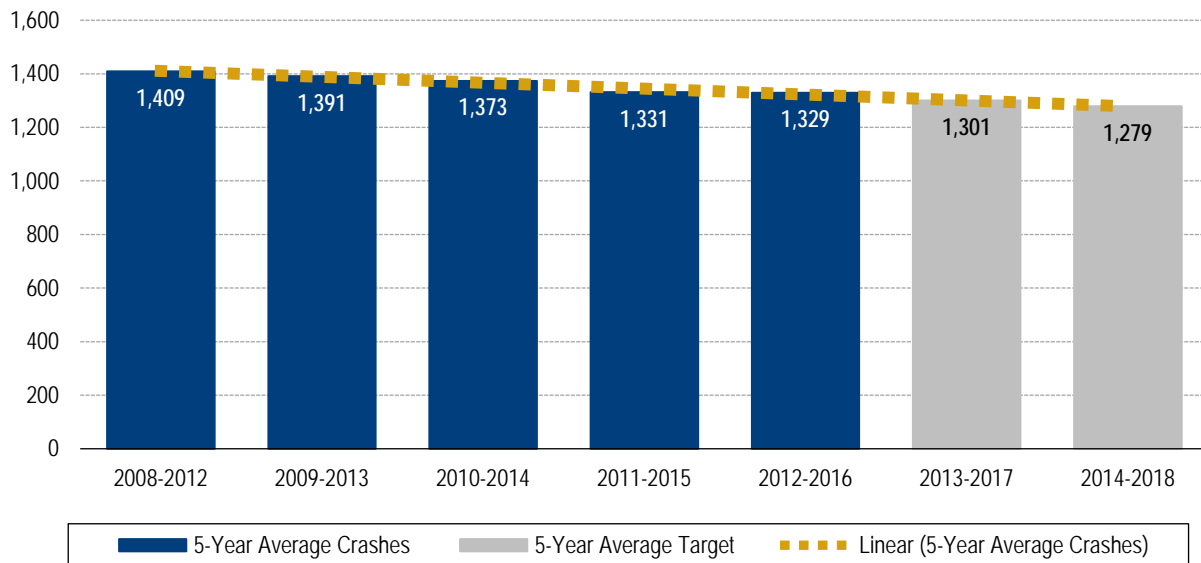


Figure 4.35 Bicyclist Crashes
2012-2018



List of Countermeasures (Programs and Projects)

All Pedestrians and Bicyclists

Countermeasures for pedestrian and bicycle safety are primarily aimed at improving behaviors of pedestrians, bicyclists, and drivers through education and enforcement measures. Targeted enforcement campaigns focusing on law violations and raising awareness are vital components of a comprehensive approach towards increasing safety. Training engineers and land use planners to incorporate these focus areas into their efforts ensures all transportation system users can travel safely. Countermeasures are tailored to urban and rural locations based on many factors specific to each location.

PennDOT supports a Safe Routes to School Program and maintains a variety of pedestrian and bicycle safety information on PennDOT's website under the Traffic Safety and Driver Topics page in the Safety section under the Travel in PA tab. Pedestrian and bicycle safety videos were developed for PennDOT's YouTube channel and are available to the public. Programs for school age children are administered through the Pennsylvania Child Passenger Safety Program and Community Traffic Safety Programs.

Based on the most recent calendar year of final FARS data (2014), Pennsylvania will qualify for Nonmotorized safety grant funds authorized under 23 U.S.C. 405(h). A state is eligible under this section if the state's annual combined pedestrian and bicyclist fatalities exceed 15 percent of the state's total annual crash fatalities. In 2014, 15.06% percent of total crash fatalities were pedestrian and bicyclist.

The additional funding will support a multi-year effort to curb the increasing crash data trends observed within these focus areas. PennDOT has included two projects utilizing the 405(h) funds in the FFY 2018 HSP. Additional tentatively planned efforts for FFY 2019 and FFY 2020 include:

- Supporting additional data analysis to refine problem identification
- Conducting pedestrian and bicyclist focus groups/town hall meetings
- Piloting grants to seed bicycle enforcement units in police departments
- Developing Video Public Service Announcements
- Developing School Curriculum
- Updating the PennDOT Bike Manual
- Updating existing outreach materials, including translating materials for multicultural locations

Evidence of Effectiveness: CTW, Chapter 8: Sections 2.2, 4.1, 4.3, 4.4, 4.5; Chapter 8: Sections 1.2, 3.1, 3.3

Project Number: RS-2018-01-00-00 State

Project Title: Walkable Community Programs

Project Description: PennDOT has deployed numerous low-cost safety improvements at high pedestrian and bicycle crash locations. Properly designed and implemented pedestrian and bicycle improvements have been shown effective in reducing crashes involving pedestrians and bicyclists. Some of the low-cost solutions include road dieting or lane reduction; rectangular rapid flashing beacons; pedestrian countdown

signals; and higher-visibility crosswalks for both pedestrians and bicycles. One of the most widely used pedestrian safety countermeasures is the Yield-to-Pedestrian Channelizing Device. The signs are designed to remind motorists to yield the right-of-way within any marked crosswalk or within any unmarked crosswalk at an intersection where there are no traffic controls or traffic controls are not in operation. Since 2001, PennDOT has deployed approximately 10,000 Yield to Pedestrian Channelizing Devices statewide.

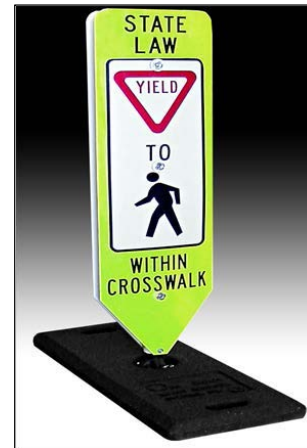
Metric: Distribute 100 Yield-to-Pedestrian Channelizing Devices.

Project Budget: \$150,000 State

Indirect: TBD

MOE: \$0

Match: \$150,000



Project Number: FHLE-2018-01-00-00 Federal

Project Title: Pedestrian Education and Enforcement Program

Project Description: The pedestrian safety grant program is a data driven program aimed at reducing traffic crashes, injuries, and fatalities involving pedestrians. The program uses localized High-Visibility Enforcement (HVE) operations and community outreach to promote safer walking and driving behaviors and to reinforce the message through law enforcement to increase compliance with appropriate traffic laws by both pedestrians and drivers. It is targeted at high pedestrian crash locations and surrounding areas to create a comprehensive pedestrian safety program.

To address limited interest when offering this grant in recent years, municipalities will be prioritized and targeted by crash data analysis and proactively offered pilot grants. There are 8 identified municipalities in Pennsylvania that account for nearly 35 percent of Pennsylvania's total crashes involving a pedestrian and a fatality or serious injury. In response to this knowledge of where a large portion of these crashes are occurring, additional efforts to contact each of the identified municipalities will be made to encourage them to utilize a grant funded program that focuses on pedestrian safety in their area. A summary of each municipality's pedestrian crash picture, along with demographic information, will be given to the municipalities to provide them with a better understanding of the problem, and in turn, promote their participation.

Metric: Conduct pedestrian enforcement and education programs in up to eight high pedestrian crash municipalities.

Project Budget: \$400,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: FHPE-2018-01-00-00 Federal

Project Title: Bicycle Safety Outreach - Toolkits

Project Description: To help raise conspicuity of bicyclists during rides and expedite emergency roadside maintenance, bicycle safety toolkits will be purchased for distribution through coordinated bicycle safety outreach activities. These kits will include items such as: reflective tape, blinking pin lights, helmet medical alert stickers, tire levers, spare tubes, and other specific items which provide a sole safety benefit for bicycle riders. These tools will be stored in a saddle bag which can be conveniently attached to a bicycle. The distribution of these toolkits will be part of comprehensive bicycle safety outreach efforts coordinated by Community Traffic Safety Programs and PennDOT District Safety Press Officers.

Metric: To distribute approximately 2,500 toolkits to data-driven locations.

Project Budget: \$100,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: RS-2018-01-00-00 State

Project Title: Bicycle-Pedestrian Facilities Training

Project Description: The objective of this project is to provide Bicycle/Pedestrian Facilities Training and to update, revise, and/or modify these courses as necessary on behalf of the Pennsylvania Department of Transportation (PennDOT), Business Leadership and Administrative Services Office (BLASO), Technical Training and Development Section (TTDS).

This is a 1 day course, intended for State, or local engineers with planning, design, construction, or maintenance management responsibilities; bicycle/pedestrian specialists, transportation planners, landscape architects, as well as decision makers at the project planning level.

Metric: Conduct 1 trainings in State Fiscal Year (SFY) 2018.

Project Budget: \$7,000 State

Indirect: TBD

MOE: \$0

Match: \$7,000

TRAFFIC SAFETY INFORMATION SYSTEMS

Problem Identification and Analysis

Pennsylvania's traffic records system provides the basic information necessary for efficient and successful highway safety efforts at the local, state, and Federal levels of government. The statewide traffic records system is used to perform problem identification, establish targets and performance measures, allocate resources, determine the progress of specific programs, and support the development and evaluation of highway and vehicle safety countermeasures.

Crash record management is divided into three sections. The reports section sorts, categorizes, batches, and prepares paper crash reports from the field and ensures that the reports are scanned into the Crash Report System (CRS). The analysis section uses the CRS to validate crash information coming in from paper and electronic police crash reports and checks the incoming data against a set of roughly 400 edits. The information systems section is responsible for providing crash data to end users using the Crash Data Analysis and Retrieval Tool (CDART), Pennsylvania Crash Information Tool (PCIT), and other analysis tools to retrieve summarized data. Those requesting data include engineers, the media, the Attorney General's office, program managers, police officers, and the general public. The data is used to help create the Strategic Highway Safety Plan, set safety targets, determine safety focus areas, and develop implementation strategies.

Projects that will be implemented in Fiscal Year 2018 to improve the state data system are outlined in the 2018 Traffic Records Strategic Plan, which was created under the direction of the Traffic Records Coordinating Committee (TRCC). The plan includes identified recommendations and considerations in the system, crash records performance measures, and updates on ongoing projects.

The Maintenance of Effort (MOE) requirement for 23 U.S.C. 405(c) funds is calculated in Pennsylvania using:

- PennDOT funded staff working on making timely and accurate crash data available
- PennDOT funded contracted services to maintain and enhance the Crash Reporting System and Crash Data & Analysis Retrieval Tool (CDART)

The amount of FFY 2018 §405(c) MOE provided by these state expenditures is projected to be \$880,000.

Annual Targets and Performance Measures

The following performance measures have been established by the Traffic Records Coordinating Committee. The measures have been established for the performance areas of completeness, accuracy, and timeliness. The completeness and accuracy objectives are to lower the average numbers by providing feedback to police chiefs, providing additional training, and moving more police agencies to electronic submissions which allows for pre-submittal editing. The timeliness objective is to decrease the average processing time from crash event to entry in the crash database by encouraging police chiefs to submit the crash forms more quickly and move our remaining paper-submitting police agency to electronic submission.

Figure 4.36 Completeness Performance Measure

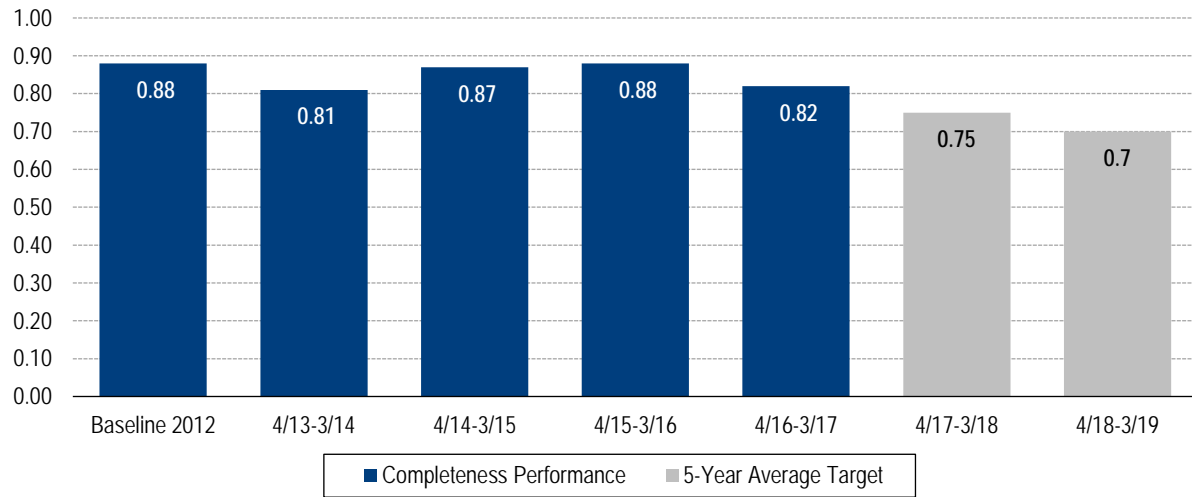


Figure 4.37 Accuracy Performance Measure

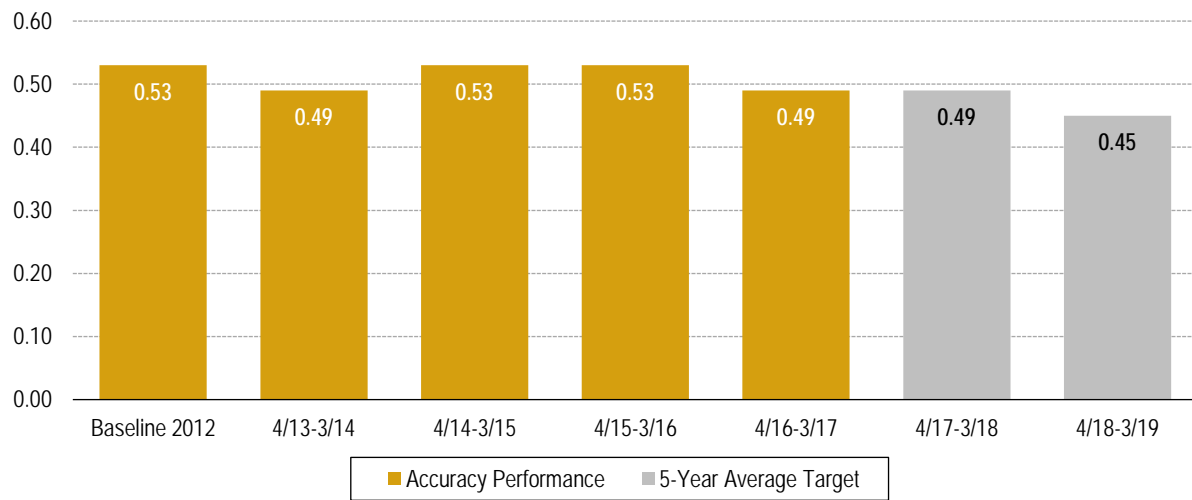
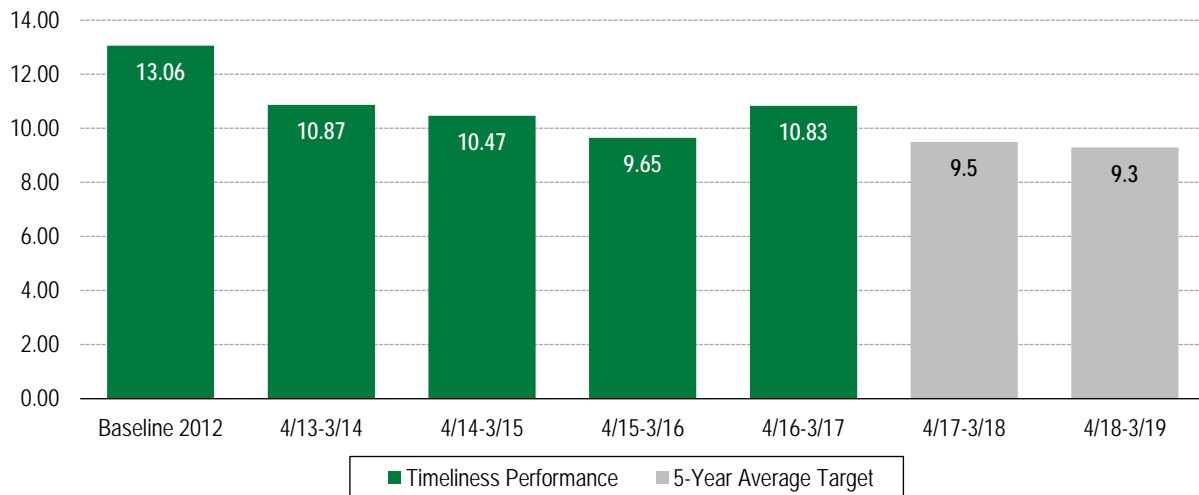


Figure 4.38 Timeliness Performance Measure



List of Countermeasures (Programs and Projects)

The Pennsylvania Traffic Records Coordinating Committee (TRCC) has approved roughly \$1.6 million in projects funded by §405(c) fund for FFY 2018 projects as of July 1st, 2017. The TRCC routinely solicits and reviews proposals throughout the fiscal year and subsequently more projects may be funded in FFY 2018. PennDOT is committed to continue to use these funds prudently and will ensure all funds available during FFY 2018 have been assigned to projects in accordance with 23 CFR §1300.32 and 23 CFR §1300.41(a)(2). Projects have been discussed within the TRCC that can support the liquidation of outstanding §405(c) fund balances. Projects such as funding part of the Department's Vehicle Registration and Driver Licensing System rewrite, MIRE collection, additional traffic counters, and design and implementation of a Traffic Records Integration Plan are common discussions within the TRCC and are viable projects.

Project Number: M3DA-2018-01-00-01 Federal

Project Title: Driver Licensing Participation in Clerus State to State (S2S) Program

Project Description: The State-to-State (S2S) Verification Service is a means for states to electronically check with all other participating states to determine if the applicant currently holds a driver license or identification card in another state. Currently a singular, organized method of effectively obtaining, reviewing and verifying driver/traffic records across multiple states, does not exist. As a result, it can and is difficult to identify problem drivers that are known to states other than the state in which the individual is applying for or currently holds a license in. Additionally, it enables a driver to possess multiple licenses in multiple jurisdictions.

The result is that several roadway incidents occur that could have been avoided by merely being able to efficiently check the traffic records of the licensed individual across multiple states. The major impact is seen in increased traffic related fatalities, serious injuries and financial impairment due to lesser driver related infractions.

Metric: Enable ability to determine if a person holds a DL or identification card in another State and improve the Fraud Detection and Prevention within the driver license issuance process by September 30, 2018.

Project Budget: \$50,000.00 Federal

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M3DA-2018-01-00-02 Federal

Project Title: Crash Reporting Law Enforcement Liaison (LEL)

Project Description: The overall project's goal is designed to assist in Pennsylvania's safety strategy to reduce fatalities by 50% in the next 20 years (starting in 2010) through improving the data entered into the Crash Record System. The measurable target for this project will be to increase the electronic submission of LEA Crash Reports from 92 percent to 100 percent of agencies, including Philadelphia in FFY 2018. The project has the following additional goals:

- Increase the speed with which data is entered into the crash database through electronic reporting by decreasing the amount of time it takes to prepare and post a crash report. Timeliness is the length of time that occurs from the time a crash occurs to when the crash report is received by PennDOT's Data Repository. It is essential in obtaining real-time data for location and cause evaluation.
- Decrease the number of errors found in all crash cases in FFY 2018. In preparing a crash report, the information within the report provides invaluable data when evaluating the crash. The accuracy of the report has a direct impact on the quality of the data being evaluated.
- Improve the completeness of crash statistics per case in FFY 2018. A crash report cannot be accurately evaluated when fields are missing or attributes are omitted.

The primary focus of this project will continue the use of a statewide Law Enforcement Liaison network to work with each of Pennsylvania's Law Enforcement Agencies that are required to submit crash reports. Each Crash Reporting (CR) LEL will establish themselves as the point of contact between PennDOT Crash Reporting staff and the law enforcement community. LELs will be assigned to make regular contact with enforcement agencies in 4 Pennsylvania regions. The CR LEL will schedule meetings, provide review of existing reporting activities, complete individual or group trainings, workshops, provide computer equipment and training, and review LEA reporting performance.

An additional focus again in 2018 will be extending the TraCS to Locals project within this program to 35-40 police agencies. This will allow additional electronic submissions of citations. The TraCS to Locals project has already accounted for over 61,000 electronic citations since its genesis, improving timeliness and accuracy.

Metric: Increase the electronic submission of Law Enforcement Agency crash reports from 92 percent to 100 percent of agencies, including Philadelphia in FFY 2018.

Project Budget: \$1,040,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M3DA-2018-01-00-03 Federal

Project Title: Crash Architecture and Public/Partner Data Interface

Project Description: The current CDART application is an intranet application only available to Commonwealth agencies, PSP headquarters, and the Metropolitan Planning Organizations who access the system via the Business Partner network. The application's tools are designed for engineering solutions. There is a behavioral safety need for crash data as well. This need does not only reside within PennDOT, but also within the safety community which is interested in reducing fatalities and injuries due to things like drinking and driving, seatbelt use, aggressive driving, distracted driving, etc. Police agencies also are interested in curbing these same activities. This project calls for the continuing development of an application (PCIT – Pennsylvania Crash Information Tool) to allow PennDOT's safety partners, the police who report crashes, and the general public an easy way to access useful crash data.

In 2018, the main plan is to enhance mapping capability to the current system, allowing mapping to geographically select data for analysis. Additionally, the application will begin focusing on authenticated user views, for users such as police.

Metric: Provide links to data, additional querying and mapping capability by September 30, 2018.

Project Budget: \$540,000

Indirect: TBD

MOE: \$0

Match: \$0

Project Number: M3DA-2018-01-00-04 Federal

Project Title: Pending Traffic Records Coordinating Committee Projects

Project Description: The TRCC actively solicits and reviews project ideas throughout the fiscal year period. As such, this project will reserve funds for projects currently under review which have not been fully vetted through the TRCC prior to the submission of this plan. Three projects are pending TRCC review at this time:

PennDOT's Vehicle Registration and Driver Licensing Rewrite - \$1,000,000 Federal

MIRE Data Collection Enhancements - \$500,000 Federal

Additional Traffic Counters - \$500,000 Federal

Metric: Secure funding decisions by the TRCC regarding the identified three pending projects to ensure funds are liquidated in a timely manner.

Project Budget: \$2,000,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

COMMUNITY TRAFFIC SAFETY PROGRAM

Problem Identification and Analysis

The Community Traffic Safety Program provides a necessary link between the Pennsylvania Highway Safety Office and local communities. Pennsylvania's large size, population, and local diversity make it difficult to administer a centralized program. PennDOT establishes Community Traffic Safety Projects (CTSP) under this program area to provide coverage to all 67 Pennsylvania counties. The CTSPs have some defined tasks, like participation in NHTSA national safety campaigns. Other parts of their annual program are planned and organized by them based on local needs. The CTSPs are required to conduct education and outreach activities that address all of the Safety Focus areas based on local data and need (including speeding, aggressive driving, occupant protection, motorcycle safety, mature driver safety, younger drivers, and pedestrian and bicycle safety).

Projects must address critical safety needs by analysis of crash data as the principle basis for programs. Data analysis and problem identification is the foundation for each project and will determine the structure and accuracy of the targets, activities, measures, and evaluation efforts for the duration of the project. Analysis might include years of crash, injury, and fatality data; license, registration, and conviction data; and other data from various sources. Data included in agreements will identify safety problems and support the subsequent development of targets and activities. Broad program area targets must be tied to the specific countermeasures selected, including clear articulation of how and why specific tasks were chosen.

The initial projections of all Community Traffic Safety Project allocation amounts are based on a 5-year average of crashes in the regions historically covered by each project and prior year award amounts. As the majority of costs under this program cover personnel, program budgets often reflect the longevity and experience of individuals working under the projects. Projects with senior staff near the end of a local government pay scale often skew the awarded grant budget beyond the amount determined by the allocation formula. If a project has new employees the awarded grant budget may be less than the allocation formula amount to reflect starting salaries for local governments and to provide time for project growth. Over time these deviations from the allocation formula amounts are eliminated through personnel turnover and the maturation of new employees. Budgets are finalized through negotiations with leadership from the sponsoring agency and Highway Safety Office Program Managers.

List of Countermeasures (Programs and Projects)

1. Educational and Outreach Programs

Education and outreach programs are a vital component of statewide traffic safety efforts. Activities supporting enforcement efforts greatly increase the effectiveness and ability to change driver behavior. Educational programs targeted to all age groups raise awareness of traffic safety laws, available resources and training, and general driver instruction. Outreach programs to schools, community groups, businesses, police departments, EMS providers, and the judicial community increase knowledge of traffic safety campaigns throughout the year and provide opportunities for collaboration to enhance program effectiveness, gathering feedback for future program modifications, and to standardize messaging among safety partners.

Evidence of Effectiveness: CTW, Chapter 1: Section 6.5; Chapter 2: Sections 3.1, 3.2, 6.1, 6.2, 7.1; Chapter 3: Section 4.1; Chapter 4: Sections 2.1, 2.2, 3.1, 3.2; Chapter 5: Sections 4.1, 4.2; Chapter 6: Sections 2.1, 2.2, 3.1; Chapter 7: Sections 1.1, 1.2; Chapter 8: Sections 2.1, 2.3; Chapter 9: Sections 1.3, 1.4, 2.2, 3.2, 4.2

Project Number: CP-2018-01-00-00 Federal

Project Title: Community Traffic Safety Program

Project Description: Tasks include identifying enforcement training needs, partnering with local organizations to address identified safety focus areas, assisting enforcement agencies to target local problems based on crash data, serving as a local contact for the general public, acting on PennDOT's behalf in the development of local safety action plans and safety efforts, providing educational programs to schools and local employers, and providing outreach and education on a variety of traffic safety issues to Magisterial District Justices (MDJ). Those CTSPs with official seat belt survey sites within their jurisdictions are asked to conduct informal seat belt surveys to monitor seat belt usage rates throughout the year.

Metric: Fund 15 to 20 Community Traffic Safety Projects.

Metric: Coordinate 100 educational programs to the public addressing identified priority safety focus areas specific to geographic areas.

Metric: Contact 100 percent (estimated 550 total) of the Magisterial District Judges in Pennsylvania by September 30, 2018.

Metric: Coordinate 6 regional Law Enforcement Seminars/Trainings by September 30, 2018.

Project Budget: \$3,065,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

COMMUNICATIONS AND MEDIA

Communications Office

PennDOT’s Central Press Office and regional Safety Press Officers manage media for the highway safety program. All press releases promoting enforcement activities, law enforcement trainings, and community events are approved by the press office. The office is also responsible for PSA recordings, interview opportunities, and press conferences. Communications staff tracks earned media activities like media events and outreach meetings and issues a statewide report. The Press Office maintains multiple Twitter accounts (@PennDOTNews, @SecRichards, and several regional 511PA accounts), a PennDOT Facebook page, an Instagram account, and a YouTube channel that includes many safety and media buy videos.

PennDOT will be using state funds for paid advertising in Fiscal Year 2018. Paid media campaigns are coordinated and implemented by press office staff, who ensure that each campaign has a consistent “brand identity” in all messaging. State media buys are conducted to complement federal media buys occurring during the same safety campaign. Press releases, electronic messaging, and talking points/interviews use the enforcement messaging (CIOT, etc.) of the federal safety campaign. Pennsylvania also has its own brand and year-round recognition through Just Drive Pennsylvania. All designs, slogans, and media budget uses must be approved by the Governor’s Press Office before proceeding.

Paid media will be purchased for the following events:

“Just Drive – Safe and Sober”: Labor Day and Independence Day DUI enforcement crackdowns

The campaign will consist of on-line advertising, radio, and lifestyle advertising at convenience stores/gas stations. Males age 21 to 54 will be the primary demographic. This demographic has been identified through the court reporting network (CRN) data as major contributors to the DUI problem.

“Just Buckle Up – A Click Can Save Your Life”: May CIOT mobilization

The campaign will consist of radio messages, on-line ads, and gas/convenience store advertising. Males 18 to 54, nighttime drivers, and pickup truck drivers all make up the target demographic. This demographic has been identified as least likely to wear seatbelts.

“Just Drive – Distractions Can Wait”: National Distracted Driving Awareness Month, April 2018

On-line and radio advertising will be deployed, including reminders of Pennsylvania’s no-texting-while-driving law. Teen drivers will be the target demographic. The campaign will run in conjunction with other National Distracted Driving Month awareness activities.

The Press Office also will prepare a Safety Communications Plan for FFY 2018 to aid grantees and partners in establishing earned media plans throughout the fiscal year.

The most recent census.gov data states approximately 10 percent of Pennsylvania residents (aged 5 years and over) speak a language other than English at home and, regarding English-speaking ability of those individuals, just over 17 percent speak English “not well” or “not at all”. Many PennDOT manuals are translated into Spanish and a few can be located at the following links:

Tutor's Guide (Para el tutor)

<http://www.dot.state.pa.us/public/dvspubsforms/BDL/BDL%20Manuals/Manuals/Steer%20to%20Safe%20Driving%20-%20Spanish/PUB%20388.pdf>

Driver's Manual (Manual del conductor de Pensilvania)

<http://www.dot.state.pa.us/Public/DVSPubsForms/BDL/BDL%20Manuals/Manuals/PA%20Drivers%20Manual%20By%20Chapter/Spanish/pub%2095s.pdf>

Commercial Driver's Manual (Manual del conductor comercial)

<http://www.dot.state.pa.us/Public/DVSPubsForms/BDL/BDL%20Manuals/Manuals/Commercial%20Drivers%20Manual/Comm%20Manual%20Spanish/PUB%20265.pdf>

Motorcycle Operators Manual (Manual del Motociclista)

<http://www.dot.state.pa.us/Public/DVSPubsForms/BDL/BDL%20Manuals/Manuals/Motorcycle%20Operators%20Manual/Spanish/PUB%20490.pdf>

Special Point's Exam Study Guide (Examen especial por puntos: Guía de estudio)

<http://www.dot.state.pa.us/Public/DVSPubsForms/BDL/BDL%20Manuals/Manuals/Point%20examination%20folder/Spanish/PUB%20248S.pdf>

List of Countermeasures (Programs and Projects)

Project Number: CP-2018-03-00-00 Federal; CP-2018-03-00-00 State

Project Title: Public Information and Education

Project Description: The PennDOT Graphic Services Center and Commonwealth Media are used to produce materials for use in the highway safety program. Brochures and other free educational pieces address safety focus areas and other safety issues. The publications are available for download, and in some cases, are printed for distribution. An outside contractor can be used for professionally done videos and other materials. In FFY 2018 this project will also include funds for conducting focus groups and generating a professional communications plan.

Additionally, PennDOT provides support for the Pennsylvania Yellow Dot Program (<http://www.yellowdot.pa.gov>). This program was created to assist citizens in the “golden hour” of emergency care following a traffic accident when they may not be able to communicate their needs themselves. Placing a yellow dot in your vehicle’s rear window alerts first responders to check your glove compartment for vital information to ensure you receive the medical attention you need.

Project Budget: \$567,000 (\$510,000 Federal; \$57,000 State)

Indirect: TBD

MOE: \$0

Match: \$57,000

Project Number: SB-2018-01-00-00 Federal

Project Title: School Bus Safety – Stop on Red Awareness Campaign

Project Description: The illegal passing of School Buses with the red lights flashing and stop arm extended presents one of the most hazardous traffic safety threats imaginable by exposing school students to a direct line of vehicular traffic. To bring this problem to light nationally, National Association of State Directors of Pupil Transportation Services (NASDPTS) has conducted an annual survey since 2010 for which school bus drivers record how many times other motorists passed their School Buses illegally while the buses were stopped displaying their flashing red lights and stop arms. Throughout a 180-day school year, these sample results alone point to over 13 million violations by private motorists. In 2014-2015, 75% of all School Bus related student fatalities nationally occurred after the child left the bus, 60% of which were due to passing motorists. In Pennsylvania, there were 701 convictions for illegal School Bus passes in 2015. This was an increase from 618 convictions in 2014. This project intends to greatly expand the current one-day only Operation Safe Stop campaign to a year-round approach. This will be accomplished through education of the motoring public and school-aged children alike, by creating a greater awareness of the law. Activities will include development and printing of school bus safety materials for both students and drivers, outreach in the form of billboards to motorists with a message that stresses the importance of stopping for a school bus with its red lights flashing, and development and creation of large magnetic decals for the back of school buses alerting motorists of the law and penalties.

Project Budget: \$235,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0

PLANNING AND ADMINISTRATION

Problem Identification and Analysis

Public Law 89-564 (Highway Safety Act) requires that a Highway Safety Program be approved by the Federal government. To adequately perform this task and ensure the program is activated in accordance with the NHTSA/FHWA orders, directives, regulations, policies, etc., the Bureau of Maintenance and Operations, Program Services Unit, is responsible for Pennsylvania's Highway Safety Program.

List of Countermeasures (Programs and Projects)

Project Number: PA-2018-01-00-00 Federal; PA-2018-01-00-00 State

Project Title: Planning and Administration

Project Description: The Program Services Unit is responsible for planning and implementing Pennsylvania's Highway Safety Program. The 2018 Highway Safety Plan identifies the program areas of NHTSA and FHWA.

The objectives of this project cannot be measured in quantifiable terms related to other projects which can reflect a measure of accomplishment; however, the objectives of this project do provide for the planning and administration which are efforts readily identifiable and directly attributable to the overall development and management of the Commonwealth's Highway Safety Plan.

The functions covered encompass, wholly or partially, elements applicable to planning, coordination, financial aspects, and general administration of the entire HSP (NHTSA) and other areas related to the highways safety process.

Administrative activities are performed in a competent and effective manner to ensure compliance with all aspects of problem identification, evaluation monitoring, and legislation to provide methods and procedures which allow an effective approach to reducing traffic crashes and deaths.

Metric: Implement at least 90 statewide and local projects addressing highway safety during FFY 2018.

Metric: Perform approximately 100 site evaluations and 50 fiscal audits of highway safety projects by September 30, 2018.

Metric: Prepare Annual Report submission to NHTSA no later than December 31, 2017.

Metric: Prepare Highway Safety Plan and 405 applications for submission to NHTSA no later than July 1, 2018.

Project Budget: \$860,000 (\$430,000 Federal; \$430,000 State)

Indirect: TBD

MOE: \$0

Match: \$430,000

Project Number: CP-2018-04-00-00 Federal

Project Title: Grant Program Training Needs

Project Description: The Program Services Unit established this project to address training needs necessary to support the objectives of the Highway Safety Plan which are not otherwise included in established projects. This agreement provides funding for trainings needs for the PennDOT Program Services Unit staff as well as the District Safety Press Officers.

Training modules will include, but are not limited to:

- dotGrants electronic grants management system;
- Fall Outreach Coordination Workshop;
- Annual PA Traffic Safety Conference; and
- DUI Court Coordinator Training (NHTSA).

Metric: Conduct one planning and training workshop for PennDOT and Community Traffic Safety Project outreach coordinators by November 23, 2017.

Metric: Conduct one planning and training workshop for PennDOT grantees, partners by April 29, 2018.

Project Budget: \$50,000 Federal

Indirect: TBD

MOE: \$0

Match: \$0



Cost Summary

PENNSYLVANIA HIGHWAY SAFETY PLAN



pennsylvania

DEPARTMENT OF TRANSPORTATION

5. Cost Summary

Program areas and projects to be funded in this plan are summarized in this section.

This information has been generated for planning purposes and does not reflect approved grant projects and awarded funds. Final project and budget approval will be determined during the annual grant selection cycle to be completed prior to October 1, 2017. Revisions to this information will be submitted subsequent to these final grant budget determinations.

FUND BALANCES

Fund balances in this plan are calculated based on projected carry-forward and new Federal funds. State funds are estimated and will be adjusted upon approval of the new state fiscal year budget and through routine planning.

UNEXPENDED PRIOR-YEAR BALANCES

Funds identified during annual fiscal year close-out will be carried forward in accordance with 23 CFR §1300.41(a).

Federal Fiscal Year 2018 Highway Safety Program Budget

Program Area	Program Description	CFDA	State Funds	Federal Funds	Federal Share to Local	Indirect Costs	MOE	Match
AL-2018-01-00-00	DDAP/PennDOT DUI Intervention Project	20.600	\$0.00	\$100,000.00	\$0.00	TBD	\$0.00	\$0.00
CP-2018-01-00-00	PA Community Traffic Safety Projects	20.600	\$0.00	\$3,065,000.00	\$3,065,000.00	TBD	\$0.00	\$0.00
CP-2018-02-00-00	Statewide Child Passenger Safety Coordination	20.600	\$455,000.00	\$945,000.00	\$0.00	TBD	\$455,000.00	\$455,000.00
CP-2018-03-00-00	Public Information & Education	20.600	\$57,000.00	\$510,000.00	\$0.00	TBD	\$0.00	\$57,000.00
CP-2018-04-00-00	Grant Program Training Needs	20.600	\$0.00	\$50,000.00	\$0.00	TBD	\$0.00	\$0.00
DE-2018-01-00-00	Implementation of a Driver Improvement School	20.600	\$0.00	\$110,000.00	\$0.00	TBD	\$0.00	\$0.00
DL-2018-01-00-00	Mature Driver Safety Program	20.600	\$0.00	\$200,000.00	\$0.00	TBD	\$0.00	\$0.00
OP-2018-01-00-00	PA State Police - Child Passenger Safety Fitting Stations	20.600	\$0.00	\$100,000.00	\$0.00	TBD	\$0.00	\$0.00
OP-2018-02-00-00	Municipal Occupant Protection Enforcement & Education Program	20.600	\$0.00	\$1,800,000.00	\$1,800,000.00	TBD	\$0.00	\$270,000.00
PA-2018-01-00-00	Planning & Administration	20.600	\$430,000.00	\$430,000.00	\$0.00	TBD	\$0.00	\$430,000.00
PT-2018-01-00-00	PA State Police - Police Traffic Services	20.600	\$150,000.00	\$2,050,000.00	\$0.00	TBD	\$0.00	\$1,350,000.00
PT-2018-02-00-00	Municipal Aggressive Driving Enforcement & Education Program	20.600	\$0.00	\$2,200,000.00	\$2,200,000.00	TBD	\$0.00	\$700,000.00
PT-2018-03-00-00	Institute for Law Enforcement Education (\$ 402)	20.600	\$0.00	\$325,000.00	\$0.00	TBD	\$0.00	\$0.00
PT-2018-04-00-00	Police Traffic Services	20.600	\$0.00	\$560,000.00	\$560,000.00	TBD	\$0.00	\$0.00
RS-2018-01-00-00	Walkable Communities/Bike-Ped Facilities Training	20.600	\$157,000.00	\$0.00	\$0.00	TBD	\$0.00	\$157,000.00
SB-2018-01-00-00	School Bus Safety - Stop on Red Awareness Campaign	20.600	\$0.00	\$235,000.00	\$0.00	TBD	\$0.00	\$0.00
TSP-2018-01-00-00	Teen Driver Safety Program	20.600	\$16,000.00	\$225,000.00	\$0.00	TBD	\$0.00	\$16,000.00
Subtotal CFDA #20.600 (\$402)			\$1,265,000.00	\$12,905,000.00	\$7,625,000.00	TBD	\$455,000.00	\$3,435,000.00
M2HVE-2018-01-00-00	PA State Police - Occupant Protection Enf. & Edu. Program	20.616	\$250,000.00	\$1,782,000.00	\$0.00	TBD	\$0.00	\$250,000.00
Subtotal CFDA #20.616 (\$405b)			\$250,000.00	\$1,782,000.00	\$0.00	TBD	\$0.00	\$250,000.00
M3DA-2018-01-00-00	Traffic Records Coordinating Committee Projects	20.616	\$880,000.00	\$3,630,000.00	\$0.00	TBD	\$880,000.00	\$880,000.00
Subtotal CFDA #20.616 (\$405c)			\$880,000.00	\$3,630,000.00	\$0.00	TBD	\$880,000.00	\$880,000.00
M5HVE-2018-01-00-00	PA State Police - DUI Enforcement Program	20.616	\$400,000.00	\$2,300,000.00	\$0.00	TBD	\$0.00	\$750,000.00
M5HVE-2018-02-00-00	Municipal DUI Enforcement Program (includes \$ 405d PTS share)	20.616	\$0.00	\$3,033,000.00	\$3,033,000.00	TBD	\$0.00	\$0.00
M5CS-2018-01-00-00	DUI Courts	20.616	\$0.00	\$150,000.00	\$150,000.00	TBD	\$0.00	\$0.00
M5II-2018-01-00-00	Ignition Interlock	20.616	\$640,000.00	\$0.00	\$0.00	TBD	\$640,000.00	\$640,000.00
M5TR-2018-01-00-00	Institute for Law Enforcement Education (\$ 405d)	20.616	\$0.00	\$630,000.00	\$0.00	TBD	\$0.00	\$0.00
M5TR-2018-02-00-00	Traffic Safety Resource Prosecutor	20.616	\$0.00	\$200,000.00	\$0.00	TBD	\$0.00	\$0.00
M5TR-2018-03-00-00	Judicial Outreach Liaison	20.616	\$0.00	\$55,000.00	\$0.00	TBD	\$0.00	\$0.00
M5TR-2018-04-00-00	DUI Law Enforcement Liaisons	20.616	\$0.00	\$595,000.00	\$0.00	TBD	\$0.00	\$0.00
M5TR-2018-05-00-00	PA DUI Association Technical Services Program	20.616	\$425,000.00	\$0.00	\$0.00	TBD	\$0.00	\$425,000.00
Subtotal CFDA #20.616 (\$405d)			\$1,465,000.00	\$6,963,000.00	\$3,183,000.00	TBD	\$640,000.00	\$1,815,000.00
M9MA-2018-01-00-00	Motorcycle Safety Initiatives	20.616	\$4,200,000.00	\$233,000.00	\$0.00	TBD	\$0.00	\$4,200,000.00
Subtotal CFDA #20.616 (\$405f)			\$4,200,000.00	\$233,000.00	\$0.00	TBD	\$0.00	\$4,200,000.00
FHLE-2018-01-00-00	Pedestrian Education and Enforcement Program	20.616	\$0.00	\$400,000.00	\$200,000.00	TBD	\$0.00	\$0.00
FHPE-2018-01-00-00	Bicycle Safety Outreach - Toolkits	20.616	\$0.00	\$100,000.00	\$50,000.00	TBD	\$0.00	\$0.00
Subtotal CFDA #20.616 (\$405h)			\$0.00	\$500,000.00	\$250,000.00	TBD	\$0.00	\$0.00
Totals			\$8,060,000.00	\$26,013,000.00	\$11,058,000.00	TBD	\$1,975,000.00	\$10,580,000.00



Certifications and Assurances

PENNSYLVANIA HIGHWAY SAFETY PLAN



pennsylvania

DEPARTMENT OF TRANSPORTATION

**APPENDIX A TO PART 1300 –
CERTIFICATIONS AND ASSURANCES
FOR HIGHWAY SAFETY GRANTS
(23 U.S.C. CHAPTER 4; SEC. 1906, PUB. L. 109-59,
AS AMENDED BY SEC. 4011, PUB. L. 114-94)**

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

State: Pennsylvania

Fiscal Year: 2018

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

GENERAL REQUIREMENTS

The State will comply with applicable statutes and regulations, including but not limited to:

- 23 U.S.C. Chapter 4 – Highway Safety Act of 1966, as amended
- Sec. 1906, Pub. L. 109-59, as amended by Sec. 4011, Pub. L. 114-94
- 23 CFR part 1300 – Uniform Procedures for State Highway Safety Grant Programs
- 2 CFR part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
- 2 CFR part 1201 – Department of Transportation, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

INTERGOVERNMENTAL REVIEW OF FEDERAL PROGRAMS

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

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

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

- Name of the entity receiving the award;
- Amount of the award;

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

NONDISCRIMINATION

(applies to subrecipients as well as States)

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

- **Title VI of the Civil Rights Act of 1964** (42 U.S.C. 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin) and 49 CFR part 21;
- **The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970**, (42 U.S.C. 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- **Federal-Aid Highway Act of 1973**, (23 U.S.C. 324 *et seq.*), **and Title IX of the Education Amendments of 1972**, as amended (20 U.S.C. 1681-1683 and 1685-1686) (prohibit discrimination on the basis of sex);
- **Section 504 of the Rehabilitation Act of 1973**, (29 U.S.C. 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability) and 49 CFR part 27;
- **The Age Discrimination Act of 1975**, as amended, (42 U.S.C. 6101 *et seq.*), (prohibits discrimination on the basis of age);
- **The Civil Rights Restoration Act of 1987**, (Pub. L. 100-209), (broadens scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal aid recipients, sub-recipients and contractors, whether such programs or activities are Federally-funded or not);
- **Titles II and III of the Americans with Disabilities Act** (42 U.S.C. 12131-12189) (prohibits discrimination on the basis of disability in the operation of public entities,

public and private transportation systems, places of public accommodation, and certain testing) and 49 CFR parts 37 and 38;

- **Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations** (prevents discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations); and
- **Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency** (guards against Title VI national origin discrimination/discrimination because of limited English proficiency (LEP) by ensuring that funding recipients take reasonable steps to ensure that LEP persons have meaningful access to programs (70 FR at 74087 to 74100)).

The State highway safety agency—

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

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

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

- b. Not to participate directly or indirectly in the discrimination prohibited by any Federal non-discrimination law or regulation, as set forth in Appendix B of 49 CFR part 21 and herein;
- c. To permit access to its books, records, accounts, other sources of information, and its facilities as required by the State highway safety office, US DOT or NHTSA;
- d. That, in event a contractor/funding recipient fails to comply with any nondiscrimination provisions in this contract/funding agreement, the State highway safety agency will have the right to impose such contract/agreement sanctions as it or NHTSA determine are appropriate, including but not limited to withholding payments to the contractor/funding recipient under the contract/agreement until the contractor/funding recipient complies; and/or cancelling, terminating, or suspending a contract or funding agreement, in whole or in part; and
- e. To insert this clause, including paragraphs a through e, in every subcontract and subagreement and in every solicitation for a subcontract or sub-agreement, that receives Federal funds under this program.

THE DRUG-FREE WORKPLACE ACT OF 1988 (41 U.S.C. 8103)

The State will provide a drug-free workplace by:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- b. Establishing a drug-free awareness program to inform employees about:
 - o The dangers of drug abuse in the workplace.
 - o The grantee's policy of maintaining a drug-free workplace.
 - o Any available drug counseling, rehabilitation, and employee assistance programs.
 - o The penalties that may be imposed upon employees for drug violations occurring in the workplace.
 - o Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).
- c. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will –
 - o Abide by the terms of the statement.
 - o Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- d. Notifying the agency within ten days after receiving notice under subparagraph (c)(2) from an employee or otherwise receiving actual notice of such conviction.
- e. Taking one of the following actions, within 30 days of receiving notice under subparagraph (c)(2), with respect to any employee who is so convicted –

- Taking appropriate personnel action against such an employee, up to and including termination.
 - Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- f. Making a good faith effort to continue to maintain a drug-free workplace through implementation of all of the paragraphs above.

POLITICAL ACTIVITY (HATCH ACT)
(applies to subrecipients as well as States)

The State will comply with provisions of the Hatch Act (5 U.S.C. 1501-1508), which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

CERTIFICATION REGARDING FEDERAL LOBBYING
(applies to subrecipients as well as States)

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who

fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

RESTRICTION ON STATE LOBBYING
(applies to subrecipients as well as States)

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION
(applies to subrecipients as well as States)

Instructions for Primary Certification (States)

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default or may pursue suspension or debarment.
4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms *covered transaction*, *debarment*, *suspension*, *ineligible*, *lower tier*, *participant*, *person*, *primary tier*, *principal*, and *voluntarily excluded*, as used in this clause, have the

meaning set out in the Definitions and coverage sections of 2 CFR Part 180. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by NHTSA.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR Parts 180 and 1300.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the department or agency may disallow costs, annul or terminate the transaction, issue a stop work order, debar or suspend you, or take other remedies as appropriate.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions

(1) The prospective primary participant certifies to the best of its knowledge and belief, that its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;

- (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Lower Tier Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms *covered transaction*, *debarment*, *suspension*, *ineligible*, *lower tier*, *participant*, *person*, *primary tier*, *principal*, and *voluntarily excluded*, as used in this clause, have the meanings set out in the Definition and Coverage sections of 2 CFR Part 180. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by NHTSA.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Certification" including the "Certification

Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR Parts 180 and 1300.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the department or agency with which this transaction originated may disallow costs, annul or terminate the transaction, issue a stop work order, debar or suspend you, or take other remedies as appropriate.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

BUY AMERICA ACT

(applies to subrecipients as well as States)

The State and each subrecipient will comply with the Buy America requirement (23 U.S.C. 313) when purchasing items using Federal funds. Buy America requires a State, or subrecipient, to purchase only steel, iron and manufactured products produced in the United States with Federal funds, unless the Secretary of Transportation determines that such domestically produced items would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. In order to use Federal funds to purchase

foreign produced items, the State must submit a waiver request that provides an adequate basis and justification to and approved by the Secretary of Transportation.

PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE
(applies to subrecipients as well as States)

The State and each subrecipient will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcyclists.

POLICY ON SEAT BELT USE

In accordance with Executive Order 13043, Increasing Seat Belt Use in the United States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information on how to implement such a program, or statistics on the potential benefits and cost-savings to your company or organization, please visit the Buckle Up America section on NHTSA's website at www.nhtsa.dot.gov. Additional resources are available from the Network of Employers for Traffic Safety (NETS), a public-private partnership headquartered in the Washington, D.C. metropolitan area, and dedicated to improving the traffic safety practices of employers and employees. NETS is prepared to provide technical assistance, a simple, user-friendly program kit, and an award for achieving the President's goal of 90 percent seat belt use. NETS can be contacted at 1 (888) 221-0045 or visit its website at www.trafficsafety.org.

POLICY ON BANNING TEXT MESSAGING WHILE DRIVING

In accordance with Executive Order 13513, Federal Leadership On Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, States are encouraged to adopt and enforce workplace safety policies to decrease crashes caused by distracted driving, including policies to ban text messaging while driving company-owned or -rented vehicles, Government-owned, leased or rented vehicles, or privately-owned when on official Government business or when performing any work on or behalf of the Government. States are also encouraged to conduct workplace safety initiatives in a manner commensurate with the size of the business, such as establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving, and education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

SECTION 402 REQUIREMENTS

1. To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for a grant under 23 U.S.C. 402 is accurate and complete.
2. The Governor is the responsible official for the administration of the State highway safety program, by appointing a Governor's Representative for Highway Safety who shall be responsible for a State highway safety agency that has adequate powers and is suitably

equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program. (23 U.S.C. 402(b)(1)(A))

3. The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation. (23 U.S.C. 402(b)(1)(B))
4. At least 40 percent of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of political subdivisions of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(1)(C)) or 95 percent by and for the benefit of Indian tribes (23 U.S.C. 402(h)(2)), unless this requirement is waived in writing. (This provision is not applicable to the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)
5. The State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks. (23 U.S.C. 402(b)(1)(D))
6. The State will provide for an evidenced-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. (23 U.S.C. 402(b)(1)(E))
7. The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State, as identified by the State highway safety planning process, including:
 - Participation in the National high-visibility law enforcement mobilizations as identified annually in the NHTSA Communications Calendar, including not less than 3 mobilization campaigns in each fiscal year to –
 - Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
 - Increase use of seatbelts by occupants of motor vehicles;
 - Submission of information regarding mobilization participation into the HVE Database;
 - Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits;
 - An annual Statewide seat belt use survey in accordance with 23 CFR part 1340 for the measurement of State seat belt use rates, except for the Secretary of Interior on behalf of Indian tribes;
 - Development of Statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources;
 - Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. 148(a). (23 U.S.C. 402(b)(1)(F))

- 8. The State will actively encourage all relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect. (23 U.S.C. 402(j))
- 9. The State will not expend Section 402 funds to carry out a program to purchase, operate, or maintain an automated traffic enforcement system. (23 U.S.C. 402(c)(4))


The State: [**CHECK ONLY ONE**]

Certifies that automated traffic enforcement systems are not used on any public road in the State;

OR

Is unable to certify that automated traffic enforcement systems are not used on any public road in the State, and therefore will conduct a survey meeting the requirements of 23 CFR 1300.13(d)(3) AND will submit the survey results to the NHTSA Regional office no later than March 1 of the fiscal year of the grant.

I understand that my statements in support of the State's application for Federal grant funds are statements upon which the Federal Government will rely in determining qualification for grant funds, and that knowing misstatements may be subject to civil or criminal penalties under 18 U.S.C. 1001. I sign these Certifications and Assurances based on personal knowledge, and after appropriate inquiry.


Signature Governor's Representative for Highway Safety

6/20/17
Date

George W. McAuley Jr.

Printed name of Governor's Representative for Highway Safety

6. Section 405 Grant Program

For FFY 2018, Pennsylvania is applying for the following 405-incentive grant programs:

- 405b – Occupant Protection;
- 405c – State Traffic Safety Information System;
- 405d – Impaired Driving;
- 405f – Motorcycle; and
- 405h – Nonmotorized

The 405 Application, which is signed by Pennsylvania’s Governor’s Representative for Highway Safety and includes the completed sections of the Appendix B to Part 1300 – Certifications and Assurances for National Priority Safety Program Grants and the accompanying documentation, will be sent separately to NHTSA using the GMSS system.