# 2018 Colorado Annual Report





### COLORADO

Department of Transportation

Office of Transportation Safety & Risk Management

# 2018 OFFICE OF TRANSPORTATION SAFETY HIGHWAY SAFETY ANNUAL REPORT

#### Introduction

The mission of the Highway Safety Office (HSO), within the CDOT Office of Transportation Safety (OTS) is to "reduce the incidence and severity of motor vehicle crashes and the associated human and economic loss". One measurement of traffic safety performance is the number of fatalities that occur per 100 million vehicle miles traveled (VMT). Colorado made significant progress since 2000 to reduce fatalities on its roadways. In 2002, Colorado had 1.71 fatalities per 100 MVMT. By 2014, the rate had declined to 1.00 per 100 VMT. However, over the past three years the fatalities per 100 MVMT has increased yearly with a VMT 1.21 in 2017. In 2016, Colorado had 608 traffic fatalities and in 2017 that increased to 648, a 7% increase. The HSO continues to address these challenges through a multi-pronged approach that includes educating the roadway users, traffic safety legislative enhancements, and high visibility enforcement of the State's driving laws.

Transportation safety challenges include impaired driving by alcohol and/or drugs, occupant protection compliance in a secondary enforcement environment, excessive speed, motorcycle safety and distracted driving. In addition, in 2017 Young Driver fatalities increased 36%, from 59 in 2016 to 93 in 2017.

Utilizing a Problem Identification process, the HSO aggressively addresses these challenges by soliciting projects from Traffic Safety partners and stakeholders, funding enforcement activities and identifying countermeasures to educate the public and raise awareness. Public information programs and high visibility enforcement have served to raise the awareness of the users of Colorado roadways and the public regarding their responsibilities as drivers. To address Colorado's impaired driving issues including the use of marijuana, alcohol and other drugs, innovative campaigns such as "Heat is On!" and "Drive High, Get a DUI!" continue to raise public awareness about high visibility enforcement. These countermeasures, along with a combination of partnerships with State and local stakeholders, allows Colorado and the HSO to proactively addresses current and emerging traffic safety challenges.

This report describes the HSO program goals and performance measures, provides an overview of each program area and provides a summary of each project, and how that project impacted specific performance measures, in Federal Fiscal Year 2018.

#### **Accomplishments**

Despite the overall increase in fatalities, the HSO did make improvement toward some goals. Examples of this progress include:

- The number of fatalities involving a motorcyclist decreased from 125 in 2016 to 103 in 2017, an 18% decrease
- The number of unhelmeted motorcyclist fatalities decreased in 2016 from 77 to 67 in 2017, an 13% decrease
- The number of fatalities involving an at fault driver age 65 and older decreased from 92 in 2016 to 89 in 2017, an 4% decrease:
- Significant improvement continues to be made in the timeliness, availability and accuracy of Colorado vehicle crash data.

#### **Evidence-Based Traffic Safety Enforcement Plan Activities**

The Colorado Department of Transportation, Office of Transportation Safety, Highway Safety Office (HSO) Traffic Safety Enforcement Plan for Occupant Protection, Impaired Driving and Speed is based on problem identification to identify areas of the state that are over represented in crashes and fatalities involving impaired driving, occupants not using proper restraints and excessive speed. When the areas are identified the HSO contacts law enforcement in the identified areas to form enforcement partnerships. Working with the enforcement partners the HSO's Public Relations Office (PRO) developed outreach and awareness programs to make the public aware of the enforcement.

Detailed summaries for Occupant Protection, Impaired Driving and Speed related activities including enforcement activity, citation information and paid and earned media information are available in the Program Task Reports section.

#### OCCUPANT PROTECTION ENFORCEMENT

Colorado's Highway Safety Office supported the Click It or Ticket May Mobilization and Child Passenger Safety Week national mobilizations. The Colorado State Patrol (CSP) provided statewide enforcement year round, in addition to the two weeks of enforcement during May. In addition to the CSP, various local law enforcement agencies were recruited and provided with overtime funding for May Mobilization. While all local law enforcement agencies were encouraged to apply for overtime enforcement funding, allocations were made through problem identification with consideration to the number of unrestrained fatalities and seat belt compliance rate of an area, along with the past performance of the agency during the campaign.

In addition to May Mobilization, the Colorado HSO supported two weeks of occupant protection enforcement in the rural areas of the State during March and April. Compliance rates are also generally lower than the state rate in these rural and frontier areas but historically, after an enforcement event, these areas show a significant increase in seat belt usage rates. The first Rural Click It or Ticket campaign took place in March with officers from the Colorado State

Patrol and 43 rural law enforcement agencies participating. The second Rural Click It or Ticket campaign took place in July with the same agencies participating.

#### IMPAIRED DRIVING ENFORCEMENT

Colorado law enforcement agencies participated in all seven national high visibility enforcement (HVE) campaigns as well as five other statewide HVE campaigns during the year. The State specific HVE campaigns that the HSO promoted included Spring Events (six weeks), Memorial Day Weekend (four days), Checkpoint Colorado (16 weeks), Fall Festivals (six weeks), and New Year's Eve (four to six days). These five HVE enforcement campaigns were created to address events in the State that have an impact on impaired driving related motor vehicle crashes and fatalities. Law enforcement agencies apply for HVE funding and are selected using FARS and other data sources to identify the areas with a high number of impaired driving related crashes and fatalities. Agencies deploy their resources at their discretion during the enforcement periods, using local data to determine enforcement strategies as to location, day of week, time of day, etc. Law enforcement agencies report their activity through narrative reports and also report arrest and citation data on the readily available CDOT "Heat Is On!" website.

#### **SPEED ENFORCEMENT**

Law enforcement agencies participating in Colorado's HSO Speed Enforcement Programs are identified through a problem identification analysis. Law enforcement agencies in the Speed Enforcement Program worked closely with the HSO Law Enforcement Coordinator (LEC) to create enforcement plans that included officer performance standards, project baselines and goals, an evaluation plan and a night-time speed enforcement element.

#### **Grant Funding Overview**

The Office of Transportation Safety (OTS), within the Colorado Department of Transportation, received funding from the National Highway Traffic Safety Administration (NHTSA) through the Fixing America's Surface Transportation (FAST) Act.

For FY18 all projects were funded through the FAST ACT and this legislation authorized funding for the following grant programs:

#### Section 402 - State and Community Highway Safety Grant Program

**Purpose:** Section 402 funds are used to support State highway safety programs designed to reduce traffic crashes and resulting deaths, injuries and property damage.

#### <u>Section 405B – Occupant Protection Grants</u>

**Purpose:** To encourage States to adopt and implement effective occupant protection programs to reduce highway deaths and injuries resulting from unrestrained or improperly restrained vehicle occupants.

#### Section 405C – State Traffic Safety Information System Improvements Grants

**Purpose:** To support the development and implementation of effective State programs that:

- Improve the timeliness, accuracy, completeness, uniformity, integration and accessibility
  of the State safety data that are needed to identify priorities for Federal, State and local
  highway and traffic safety programs.
- Evaluate the effectiveness of efforts to make such improvements.
- Link the State data systems, including traffic records, with other data systems within the State, such as systems that contain medical, roadway and economic data.
- Improve the compatibility and interoperability of the data systems of the State with national data systems and data systems of other States. And,
- Enhance the ability of the Secretary to observe and analyze national trends in crash occurrences, rates, outcomes and circumstances.

#### **Section 405D - Impaired Driving Countermeasures Grants**

**Purpose:** To encourage States to adopt and implement effective programs to reduce driving under the influence of alcohol, drugs or the combination of alcohol and drugs.

#### **Section 405F – Motorcyclist Safety Grants**

**Purpose:** To encourage States to adopt and implement effective programs to reduce the number of single- and multi-vehicle crashes involving motorcyclists.

#### **PERFORMANCE MEASURES**

A-1. Number of seat belt citations issued during grant-funded enforcement activities (grant activity reporting)

Number of seat belt citations issued in 2017: 8,395

A-2. Number of impaired driving arrests made during grant-funded enforcement activities (grant activity reporting)

Number of impaired driving arrests made in 2017: 13,499

A-3. Number of speeding citations issued during grant-funded enforcement activities (grant activity reporting)

Number of speeding citations issued in 2017: 3,340

B-1. Increase the observed seat belt use rate for passenger vehicles

Goal: Increase the observed seat belt use rate for passenger vehicles to 87% in 2017.

Observed seat belt use rate for passenger vehicles in 2017: 83.8% STATUS: 2017 performance measure not met

#### C-1. Reduce the number of traffic fatalities

Goal: Maintain the number of traffic fatalities in 2017 at 488.

Number of traffic fatalities in 2017: 648

**STATUS: 2017 performance measure not met.** 

#### C-2. Reduce the number of serious injuries in traffic crashes

Goal: Reduce the number of serious injuries in traffic crashes in 2017 to 3,201.

Number of serious injuries in traffic crashes in 2017: 2,416

**STATUS: 2017 performance measure exceeded.** 

#### C-3. Reduce the fatalities per Vehicle Miles Traveled (VMT)

Goal: Reduce the fatality rate per VMT in 2017 to .99.

Total fatalities per Vehicle Miles Traveled (VMT) in 2017: 1.21

STATUS: 2017 performance measure not met.

# C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions

**Goal:** Reduce the number of unrestrained passenger vehicle occupant fatalities in 2017 to 163.

Number of unrestrained passenger vehicle occupant fatalities in 2017: 220

**STATUS: 2017 performance measure not met.** 

## C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above

**Goal:** Maintain the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above in 2017 at 160.

Number of fatalities in crashes involving a driver or motorcycle operator with BAC of .08 and above in 2017: 142

**STATUS:** 2017 performance measure was met.

#### C-6. Reduce the number of speeding-related fatalities

**Goal:** Reduce the number of speeding-related fatalities in 2017 to 162.

Number of speeding-related fatalities in 2017: 230

**STATUS:** 2017 performance measure not met.

#### C-7. Reduce the number of motorcyclist fatalities

**Goal:** Maintain the number of motorcyclist fatalities in 2017 at 94.

Number of motorcyclist fatalities in 2017: 103

**STATUS: 2017 performance measure not met.** 

#### C-8. Reduce the number of unhelmeted motorcyclist fatalities

Goal: Maintain the number of unhelmeted motorcyclist fatalities in 2017 at 60.

Number of unhelmeted motorcyclist fatalities in 2017: 67

**STATUS:** 2017 performance measure not met.

#### C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes

**Goal:** Maintain the number of drivers age 20 or younger involved in fatal crashes in 2017 at 74.

Number of drivers age 20 or younger involved in fatal crashes in 2017: 93

**STATUS:** 2017 performance measure not met.

#### C-10. Reduce the number of pedestrian fatalities

Goal: Reduce the number of pedestrian fatalities in 2017 to 60.

Number of pedestrian fatalities in 2017: 92

STATUS: 2017 performance measure not met.

#### C-11. Reduce the number of bicyclist fatalities

Goal: Maintain the number of bicyclist fatalities in 2017 at 10.

Number of bicyclist fatalities in 2017: 16

**STATUS:** 2017 performance measure not met.

#### C-12. Reduce the number of distracted drivers involved in fatal crashes

Goal: Maintain the number of distracted drivers involved in fatal crashes in 2017 at 59.

Number of fatal crashes involving a distracted driver in 2017: 70

**STATUS:** 2017 performance measure not met.

#### C-13. Reduce the number of drivers aged 65 years or older involved in fatal crashes

**Goal**: Reduce the number of drivers aged 65 years or older involved in fatal crashes in 2017 to 74.

Number of drivers age 65 and older involved in fatal crashes in 2017: 89

STATUS: 2017 performance measure met/not met.

### C-14. Reduce the number of fatalities in crashes involving a driver or motorcycle operator, testing positive for drugs

**Goal:** Maintain the number of fatalities in crashes involving a driver or motorcycle operator testing positive for drugs in 2017. Goal not set as data unavailable.

Number of fatalities in crashes involving a driver or motorcycle operator testing positive for drugs in 2017: 208

**STATUS:** In progress

The State of Colorado continues to see an upward trend in traffic fatalities over the past three years. The HSO uses all State and Federal funding resources to address these challenges. However, State resources, previously dedicated to the HSO, have been diverted or reauthorized to other State agencies. Law enforcement agencies across Colorado have competing priorities that take away from dedicated traffic enforcement. Colorado's traffic laws, including secondary belt enforcement, no motorcycle helmet law for adults, a less than robust distracted driving law and a GDL law not generally understood by the public, contribute to the difficulty in enforcement and awareness. In addition, the Strategic Highway Safety Plan (SHSP), while in progress, has not been fully implemented.

In order to create a plan to better address the FY18 identified performance measures and goals the HSO, using Problem Identification, will identify law enforcement agencies and are exploring the possibility of funding dedicated traffic safety units. The Statewide Occupant Protection Task Force will be mobilized and engage partners and stakeholders in an effort to pass a primary seat belt law and to strengthen the current distracted driving ban. The HSO is also prepared to work with the Traffic Safety Engineering Branch to update and implement the SHSP.

#### **IMPAIRED DRIVING**

In 2017 there were 648 total traffic fatalities, of which 142 involved a driver with a BAC (blood alcohol concentration) of .08 or greater.

The Highway Safety Office's (HSO) Impaired Driving program funds projects through a Problem Identification process that support CDOT's efforts to meet impaired driving-related performance measures. The Impaired Driving program included high visibility impaired driving enforcement; impaired driving education; police traffic services, community-based prevention programs, law enforcement training and technical assistance.

#### **Program Administration**

15 projects were managed with a planned budget of \$2,076,030.

#### Efforts and activities to decrease Impaired Driving included:

- Aggressive high-visibility enforcement; including multi-jurisdictional enforcement "Border Wars" and 12 high visibility enforcement campaigns;
- Enforcing impaired driving laws on sections of roadways with high incidence of alcoholrelated crashes including Statewide sobriety checkpoints through "Checkpoint Colorado";
- Provided leadership role to the Colorado Task Force on Drunk and Impaired Driving;
- Maintained existing DUI Courts;
- Worked with community groups throughout the state to develop and implement impaired driving programs appropriate to the needs of their populations.

Program Name: DRE/SFST Updates Contractor: LEAD Impairment Training

This project addressed performance measure C-5. Reduce the number of fatalities involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program was to provide Colorado Law Enforcement Agencies with the training required to maintain certifications, skill sets and proficiencies. The programs addressed were the SFST Instructor and Drug Recognition Expert (DEC) groups.

LEAD Impairment provided regional based In-Service Training classes to five locations in the State of Colorado to include Ft. Morgan, Lakewood, Pueblo, Durango and Rifle. The training was conducted on a two-day basis that allowed for maximum engagement within the community.

The training consisted of material revisions and updates, procedural changes, instruction techniques and legal updates. Each attendee was required to show proficiency in the Standardized Field Sobriety Tests. LEAD provided training to approximately 128 SFST Instructors and 67 Drug Recognition Experts.

LEAD Impairment partnered with the Denver Police Department to offer 10 DRE Certification Nights at the Denver DUI Unit located at the Denver County Jail. Drug Recognition Experts are required to conduct and Instructor supervised evaluation as part of the bi-yearly recertification program.

LEAD Impairment continues to provided CO Law Enforcement Officer's (LEO's) with the highest level of SFST and DRE related training and certification support programs.

Program Name: Colorado Task Force on Drunk and Impaired Driving

Contractor: Colorado State Patrol (CSP)

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to provide administrative support to the Colorado Task Force on Drunk and Impaired Driving (CTFDID) to increase its ability to accomplish its mission and increase traffic safety by working to reduce the number of drivers under the influence of drugs or alcohol.

This project impacted the Performance Measures by providing administrative support to the CTFDID by assisting with the following:

- CSP documented ten Task Force meetings.
- CSP provided facilitation and documentation for 15 Task Force work group meetings.

The CSP compiled an analysis of activities, recommendations, and progress toward goals with the following documentation:

• CTFDID 2017 Annual Report was completed and presented to the Colorado legislature in early January 2018.

Program Name: Colorado Judicial DUI Courts

Contractor: Colorado State Judicial

This ongoing project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program is to reduce drunk driving incidents by providing support for newly implemented Colorado DUI Courts. DUI Courts provide intensive case supervision, full assessment of treatment needs, weekly or biweekly court appearances, and immediate responses to behavior and treatment adjustments for the high risk, high need persistent drunk driver in an effort to reduce recidivism, increase community safety, and support the individual in long-term recovery. All DUI Courts adhere to the research based 10 Guiding Principles for DUI Courts, have received DUI Court specific training, and are focused on high risk and high need offenders that meet the criteria for persistent drunk drivers. In FY18, the project impacted the performance measure by:

- Provided training to over 160 multidisciplinary professionals statewide (including Judges, Law Enforcement, District Attorneys, Public Defenders, Probation Officers and Treatment Providers) on evidence based practices, ethical considerations, local services and resources, and treatment considerations when working with the high risk DUI offender.
- Accepted Accreditation applications from 5 DUI Courts within the state of Colorado.
- Completed site visits of 7 DUI Courts within the state of Colorado to observe practice and provide individualized consultation, support and technical assistance.
- Supported the planning and implementation of 2 new DUI Courts within the state.
- One program completed an in-depth programmatic review, and one commenced their in-depth programmatic review with completion occurring in early FY19.
- Provided intensive drug monitoring services to high risk DUI offenders involved in courts in Denver, Alamosa, Las Animas, Huerfano and Morgan counties.

Program Name: Traffic Safety Resource Prosecutor Program

Contractor: Colorado District Attorneys' Council

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to work to prevent an increase beyond 160 fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above during the fiscal year 2018.

The project impacted the performance measure by:

- Conducted 102 live classes (during which about 13,300 hours of training was provided for prosecutors, law enforcement and other traffic safety personnel);
- Provided access to 19 webinars or recorded video tutorials;
- Contributed to the Just Science Podcast Episode 5: Just Doobious Driving
- Maintained materials such as, motions bank and defense expert database for prosecutors on cdacweb.com;
- Posted events and information to cdacweb.com on traffic/impairment related forums:
- Continued to update resource materials: 2018 DUI/DWAI MANUAL: A Guidebook for Colorado Prosecutors, State of Colorado Impaired Driver Enforcement Manual 2018, SFST Primer for Law Enforcement and Prosecutors; and
- Answered almost 300 requests for technical assistance.

During FY2018, prosecutor and law enforcement knowledge and skills related to impaired driving was increased. All objectives of the Action Plan were met or exceeded.

Program Name: Checkpoint Colorado

Contractors: Various Law Enforcement agencies

This project addressed performance measures C-2. Reduce the number of serious injuries in traffic crashes and C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program was to reduce the number of DUI/DUID caused fatal and injury crashes involving drivers with a BAC of 0.8 percent.

In order to meet these performance measure, law enforcement agencies were selected to collaborate on high visibility sobriety checkpoints. These checkpoints took place between Memorial Day and Labor Day with two of those checkpoints occurring during holiday weekends.

The purpose of sobriety checkpoints is to deter impaired driving by increasing the perceived risk of arrest. The National Highway Safety Administration (NHTSA) research shows that in areas where sobriety checkpoints are routinely practiced, the number of alcohol related traffic fatalities and crashes are reduced.

- Participating agencies included; Adams County Sheriff's Office, Department, Aurora Police Department, Colorado State Patrol, Denver Police Department, La Plata County Sheriff's Department, and Thornton Police Department.
- 21 checkpoints were conducted, 15,689 vehicles went through the checkpoints, 60 impaired driving arrests were made including 6 drug arrests.

Program Name: Drug Recognition Expert (DRE) Tech Transfer

Contractor: Office of Transportation Safety (OTS)

This project addressed performance measures C-1. Reduce the number of fatalities and C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

#### **Project Description**

The goal of this project was to continue to provide funding for registration and travel costs related to DRE training, including the International Association Chiefs of Police (IACP) Impaired Driving Conference.

This task provided funding for traffic safety professionals, involved in impaired driving enforcement and training, to attend the 24<sup>nd</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving held in Nashville, Tennessee from August 13 - August 15, 2018.

The conference allows attendees receive the most current information and training on impaired driving and DRE issues. Attendees bring the information back to Colorado and use at the mandatory in-service training.

#### 2018 Attendees:

Mark Ashby, Thornton PD, Douglas Conrad, Colorado State Patrol, Kevin Deichsel, Aurora, PD, Nicola Erb, Breckenridge PD, Rodney Noga, CO State Patrol, Jennifer Plutt, Park County Sheriff's Office, and Robert Ticer, Loveland PD.

Program Name: Impaired Driving Overtime Enforcement

Contractor: Colorado State Patrol

The Colorado State Patrol (CSP) DUI overtime enforcement project addressed the following performance measures:

C-3: Reduce the fatalities per Vehicle Miles Traveled (VMT)

C-5: Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above

The goal of this program was to reduce the number of DUI/DUID caused fatal and injury crashes involving drivers with a BAC of 0.8 statewide by 25% from 160 fatalities in 2014 to 120 fatalities in 2018.

The project impacted the performance measures by:

- A total of 4,199.25 hours of DUI overtime enforcement were provided by the CSP.
- There were 301 DUI arrests made.
- There were 131 Drug Recognition Expert (DRE) call out hours were provided by the CSP.
- The total number of DRE call-outs were 56.
- The number of CSP initiated evaluations were 10 and there were 3 evaluations initiated by other law enforcement agencies.

Colorado State Patrol experienced a 12.0% statewide decrease in fatal crashes during the 2018 calendar year. From January to September 2017 fatalities were at 3,073 and from January to September 2018 fatalities were at 2,705. CSP continues to provide enforcement with the expectation of changing behavioral patterns, which will continue to carry over into future grant cycles.

Task Number: 18-01-11-10 Program Name: Border Wars

Contractor: Larimer/Weld County Law Enforcement Agencies

This project addressed performance measures C-1. Reduce the number of traffic fatalities, C-2. Reduce the number of serious injuries in traffic crashes and C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program was for law enforcement to decrease the number of traffic crashes, traffic violations and reduce impaired driving on the Highway 287 from Fort Collins to the Wyoming border.

The focus of the campaign was a 65-mile stretch of US Highway 287 between Fort Collins and Laramie Wyoming. Parts of I-25 between Cheyenne and Fort Collins were also patrolled. Saturation patrols to target dangerous drivers. Drug Recognition Experts were on hand for evaluations of drivers suspected to be under the influence of marijuana and other drugs, and the Denver Police Department brought a Breath Alcohol Testing Van to process impaired drivers.

Friday, October 26 Law Enforcement agencies from Colorado and Wyoming teamed up as a part of a multi-state, multi-agency seat-belt, speeding and impaired driving enforcement operation. The Colorado agencies involved were: Colorado State Patrol, Colorado State University, Larimer County Sheriff's Office, Fort Collins Police Department, Estes Park Police Department, and Loveland Police Department.

In Colorado, officers made 175 stops, which resulted in 41 speeding citations, five seat belt citations, 107 warnings for other violations and 29 other citations.

Program Name: 2018 DUI/HVE/Checkpoints

Contractor: Aurora Police Department

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program was to reduce the number of fatal, injury, and property damage crashes where DUI/DUID was a factor through the use of high visibility enforcement, and expanding our public education efforts.

The project impacted the Performance Measure by:

- 4 high visibility DUI/DUID checkpoints were conducted. They were publicized through social media, and/or press releases.
- 4 large scale high visibility saturation patrols were conducted. They were preceded by press releases.
- Saturation events and checkpoints were often conducted on the same night to send a strong message about enforcement efforts.
- The DUI Taxi was displayed at multiple colleges and public events around the metro area in conjunction with officers speaking about the dangers of DUI/DUID.
- Messages were posted to Facebook and Nextdoor by officers about the dangers of impaired driving. Multiple interviews with the media regarding impaired driving were conducted.
- A total of 160 DUI arrests, and 28 DUID arrests were made during enforcement efforts funded by this program.

A slight decrease in DUI/DUID related crashes in the city from 5.6% in FY2017 to 4.7% in FY2018 was noted.

Program Name: Denver's Comprehensive Impaired Drivers Program

Contractor: Denver Police Department

This project addressed performance measure C-5: Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 or above by 10% (baseline: 39 in FY15).

During the 2018 CDOT grant period, the Denver Police Department (DPD) continued its enforcement activities including DUI saturation patrols and high-visibility enforcement campaigns for speeding, careless, reckless, and aggressive driving; DUI checkpoints for speeding, careless, reckless, and aggressive driving; saturation patrols for driving under the influence of drugs; and DUI checkpoints for driving under the influence of drugs.

The project impacted performance measure C-5 the following ways:

- 1. Conducted three checkpoints on 5/27/18, 6/30/18, and 8/17/18.
- 2. In total, 2,396 motor vehicles were stopped and checked.
- 3. There were five saturation patrols conducted outside of HVE campaigns and 13 saturation patrols during HVE campaigns, totaling 18 saturation patrols.
- 4. SFST evaluations: 64 drivers during the checkpoints; 138 during the HVE campaigns; 78 during saturation patrols during HVE campaigns; and 33 during saturation patrols outside of HVE dates
- 5. 916 drivers were arrested for DUI; the most (765) were arrested during HVE campaigns
- 6. 77 drivers were evaluated by DREs, where 17 were blood draws by DRE arrest and 30 were blood draws by non-DRE.
- 7. 18 DUI saturation patrols were conducted downtown Denver; 13 were conducted during HVE events and five outside of the HVE dates
- 8. 2,396 vehicles were checked during the three checkpoints (5/27/18, 6/30/18, 8/17/18)

Program Name: Regional Law Enforcement Coordinators

Contractors: HSO Contractors

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant protection fatalities, all seat positions and C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to utilize the knowledge and expertise of the five regional law enforcement liaisons in order to assist local law enforcement agencies in the areas of impaired driving, occupant protection and the other behavioral programs within the Highway Safety Office.

The project impacted the performance measures by:

Conducting multi-agency grant training presentations at 9 locations around the state; Topics included, High Visibility Enforcement, Law Enforcement Assistance Fund, First Time Drunk Driver Funds, mini grants, and federal grants.

Developing a new Traffic Safety reporting website, Colorado Law Enforcement Liaison Facebook page, and the Colorado Law Enforcement Dispatch newsletter.

Attending National LEL webinars, TSI's Law Enforcement Liaison Training, 2018 Lifesavers Conference, Border Wars, Task Force meetings and required quarterly LEL meetings.

Conducting pre-works, site visits and capital equipment inspections.

Program Name: Drug Recognition Expert (DRE) Training

Contractor: OTS

This project addressed performance measure C-1. Reduce the number of fatalities and C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to continue to expand the DRE training program by providing DRE in-service training, certification nights and other training opportunities.

#### Results:

- A DRE In-Service in partnership with CSP took place in Pueblo, CO February 26-28, 2018. This included hosting of a Green Lab for DREs. Over 50 CSP and local DREs attended the 2-day event.
- Replacement equipment for DREs purchased including pupilometers, thermometers, etc.
- Attendance at various trainings to complete DRE recertification training requirements.

Program Name: Checkpoint Equipment

Contractor: Various Law Enforcement agencies

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to provide agencies with equipment needed to conduct checkpoints. The National Highway Traffic Safety Administration (NHTSA) research shows that in areas where sobriety checkpoints are routinely practiced, the number of alcohol related traffic fatalities and crashes are reduced. The success of a sobriety checkpoint depends greatly upon high visible, publicized extensively, and having smooth and efficient operations. This includes having the necessary equipment readily available to conduct the checkpoints.

- Thornton Police Department was the only Checkpoint agency that utilized Checkpoint equipment funds and purchased 1 Wanco Portable Light Trailer.
- 25,000 Checkpoint Colorado handouts were purchased to hand out at the checkpoints

Program Name: Portable Breath Testers, Calibration Stations, and Dry Gas

Contractors: Intoximeters and Lifeloc

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

Portable Breath Alcohol Testers (PBTs) are an important tool used by law enforcement to increase roadside screening effectiveness. Law enforcement use of portable fuel cell breath testers is known to result in higher and more accurate detection rates of impaired drivers than officer judgement alone.

EASYCAL lowers calibration gas usage, improves record keeping and eliminates the risk of operator errors associated with performing incorrect calibrations, cal-checks and subsequent breath tests.

Dry Gas Calibrators are used for checking and calibrating screening devices. The following were purchased:

Intoximeters: 25 Alco Sensor FST Portable Breath Testers

Lifeloc: 47 FC10 Plus Portable Breath Testers

Recipients of these products were Traffic Safety Champions, Drug Recognition Experts, and Checkpoint Colorado agencies.

Program Name: DUI Enforcement

Contractor: Adams County Sheriff's Office

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program was to decrease traffic fatalities in Adams County from 15% to 13%.

The project impacted the performance measure by:

- Participation occurred in all 14 of the High Visibility Enforcement periods.
- Two checkpoints were hosted by Adams County and conducted in conjunction with multiple agencies in high visibility areas to include Thornton Police Department and the Colorado State Patrol.
- Four saturation events were hosted by Adams County and conducted in conjunction with multiple agencies in high visibility areas to include Thornton, Northglenn, Westminster, Colorado State Patrol, Brighton, and Commerce City.
- Adams County had 171 grant funded overtime shifts.
- Adams County made 421 DUI / DUID arrests.
- Adams County issued 7434 citations
- Adams County provided DUI education to a Citizens Academy and hosted a Green Lab Driving event.

#### SPEED ENFORCEMENT AND CONTROL

In 2017, 230, or 35%, of the 648 total traffic fatalities were speed related. The 230 speed related fatalities in 2017 represents a 9% increase of the 211 speed related fatalities in 2016.

The goal of the Highway Safety Office's (HSO) Speed Enforcement program is to assist law enforcement in establishing and maintaining successful and effective speed enforcement and control programs.

#### **Program Administration**

6 projects were managed with a planned budget of \$344,000.

#### **Efforts and activities to increase Speed Enforcement and Control included:**

- Speed enforcement efforts on I-25, I-225 and I-70 and SH 93 throughout the cities of Denver, Pueblo, Aurora and Jefferson and El Paso counties;
- Working with other local law enforcement agencies to improve their speed enforcement projects through a mini grant program; and
- Providing high visibility nighttime enforcement.

Program Name: Denver Targeted Speed Enforcement of High Risk Roadways

Contractor: Denver Police Department

This project addressed performance measure C-6: Reduce the number of speedingrelated fatalities.

The goal of this project was to decrease the number of speeding-related fatalities in Denver County by 50% or maintain the low number of speeding-related fatalities on Denver County highways.

During the 2018 CDOT grant period, the Denver Police Department (DPD) continued its enforcement activities on I-25 and I-70, with a goal of maintaining 3.1 speeding citations per funded hour. Additionally, the Department focused on days associated with speed-related crashes, including Friday, Saturday, and Sunday, while also maintaining an average of 90 hours per month of dedicated high visibility enforcement (HVE) speed operations along I-25 and I-70.

The project impacted performance measure C-6 the following ways:

- 1. Officers worked a total of 927 hours on mostly Fridays, Saturdays, and Sundays, focusing solely on I-25 and I-70.
- 2. Lidar and radar were used unless inclement weather limited its usage.
- 3. Officers came in contact with and wrote citations for 2,879 drivers over the four quarters, with the highest number of contacts occurring in the second quarter, with 961 speeding citations, followed by 823 citations in the first quarter, 742 citations in the third, and 353 citations in the fourth quarter.
- 4. There were 3.105 speeding citations per funded hour, meeting that milestone.

Program Name: Aurora Highway Safety Speed Campaign

Contractor: Aurora Police Department

This project addressed performance measure C-6. Reduce the number of speeding related fatalities and C-2. Reduce the number of serious injuries in traffic crashes.

The goal of this program was to reduce the number of fatalities, injuries, and crashes where speed was a contributing factor in the crash, and to educate both drivers and passengers about the dangers associated with excessive speed.

The project impacted the Performance Measures by:

- High visibility enforcement operations and individual officer enforcement efforts were conducted on the interstate highways and surface streets within the city.
- Messages about the dangers of speeding and aggressive driving were posted on Facebook and Nextdoor.
- Local media coverage was used to send the message about the dangers of speeding and aggressive driving, specifically with regard to fatal accidents on several occasions. Officers provided interviews and statistics to reporters.

A significant outcome of this program was a reduction in the percentage of fatal crashes that indicated speed was a contributing factor that exceeded the program goal. Fatal crashes involving speed as a causation factor increased to 35%, and the goal was 27%. Another positive outcome of this program was a constant reduction in the percent of overall crashes where speed was a contributing factor every quarter this year. 1<sup>st</sup> quarter 11% (up from 10%), 2<sup>nd</sup> quarter 9% (down from 15%), 3<sup>rd</sup> quarter 7% (down from 10%), and 4<sup>th</sup> quarter 1% (down from 10%).

Program Name: HVE of Speeding Drivers

Contractor: Colorado Springs Police Department

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This project addressed performance measure C-6, reduce the number of speeding related fatalities.

The goal of this project was to reduce the number of traffic fatalities and serious injury crashed by 5% compared to a 2014 baseline among Colorado Springs drivers.

The project impacted the performance measure by:

Increasing enforcement of speeding laws in Colorado Springs through continuing high visibility enforcement strategies

Using speed trailers at four high crash rate intersections selected from the Top 25 Locations.

- 305 hours of High Visibility Speed Enforcement Deployments were conducted at high visibility intersections throughout the year.
- Deployments included the use of marked vehicles and motorcycles during the enforcement period.
- These deployments resulted in 441 speeding citations, 441 traffic contacts, and 459 total violations cited.
- CSPD posted 17 messages via Twitter warning drivers about the dangers of speeding and that additional enforcement was taking place. Each of the tweets reached over 50,000 followers via the CSPD PIO account, and one incident was re-tweeted to 158,640 followers. Over the course of the year, CSPD reached 217,720 followers.
- Through September 2018, traffic crashes were down 6.1% compared to the 2014 baseline. However, this number is up by 1.6% compared to the same time period in 2017

Program Name: Speed Mini Grants

Contractor: Colorado Law Enforcement Agencies

This project addressed performance measure C-6. Reduce the number of speedingrelated fatalities.

The Highway Safety Office (HSO) offered Colorado law enforcement agencies the opportunity to apply for Speed Enforcement mini-grants to support enforcement efforts and to purchase speed measuring equipment. These agencies were eligible to apply for funding up to \$4,950.00 and were required to report on the progress of their speed enforcement grants using the period before the CDOT funding as a baseline.

These agencies committed to perform at least one night-time speed enforcement event. All law enforcement agencies showed significant increases in speed enforcement activities.

The HSO selected eight Colorado law enforcement agencies to be the recipients of these mini grants:

University of Colorado-Boulder
 Lakewood Police Department
 Kustom Signals Lidar
 Overtime Enforcement

Dacono Police Department
 Stalker Radar

Englewood Police Department
 Overtime Enforcement

• Evans Police Department Overtime Enforcement

Montezuma County Sheriff's Office Applied Concepts- SAM Trailer

Holyoke Police Department
 Milliken Police Department
 Kustom Signals Radar
 Applied Concepts- Lidar

Program Name: A Step towards Reducing Traffic Fatalities

Contractor: Pueblo Police Department

This project addressed performance measure C-6: Reduce the number of speedingrelated fatalities

The goal of this project was to decrease the number of speed related fatalities in the City of Pueblo from 44% average of the past 5 years to 20% by September 30, 2018.

The project impacted the Performance Measures by:

- A total of 448 hours of special speed enforcement was performed over the year.
- 1295 citations were issued while engaged in grant related enforcement.
- Department wide 2,398 speeding citations were issued.
- 221 citations were written in work and school zones, resulting in zero fatalities in those special enforcement areas.
- A mixture of individual and team speed enforcement projects was utilized.

During fiscal year 2018 the city of Pueblo experienced thirteen traffic fatalities, an 18% increase over 2017 which had eleven.

In FY 2018 five fatal crashes had speed as a factor.

While the total number of crashes decreased slightly in comparison from FY 2017 to FY 2018, the total number of fatality crashes increased by 18%. Activities for goal attainment included an educational component in the high schools as well as speed signs.

Program Name: Highway 93/285 Speed Reduction Campaign

Contractor: Jefferson County Sheriff's Office

This project addressed performance measure C-6. Reduce the number of speeding related fatalities.

The goal of this project was to reduce speed related fatalities.

The project impacted the performance measure by:

- Increased law enforcement presence on high crash roads
- Deployment of resources during peak days of week and times of day
- Strict enforcement of speed and other aggressive driving violations

JCSO deputies worked 1,145 hours over the course of 153 shifts on both roadways. They served 2,529 summonses. 2,500 summonses were for speeding violations and 29 summonses were for other violations. Three DUI arrests were made while deputies were working this grant. Deputies averaged 2.2 summonses served per hour worked.

Colorado State Patrol crash data reports that there were no any fatal crashes on Highway's 93 and 285 during this enforcement period.

### OCCUPANT PROTECTION, CHILD PASSENGER SAFETY, DISTRACTED DRIVING AND YOUNGER AND OLDER DRIVERS

In Colorado, unrestrained traffic fatalities in 2017 experienced a 16% increase, from 186 in 2016 to 220 in 2017. The Statewide seat belt usage rate remains below the national average of 85% and Colorado also remains one of 13 States without a primary seat belt law.

Driver inattention is a contributing factor in many crashes, and cell phone use and texting are some of the most common driver distractions. Colorado has a law prohibiting texting if the driver is driving carelessly, and a law prohibiting cell phone use for drivers under 18. However, distracted driving continues to be a traffic safety challenge.

Fatalities among drivers under age 21 have increased an alarming 39% from 59 in 2016 to 93 in 2017. The likelihood of a young driver being involved in a crash is still greatest in the first few years of driving.

The Highway Safety Office (HSO) has identified Older Drivers as a traffic safety emphasis area. Traffic fatalities involving Older Drivers age 65 and older had been on the increase since 2010, however, they decreased from 92 in 2016 to 89 in 2017, a 4% decrease.

The Highway Safety Office focused on establishing and enhancing Occupant Protection, Child Passenger Safety, Distracted and Young Driver programs in several metro area locations including El Paso, Denver, Jefferson, Larimer, Mesa, Arapahoe and Pueblo counties; rural areas and the Ute Mountain Ute tribe as well as numerous state-wide efforts.

#### **Program Administration**

34 projects were managed with a planned budget of \$2,741,850.

#### Efforts and activities include:

- Providing support to law enforcement to enforce Colorado's seat belt laws during three "Click It or Ticket" high-visibility campaigns including two Rural campaigns and May Mobilization;
- Creating strategies to address child passenger safety and booster seat usage;
- Piloting new and supporting established Distracted Driving awareness, education and enforcement programs;
- Educating teen drivers and their parents on seat belt use and other teen driving safety issues, including GDL program; and
- Piloting Older Driver education and awareness programs.

Program Name: Click It or Ticket Contractor: Colorado State Patrol

This project addressed performance measures B-1. Increase the observed seat belt use for passenger vehicles and C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of the program was to reduce the number of unrestrained or improperly restrained individuals, in all vehicle positions, resulting in fewer fatal and injury crashes on Colorado roadways.

The project impacted the Performance Measures by:

- CSP provided 2,964 hours of grant funded enforcement to include three CDOT sponsored enforcement waves (March, May Mobilization, and July Rural), as well as some individual Troop targeted enforcement.
- These hours supported 4,050 grant funded vehicle contacts and 2,637 grant funded seat belt citations.
- CSP continues to use social media as a tool to relay seatbelt safety messages.
  In this grant cycle, 95 safety messages were posted to Facebook and Twitter
  accounts resulting in over 744,602 views and impressions (comments, likes, and
  shares). These messages help ensure the audiences of diverse populations
  understand the dangers of unrestrained drivers and passengers.

Colorado State Patrol experienced a 12.0% statewide decrease in fatal crashes during the 2018 calendar year. From January to September 2017 fatalities were at 3,073 and from January to September 2018, fatalities were at 2,705. CSP continues to provide enforcement with the expectation of changing behavioral patterns, which will continue to carry over into future grant cycles.

Program Name: Local Law Enforcement Agencies-Click it or Ticket

Contractor: Local Law Enforcement Agencies

This project addressed performance measures B-1. Increase the observed seat belt use for passenger vehicles and C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

This was accomplished by conducting 3 large scale seatbelt enforcement campaigns. Click it or Ticket, Rural # 1, May Mobilization and Click it or Ticket, Rural # 2 campaigns were held between March and July 2018.

With coordination and recruitment by CDOT's Law Enforcement Coordinator, the goal of this project was to encourage Colorado local law enforcement agencies to aggressively enforce occupant protection laws through a combination of enforcement, education, and awareness.

- A total of 71 agencies,869 officers and deputies worked 7,750 hours and issued 8,119 seatbelt violations
- Rural #1 enforcement consisted of 50 agencies, 55 officers and deputies worked 1,531 hours and issued 1,279 seatbelt violations.
- May mobilization consisted of 71 agencies, 608 officers and deputies worked 4,808 hours and issued 5,902 seatbelt violations
- Rural # 2 enforcement consisted of 47 agencies, 206 officers and deputies worked 1,411 hours and issued 938 seatbelt violations
- Average cost of a seat belt citation was \$ 121.00

Program Name: Occupant Protection Technology Transfer

Contractor: HSO Partners and Highway Safety Office

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions and B-1. Increase the observed seat belt use rate for passenger vehicles.

Funds from the OP Tech Transfer were used to send two HSO employees, one contractor from the Colorado Department of Public Health and Environment, two law enforcement liaisons, and one grantee from Drive Smart Colorado to San Antonio, Texas April 22-24, 2018 to attend the Lifesavers Conference.

Upon conclusion of the conference, recipients of these scholarships were required to submit a summary of their experience and how attending the conference would benefit their agencies.

Program Name: High-Visibility Traffic Safety Campaigns/Mini-Grants

Contractor: HSO Partners

This project addressed performance measure B-1. Increase the observed seat belt use for passenger vehicles and C-5. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions

Mini grants were offered to community coalitions and other agencies to help support traffic safety education efforts and enforcement campaigns in the areas of occupant protection, child passenger safety, motorcycle safety and impaired driving prevention programs.

Two regional recognition events "Traffic Safety Champions" were held to honor the men and women of law enforcement for their commitment and dedication in enforcing impaired driving and occupant protection laws.

- Two recognition events were held, one in Grand Junction and the other in Denver. A total of 86 individuals and 40 agencies were honored.
- Englewood Police Department was the only law enforcement agency that requested occupant protection mini grants
- Eight regional law enforcement trainings were held around the state and attended by 198 representatives from 115 sheriff's offices and police departments and 3 State Patrol troops.

Program Name: Seat Belt Survey

Contractor: Atelior, LLC

The performance measure addressed by this study was C-4 Reduce the number of unrestrained vehicle occupant fatalities.

The goal of this project was to conduct direct observational surveys to arrive at an estimate of seat belt usage in the State of Colorado.

Project Description: The project was designed to collect seat belt usage data through direct observation of vehicles in two separate surveys. One survey (Premobilization) was conducted May 6 – 12 immediately prior to the enforcement wave. The second survey (Statewide) was a more comprehensive survey performed from June 3-16 after the enforcement wave. Both surveys were based upon statistical sampling of sites in the counties that account for 85% of the State's vehicle accident fatalities. The Pre-Mobilization study included 225 sites and observation of 41,025 vehicles. The Statewide Study involved 770 observation sites and 132,447 vehicle observations. The population of interest were drivers and outboard front seat passengers of cars, vans, SUVs, light trucks, and commercial vehicles 10,000 pounds or less

The performance measure was impacted by the data collected that is used to assist in designing and implementing educational efforts to improve seat belt usage rates in Colorado.

Results: The two surveys were conducted successfully as planned and yielded the following results:

- Both surveys found the overall seat belt usage rate to be 86.3%.
- Both surveys show a positive correlation between speed of vehicles and seat belt usage i.e. the higher the speed the higher the seat belt usage rate.
- Primary roads have a higher seat belt usage rate than secondary and local roads.
- The Statewide Non-observable rate was 2.9%
- Standard errors were .9% for Pre-Mobilization study and 3.3% for the Statewide

Program Name: High Visibility Seat Belt Enforcement/ Child Passenger Safety

Contractor: Aurora Police Department

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of this program was to increase seat belt use to the state goal of 84%, and to increase the use and/or proper use of child safety restraint systems. Another goal of the program was to decrease the number of unrestrained occupant fatalities from 21% to 19%.

The project impacted the Performance Measure by:

- High visibility enforcement operations, and individual officer enforcement efforts were conducted throughout the year.
- Multiple high visibility enforcement operations were conducted this year, including participating in the statewide Click-It-Or-Ticket high visibility enforcement periods.
- 23 child passenger safety check events were held.
- Officers posted messages on Facebook and Nextdoor about the importance of proper seat belt and child seat use.
- 166 child seats were inspected, and 5 seats were distributed.

A significant outcome of this program was an increase in seat belt usage over FY2016 and FY2017. During FY2016, the seat belt usage in Aurora was 83.75%. During FY2017 the seat belt usage increased to an average of 84%. Seatbelt usage for FY2018 was 85%, which exceeded the goal. The FY2018 unrestrained occupant fatalities was 15%, which exceeded the goal of 19%.

Program Name: HSO/CDPHE Policy Training

Contractor: Colorado Department of Public Health and Environment

The goal of this project was to increase the Office of Transportation Safety's Highway Safety Office grantee and community partner skills in educating organizational, local, and state leaders about evidence-based traffic safety policies.

The Colorado Department of Public Health and Environment's prevention and technical assistance coordinator coordinated the development, attendee recruitment, and facilitation of a two-day interactive Change Makers training for 54 local and state partners. Training speakers and participants included staff and grantees from the Colorado Department of Transportation, the Department of Human Services, and the National Highway Traffic Safety Administration as well as a City Manager, a Colorado legislator, and numerous non-profits and local public health agencies.

Prior to the training, participants conducted research within their respective employers on rules of engagement with policy work, identified policies they wanted to address in the training, and submitted introductory problem statements.

During the training, participants learned about and practiced:

- The role of policy change in impacting individual behaviors such as seat belt use, distracted driving, and impaired driving.
- Developing strategies to identify and educate decision makers on evidence based motor vehicle safety policies in the workplace, school, city, county, and state.
- Incorporating decision maker values and priorities into policy communications.
- Engaging coalitions in policy change initiatives.

Following the training, participants have applied their knowledge by taking more active roles in the Occupant Protection Task Force, applying for systems change grant funding, educating youth in advocacy initiatives, and strengthening motor vehicle safety plans to include policy based strategies.

Program Name: Traffic Safety Initiative Mini Grants

Contractor: Local Agencies

This project addressed the following performance measures C-1: Reduce the number of traffic fatalities, C-2: Reduce the number of serious injuries in traffic crashes, C-3: Reduce the fatalities per vehicle miles traveled, C-6: Reduce the number of speeding-related fatalities, C-7: Reduce the number of motorcycle fatalities, C-8: Reduce the number of unhelmeted motorcycle fatalities, C-12: Reduce the number of fatal crashes involving a distracted driver and C-13: Reduce the number of fatal crashes involving a driver age 65 years or older.

Various rural organizations from high risk counties identified in the 2017 Problem ID implemented Traffic Safety Initiative activities. These activities included: hosting a motorcycle safety fair, promoting senior bus ridership in an effort to encourage older drivers to "give up the keys", installation of VMS signs on highway patrol cars to eliminate secondary crashes, and a large distracted driving awareness campaign reaching thousands in an area underserved by other campaigns.

The project impacted the performance measures by:

- Just under 100 people attended Motorcycle Safety Fair learning about advanced riding classes, the MOST program, and general motorcycle safety
- 20,000 people reached through 1 hour long live radio station broadcast discussing importance and availability of motorcycle safety and training
- 11% increase in senior bus ridership shown from January June in rural county
- Marketing campaign directed hundreds of seniors to website educating them on older driver safety and when to "give up the keys"
- 3.92% decrease in distracted by cell phone crashes from 2017 to 2018 in metro county which may have been aided by or a direct result of Distracted Driving media campaign.
- Large outreach achieved to increase awareness of the dangers of
  Distracted Driving through the use of television commercials, station
  homepage weekend takeover, public service announcements, and "Noon
  News" interview. Matching was also provided affording a very large impact
  with the grant dollars
- LED messaging signs in 4 traffic unit police vehicles provided safety and information for 1,239 traffic stops and 365 crash investigations as well as multiple special events and high visibility enforcement periods.

Program Name: Child Passenger Safety Team Colorado

Contractor: Safety, Colorado Department of DBA Colorado State Patrol

This project addressed performance measures C-1. Reduce the number of traffic fatalities, C-3. Reduce the fatalities per vehicle miles traveled, and C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of the Child Passenger Safety (CPS) Program was to increase traffic safety by reducing the number of unrestrained passenger fatalities through proper safety restraints used by children and education of caregivers on the proper use of child restraints in all vehicles while transporting children.

The program impacted measures by:

- Colorado State Patrol conducted 22 safety programs.
- The number of seats checked was 2,762.
- The number of new car seats installed was 1,791.
- There were 11 recertification's, 79 new technician certifications, and 10 renewal certifications.
- There are 2 new instructor candidates as a result of this training.

A significant partnership was created with Ft. Carson Army Base in Colorado Springs, CO. Fort Carson, population 13,813, contacted CSP's Child Passenger Safety Program to initiate a base-wide Child Passenger Safety Program, which included nurses, firefighters, and military staff who successfully completed a three-day national certified training course. Additionally two instructors were recertified.

Program Name: Child Passenger Safety Program

Contractor: La Raza Services, DBA Servicios de la Raza

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of this project was to reduce traffic fatalities and serious injuries in children ages birth to age 8 by providing a culturally and linguistically responsive car seat inspection station specializing in child passenger safety education, inspection, installation and outreach, targeting Latino families and caregivers.

The project impacted the performance measures by:

- 38 child passenger safety presentations were offered at community agencies.
- Child passenger safety outreach was conducted at 34 community events.
- 2,870 families received child passenger safety materials during SDLR food bank hours, SDLR community resource events, and partner agency outreach sites.
- Education to caregivers on correct installation and use of child passenger seats was conducted at the SDLR inspection station, St. Anthony's Food Bank, and Adams County Human Services, a new location in FY18 to further serve Latino families.

100% of these families reported increased knowledge of child passenger safety and proper seats for their children in 2017-2018.

Program Name: Occupant Protection Mini Grants

Contractor: Local Agencies

This project addressed the following performance measures C-1: Reduce the number of traffic fatalities, C-2: Reduce the number of serious injuries in traffic crashes, C-3: Reduce the fatalities per vehicle miles traveled, C-4: Reduce the number of unrestrained passenger vehicle occupant fatalities (all seat positions), C-9: Reduce the number of drivers age 20 or younger involved in fatal crashes, and C-13: Reduce the number of fatal crashes involving a driver age 65 years or older.

Various rural organizations from high risk counties identified in the 2017 Problem ID implemented occupant protection activities. These activities included, but were not limited to: certifying or recertifying technicians, conducting check-up events, running inspection stations by appointments, distributing safety materials, educating the public through media and presence at local events, partnering with local agencies, and conducting youth and adult safety classes.

The project impacted the performance measures by:

- 6 new CPS Technicians or Instructors from rural and metro areas have been trained and/or recertified.
- Technicians completed over 275 inspections
- Several new partnerships for Inspection stations have been established
- Numerous Traffic safety presentations have been performed in both Spanish and English directed to families in underserved populations.
- Thousands of brochures and other educational materials have been disseminated
- Over 700 families were educated one on one about car seat safety
- Tens of thousands were reached through Media Campaigns
- Numerous expired and broken seats were recycled
- Senior CarFit inspections were completed in rural areas encouraging participants to make the decision to Buckle UP properly as they are "Fit" in their vehicle.

Program Name: Each One Teach One Minority CPS Outreach Program

Contractor: Denver Health and Hospital Authority

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions. The objective was to increase by 10% the percentage of African-American and Hispanic children ages birth to eight years residing in targeted neighborhoods of Adams, Arapahoe, and Denver Counties that are restrained in a car seat or booster seat.

Denver Health and Hospital Authority started the grant year prepared to do this Child Passenger Safety Program through their network of family health clinics, Tri-County Health Department WIC offices, and Child Health Clinics at Children's Hospital Colorado. Due to a series of layoffs at the hospital which included the Project Manager overseeing this grant, the program was closed in November 2017.

Program Name: Child Passenger Safety Programs

Contractor: Southern Ute Community Action Programs, Inc.

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of this program was to increase usage of child safety seats among children enrolled at Southern Ute Head Start, Southern Ute Montessori Academy and grades K-3 at Ignacio Elementary School by 5% from a baseline as measured in child safety seat surveys conducted in the fall of 2017.

The project impacted the performance measure by:

- Continuation of partnerships with the three schools to educate parents on the importance of child safety seats
- Conducted child safety seat surveys several times throughout the school year in partnership with the Southern Ute Police Department
  - o 79% correctly used rear facing infant seats
  - o 74% correctly used convertible forward facing seats
  - o 36% correctly used booster seats
- Revised and reprinted pertinent marketing materials on the importance of child safety seat use and distributed heavily throughout the Southern Ute community via schools, local library, recreation center, Southern Ute casino, health clinics, Southern Ute Police Department, and Southern Ute Multi-Purpose Center
- Distributed car seats and booster seats as appropriate to families in need within target population
  - o 63 car seats distributed; 93 car seats installed

Program Name: Communications and Outreach Supporting Child Passenger Safety

Contractor: Drive Smart Evergreen/Conifer

This project addressed performance measure C-1. Reduce the number of traffic fatalities and C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goals of this program were to (1) increase booster seat compliance among children in Jefferson, Clear Creek, Park and Gilpin counties, increasing the average to the state average or by at least 10% and (2) Increase parent compliance and education with restraint laws in targeted schools to the state average of 86% **or** by at least 5% by September 30, 2018.

The project impacted the Performance Measures by:

- Awareness was raised among leaders and parents regarding car seat noncompliance, in 18 schools, 7 child care facilities, 5 Women, Infant and Children (WIC) locations, 3 Head Start schools, 5 libraries, 2 retail locations, 2 community fairs and 2 parent groups by delivering presentations, resources and materials, and car seat checks.
- Added 17 new partner organizations in educational offerings for parents
- 3 law enforcement led activities took place to include participation in car seat inspection events in which 23 car seats were inspected and approximately 10 referrals for future inspections for families in need.
- Engaged a diverse audience in child safety education opportunities to include bilingual families; underserved populations; library patrons; MOPs group; Public Resource Center patrons; and teachers/parents of local schools
- Conducted a total of 118 car seat inspections and education for parents; 46 at events and 72 one to one interactions
- Focused on providing education to parents in low income areas through Head Start and WIC organizations and events. Increased opportunities by 10 in bilingual and/or underserved communities.

Program Name: Swedish Medical Center's Car Seat Safety Program

Contractor: HCA-Healthone LLC / Swedish Medical Center

This project addressed performance measure C-2: Reduce the number of serious injuries in traffic crashes.

The goal of this project was to increase the number of car seats inspected for proper installation and fit prior to discharge at Swedish Medical Center (SMC) from 353 to 453 patients, increase communications and outreach to children and parents about the importance of car seat safety and increase communication and outreach to the community, schools and physician offices.

The project impacted the performance measure by:

- 1366 families were educated on car seat safety through the use of the car seat education discharge checklist prior to hospital discharge from October 2017 – September 2018
- 397 car seats were inspected for proper installation at SMC's Car Seat Inspection Station
- 4 Car Seat Safety Classes were held at local Early Childhood Centers reaching 51 parents
- 590 Car Seat Inspection Station fliers and Child Passenger Safety brochures were distributed to local physician offices.
- Over 8000 community members, hospital employees, physicians and patients were reached through social media, newsletters, events and flyers stressing the importance of proper vehicle restraint and car seat safety.
- 2 hospital employees were certified as CPS technicians to increase the number of hours the Car Seat Inspection Station is open

Program Name: Safe Choices for Children

Contractor: Pagosa Crisis Pregnancy Center, Inc. dba THRIVE

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

Project goal of this program was to reduce the number of unrestrained passenger vehicle occupant fatalities in Archuleta County and reduce the number of unrestrained serious injuries.

The project was to increase the observed proper installation and use of child restraint systems as well as corresponding adult seat belt use for the parents/caregivers through education, resources and community outreach by September 30, 2018.

The project impacted the Performance Measures by:

- Advertising THRIVE as a bilingual inspection station throughout the community.
- Provided pregnant women with the education on proper seat belt placement during their pregnancy.
- Promoted Child Passenger Restraint and Adult Seat Belt use in the community.
- 53 car seats distributed.
- 60 caregivers participated in the Child Restraint Program.
- 76 expectant mothers received one-on-one Child Passenger Restraint education with the Doctor.
- 1,275 community members were reached through program events.

Program Name: Greeley Data Driven Approaches to Crime and Traffic Safety

(DDACTS) Project

Contractor: Greeley Police Department

This project addressed performance measure C-12. Reduce the number of distraction affected fatal crashes.

The goal of this program was to reduce the number of fatal and serious injury crashes in Greeley where distracted driving was a contributing factor.

The target population for this campaign was drivers of all ages.

The project impacted the Performance Measures by:

- Greeley police officers spent a total of 912 hours engaged in high visibility texting and cell phone enforcement within the designated DDACTS area.
- Greeley police officers made a total of 1697 traffic stops in the DDACTS area during the assigned overtime hours.
- Greeley police officers issued a total of 457 citations for distracted driving related behaviors.
- The total number of traffic contacts made by the Greeley Police Department increased 4% to 27,454 during this fiscal year.

A significant outcome was a reduction in the percentage of fatal and serious injury crashes where distracted driving was a contributing factor from 12.5% in fiscal year 17 to 10% during the final year of the grant funding.

Program Name: Aurora P.A.R.T.Y. Program

Contractor: University of Colorado Hospital Authority

The project addressed performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

The goal of this program was to decrease the number of traffic fatalities ages 20 and younger in El Paso, Adams, Larimer, and Arapahoe counties by 15% by September 30, 2018.

The project impacted the performance measure by:

- The P.A.R.T.Y program established a new location in Larimer County through Poudre Valley Hospital
- The P.A.R.T.Y. program expanded to the following new schools: Fountain Ft. Carson High School, Sand Creek High School, Limon High School, The New America School in Thornton, Cheyenne High School, Mitchell High School, and Ridge View Youth Services in Aurora.
- 29 P.A.R.T.Y. programs were held in the Denver Metro area reaching 742 students.
- 15 P.A.R.T.Y. programs were held in Colorado Springs and the surrounding area reaching 542 students.
- 8 P.A.R.T.Y. programs were held in the Ft. Collins area reaching 198 students.
- 916 pre-surveys, 754 post-surveys, and 243 4-6 month post-surveys were completed. Students who attended the in-hospital programs showed a 50% increase in knowledge between the pre and post-survey and a 30% retention of knowledge between the post and 4-6 week post-survey.
- 86% of students reported they are not likely to use their phones for calls or texts after viewing the program.

Program Name: Young Driver Traffic Safety Project

Contractor: Weld CO Dept. of Public Health and Environment

This project addressed performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

Goal for Project was to reduce by 10% the number of traffic fatalities in Weld County from 55 to 50 by September 30, 2018.

The DRIVE SMART Weld County –Young Driver Traffic Safety Project used a multifaceted approach to reduce traffic fatalities amongst young drivers.

The project impacted the performance measures by:

- Ten half-day High School Safe Teen Driving Programs were conducted throughout Weld County reaching nearly 1,078 students
- Four Weld County high schools participated in our year-long student safety challenge which impacted just over 3,292 students.
- Two Parent of Teen Drivers classes were conducted within Weld with a total of 28 participants in attendance.
- Five GDL Roll-Call presentations for local law enforcement agencies were conducted with a total of 39 officers attending. After the presentation, according to survey results, 100% of officers in attendance were willing to issue a citation for GDL violations
- DRIVE SMART Weld County attended 7 different community events distributing
   GDL, seatbelt and distracted driving information to over 1,520 community members.
- Eight Drivers Education scholarships were distributed to low income families
- DRIVE SMART Weld County obtained 249 Facebook followers and 765 "Likes" on Twitter.
- A significant outcome of this program was an increase in seat belt usage over FY2015. During FY2015, the seat belt usage in Aurora was 83%. During FY2016 the seat belt usage increased to a quarterly average 83.75%. The goal of 84% usage was achieved in 3 of the 4 quarters, and the usage was 83% in the other quarter.

Program Name: Teens in the Driver Seat Contractor: Texas A&M Transportation Institute

This project addressed performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

The goal of this program was to promote vehicle occupant safety in both the Metro Denver area and statewide by increasing teen seat belt use and reduce distracted driving by reducing cell use for teen drivers ages 15-19.

The project impacted performance measures by:

- Activated 22 high school programs, 4 within the state of Colorado and 18 high schools within the designated high-risk zip codes. Staff distributed an additional 16 mini resource kits to Colorado schools that were not located within high priority areas.
- Distributed 22 surveys and received responses from 5 schools for a total of 278 responses.
- Recorded and monitored 444 reported in-school activities during the school year from 7 schools.
- Promoted six Zero Crazy activities, programs saw an average 3.5% increase in driver seat belt use and an 11.5% increase in passenger seatbelt use along with an average 4.75% reduction of drivers using cell phones.
- Distributed over \$2,050 in awards and prizes for Colorado schools through TDS contests (TDS Cup, Outstanding School, Zero Crazy, etc.).
- Staff conducted 4 teen driver education workshops and met with 15 Colorado organizations for program support.
- Supported 4 Teen Advisory Board members during the 17-18 school year and welcomed 2 members during the 18-19 school year.
- Supported knowledge dissemination through 4 social media channels and monthly newsletters to 56 subscribers.

Program Name: Think Fast Interactive Contractor: TJohnE Productions, Inc.

The project addressed performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

The ThinkFast Interactive Program is an award-winning prevention intervention program that uses a trivia-based game program format, designed around active learning theories to connect young people with factual, relevant information related to highway safety issues. ThinkFast partners with and produces programs with numerous non-profits and works with Nissan North America in 10 states as part of their Teen Driver Safety initiative.

The goal of Colorado's program (performed at 71 schools across the state) was to inform teen drivers on highway safety rules, regulations, associated penalties, Graduated Driver's License (GDL) information, as well as a heavy focus on prevention measures as they relate to distracted driving, pedestrian safety, DUI, occupant protection and national driving statistics. The purpose of this initiative was to save teen lives and to promote safe driving habits on Colorado roads and highways as well as to embody the state's "Moving Towards Zero Deaths" safety initiative.

The project impacted the performance measures by:

- Reduced the number of traffic-related fatalities for the 20 and younger age group
- Reduced the number of serious injuries caused by traffic crashes
- Reduced the number of distraction-affected traffic crashes
- Emphasized Safe driving practices
- Educated young drivers on GDL laws
- Educated students on Colorado's highway safety rules, regulations, associated penalties and safety initiatives as outlined in CDOT's Strategic Plan

Program Name: Young Driver and Highway Safety

Contractor: DRIVE SMART COLORADO

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

By September 30, 2018, reduce the number of traffic fatalities among drivers ages 24 and younger in El Paso and Teller counties from 12 fatalities in 2013 to nine fatalities (25% reduction).

The project impacted the performance measure by:

- Developing relationships with seven auto dealers in four counties and asking them to display "Buckle Up: We Value our Customers" hangtags in every vehicle in the dealer lot.
- Holding two Saved by the Belt ceremonies in two counties recognizing 19 individuals who did the right thing by buckling up and being involved in a crash that was not their fault.
- Involving an average of 27 El Paso and Teller County high schools in the DRIVE SMART High School Traffic Safety Challenge. On average, seat belt use was increased by 10% and cell phone use was decreased by 2%.
- Involving four out of five high schools in the CDOT targeted zip codes to receive multiple traffic safety messages/presentations. These presentations impacted 1,000 students at those four schools.
- Partnering with the Colorado Springs Police Department and Pikes Peak Hill Climb to photograph and produce two Buckle Up posters that have been distributed throughout El Paso County high schools, military installations and various businesses and organizations.
- Participating in an additional 20 area health/wellness/safety fairs, business meetings and military stand-down days educating on the importance of safe impairment and distraction free driving.

Program Name: 2018 Distracted Driving

Contractor: Colorado State Patrol

This project addressed performance measure C-12. Reduce the number of distractionaffected fatal crashes.

The goal of this program was to reduce the number of distracted driving occurrences, resulting in fewer fatal and injury crashes on Colorado roadways.

CSP's Performance Measures for the year showed:

- There were 1,897 vehicles stopped.
- There were 374 distracted driving violations.
- Distracted Driving ads ran in movie theatres from November 17, 2017 to December 21, 2017. The number of advertising spots were 13,222 and 338,993 viewers in fiscal year 2018. The number of viewers more than doubled in fiscal year 2018 compared to fiscal year 2017's viewers which totaled 143,866.

The CSP provided both education and enforcement with the expectation of changing behavioral patterns in all age groups. There were 26 distracted driving education events. The estimated number of attendees was 9,062, of all ages.

Program Name: Distracted Driving Enforcement Campaign

Contractor: Aurora Police Department

This project addressed performance measure C-12. Reduce the number of distractionaffected fatal crashes and C-2. Reduce the number of serious injuries in traffic crashes.

The goal of this program was to reduce the percentage of serious and fatal crashes caused in part by distracted drivers, and educate the public about the dangers of distracted driving.

This project impacted the Performance Measures by:

- Both group and individual officer enforcement operations were conducted.
- A large scale operation was conducted throughout the national distracted driving month in April that resulted in 1367 drivers being contacted, 1303 summonses being issued, 64 warnings being issued, and 365 drivers being determined to be distracted.
- A total of 1878 drivers were contacted during directed enforcement efforts funded by this program. Officers determined that 1123 of the drivers contacted were distracted.
- Messages were posted to Facebook and Nextdoor by officers about the dangers associated with distracted driving.
- "Every 15 minutes" was presented at a local high school and reached hundreds of students with the dangers of distracted driving.

A notable outcome of this program was that the goal of reducing the percent of fatal crashes where distracted driving was a contributing factor to 9% was met. None of the fatal crashes were attributed to distracted driving. Overall crashes with a distracted driving contributing factor increased from 16% to 17%.

Program Name: Denver's High Visibility Cell Phone and Text Messaging Enforcement

Contractor: Denver Police Department

This project addressed performance measure C-12. Reduce the number of distractionaffected fatal crashes.

The goal of this program was to increase the number of citations given by 10% when involving a distracted driver in the City and County of Denver.

During the 2017 CDOT grant period, the Denver Police Department (DPD) received \$50,000 to continue education and enforcement efforts. The primary objective for this program. These funds were used in the following ways:

- 1. Officers worked a total of 361.75 hours on this program
- 2. Officers contacted 744 motorists who were observed manipulating an electronic device in one manner or another while driving or who were observed committing a similarly unsafe violation
- 3. Those contacts resulted in 510 moving citations being issued. Last year, DPD issued a total of 824 moving citations, representing a -38% decrease in citations this year. The goal of increasing citations by 10% was not achieved, but the project was still successful, as it still resulted in citations that help to mitigate distracted driving in Denver.
- 4. Of the 510 citations, six were specifically written for distracted driving.
- 5. There is no set time, but the enforcement is concentrated in the afternoon and evening hours, and officers had a wide focus on distracted driving, with the citations being given in multiple areas throughout the City and County of Denver.

Program Name: Denver Metro Teen Drivers (DMTD)

Contractor: Children's Hospital Colorado

The project addressed performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

The goals of this program were to promote increased awareness of both Colorado's GDL law and parental abilities to confidently participate in their teen's driving experience.

The project impacted the performance measure by collaboratively working with 22 program partners to engage teens through 14 educational booths, including the "Ditch the Distraction" photo booth, reaching more than 2,200 teens; 18 "What Do You Consider Lethal" classroom-based presentations, reaching 3,822 teens; and 1 "Teens Take the Wheel" events, reaching over 125 teens and parents.

The 2017-2018 FY utilized time and resources to pilot the High School Challenge. Awards were presented to schools based on merits. Quarter 3 was dedicated to evaluation of pilot schools implementing their programs, addressing challenges, implementing identified changes and reaching out to target schools to garner participation in the upcoming school year 2018-2019. The purpose of this award program is to get students involved with peer-to-peer education and to promote safe driving throughout the school year.

The outcomes of this program were observed through pre/post seatbelt/distraction surveys from participating schools. Evaluation of the observations showed some overall improvement in schools from 2 of 3 targeted counties. Due to incomplete challenge observation schools, dropping out of the challenge and other obstacles, the process and implementation of the subsequent seatbelt surveys will be evaluated and recommendations for process improvement will be addressed for schools participating in the future challenges.

Program Name: Foothills School-Based Teen Motor Vehicle Program

Contractor: Drive Smart Evergreen/Conifer

Reduce the number of traffic fatalities and C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

The goal of this program was to decrease the number of 15-20-year olds involved in fatal crashes and hospitalizations by increasing Graduated Drivers Licensing Law (GDL) knowledge for parents and teens and continuation of peer to peer educational activities encouraging safe driving behaviors in targeted high schools in Jefferson county and high-risk zip code areas.

The project impacted the Performance Measures by:

- Contacted 38 schools, 70% of them in high risk areas, and offered driver safety programs in each school.
- Added 15 new schools as participants in DRIVE SMART teen safety programs, bringing total school participation to 20.
- Conducted traffic safety activities in each of 20 schools reaching approximately 14,000 students. Activities included seat belt checks, trivia contests, homecoming and prom activities, and community projects focused on safe driving.
- Delivered 6 GDL seminars throughout the metro area, reaching approximately 85 parents and teens. Set up recurring schedules into 2019 at 2 locations.
- Supported Teens in the Driver Seat year long program in 5 schools resulting in national recognition and awards earned.
- Participated in 13 safety fairs and community events providing teen transportation safety demonstrations, educational materials and GDL information.
- Partnered with MADD, Colorado State Patrol, Alive at 25, Sawaya Foundation, Brandon & Paul Foundation and Butterfly Foundation in providing safety presentations to local high school students.
- Promoted CDOT's teen social media campaigns, increasing public awareness.

Program Name: All About Insurance GDL Contractor: All About Insurance, LLC

This project addressed the following performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

This program helped families and youthful drivers understand the GDL laws, safety on the roads and in vehicles, helped set expectations for decisions and choices while operating a vehicle, and the insurance ramifications of good and bad choices.

The goal of the program was to increase seat belt use from 83% to the state goal of 84%, and to increase the awareness of the GDL program for our youthful drivers and parents responsible for them.

The project impacted the performance measure by:

- Providing a positive environment with set structure to get information about GDL,
   Colorado laws and insurance options.
- Holding multiple classes at different locations throughout the year, including the Colorado Springs Police Department, Swedish Medical Center, and communities of Evergreen, Thornton and Boulder.
- 9 GDL classes were held with 102 attendees in all.
- Social Media messages on Facebook and Nextdoor were posted about the importance of proper seat belt and safe driving habits which helped increase attendance.
- Representation from law enforcement, Drive Smart personnel, and an Insurance Broker were present to provide proper information and answer questions.
- Resources were provided physically via handouts, and visually with online presentation.
- Interactive classroom style for the participants to ask and answer questions.

The response to the classes, through surveys and on-site participation, consistently proved that the class was helpful and necessary, and that value was received by the information presented. The presentation and all its components was consistently well-received by parents and teens alike.

Program Name: The Aging Road User/Older Driver

Contractor: DRIVE SMART COLORADO

This project addressed C-13) Reduce the # of fatal crashes involving a driver aged 65 years and older

The goal of this program was to reduce the number of passenger vehicle fatalities among older drivers ages 65+ in Colorado from 89% to 86%.

The project impacted the performance measure by:

- Updating and reprinting the Colorado's Guide for Aging Drivers and Their Families for the fourth time. Since the first publication, DRIVE SMART COLORADO distributed over 30,000 free guides throughout Colorado, and has it posted on www.drivesmartcolorado.com website.
- Conducting 13 CarFit events and participating in 19 additional events geared towards the older citizen by giving presentations on the importance of older driver awareness and safety, including exposing over 3,000 individuals to the older driver message at two large senior expositions in two counties.
- Six statewide Older Driver Coalition meetings were conducted every-other-month, which allows for communication and support as well as generating new ideas on older driver safety. Over 70 volunteer hours were spent on the meetings alone by members throughout the State.
- Being instrumental in the updating and recreating the Colorado Department of Revenue's (DOR) Law Enforcement Medially-At-Risk reporting form. The form will be placed on the DOR law enforcement electronic portal (which is currently in creation by DOR).

Program Name: Increasing Aging Road User Safety

Contractor: Drive Smart Evergreen/Conifer

This project addressed performance measures: C-13) Reduce the # of fatal crashes involving a driver aged 65 years and older

The goal of this project was to reduce the number of passenger vehicle fatalities and serious injuries among older drivers in Jefferson County to the state average. This project focuses on educating citizens and traffic safety partners on issues facing the older driver.

The project impacted the performance measures by:

- Active participation in the Colorado Older Driver Coalition, Local Coordinating Council and Fitness to Drive communities focusing on strategies to address safe driving and transportation needs of seniors through education and information sharing.
- Updated training opportunities for seniors and caregivers monthly on DRIVE SMART's Experienced Driver page of website.
- Trained 5 new CarFit® technicians; 3 from within the medical community. Refresher trainings for 4 CarFit® technicians conducted as well.
- Established 1 new CarFit® station with regular monthly operating schedules; bringing the total stations with regular schedules to 3.
- Expanded CarFit® program into Park, Boulder and Broomfield counties.
- Held 18 CarFit® events throughout 5 counties.
- Distributed over 1,300 "Colorado's Guide for Aging Drivers and Their Families through libraries, various fairs and events, businesses, and car fit booths.
- Coordinated with Denver Regional Mobility and Access Council to link their comprehensive community 'Getting There Guide' which identifies existing resources for-aging road user resources to DRIVE SMART's website. This resource replaced a time-consuming manual effort previously done by DRIVE SMART.

Program Name: Reaching Older Adult Drivers (ROAD)

Contractor: Cordy & Company, Inc.

This project addressed performance measures: C-13) Reduce the # of fatal crashes involving a driver aged 65 years and older

The third consecutive year of activities was instrumental in building on existing programming to promote ROAD's effort to reach its goal of reducing the number of traffic fatalities and serious injuries for aging drivers 65+ in Denver, Adams and Arapahoe counties.

The project impacted the Performance Measures by:

- The third consecutive year of the program was fortified in Arapahoe, Adams and Denver County through existing and new partnerships with AAA Colorado, MAC for Active Adult Lifestyles, Denver Public Library system, Denver Parks and Recreation system, Thornton Active Adult Center, and with various 55+ residential communities.
- 23 CarFit events at which 101 checkups were performed in Denver, Adams and Arapahoe counties, including 14 at Eagle View Adult Center and 10 at Heather Gardens, a 2,400-unit, 55+ residential community.
- The second annual transportation fair, featuring educational presentations and CarFit, was presented in August in collaboration with Park Hill Library's North of 50 program, Walk2Connect, BikesTogether and Northeast Transportation Connections.
- Outreach was expanded through a presence at larger venues, e.g., the Montbello 2020 Back to School Community Wellness Fair in Montbello, attracting 500+; a health fair hosted by The Grove at Stapleton, a 150-unit 55+ residential community in Denver; a Back to School Showcase at Eagle View Adult Center in Brighton, attracting 200+; and the AARP Caregiving Symposium, attracting 500+ participants at the Arvada Center.
- Further outreach was conducted via 9 presentations on aging driving safety at senior communities, information tables at senior events and participation on boards comprised of government and non-profit senior advocates.
- Three media releases were developed, including an announcement that ran in MyPrimeTimeNews, Colorado Community Media, Lakewood Sentinel, Golden Transcript, CDOT Traffic Safety Pulse newsletter, and set up an interview for ROAD Program Director Sylvia Cordy on the Adam Morgan Public Affairs Show that aired June 17 & 24 on KOSI, KYGO, and KKFN.
- 2,516 Colorado's Guide for Aging Drivers and Their Families were distributed to 43 agencies, including libraries, recreation centers, senior centers and residences.

Program Name: Engaging Mobility Initiative Contractor: Health Promotion Partners, LLC

This project addressed performance measures: C-13) Reduce the # of fatal crashes involving a driver aged 65 years and older

The goal of this project was by September 30, 2018, reduce the number of passenger vehicle fatalities among older drivers ages 65+ in Colorado from 89 (2013 CoHID data) to 86 (3%) and reduce serious injuries/hospitalizations from 394 (2013 CoHID hospitalization data) to 374 (5%).

The following actions were completed the to impact the performance measure:

- A 13-member expert advisory committee guided the program efforts.
- In-service education about the occupational therapy role in driver safety was provided to 231 occupational therapy practitioners, occupational therapy students and physicians.
- A five-month state-wide driving study group was completed in to build capacity of occupational therapists to address driver safety. Therapists demonstrated an average 8 point increase from pre-test to post-test and reported changes to their practice.
- The interdisciplinary Fitness to Drive Community of Practice met throughout the year to share Older Driver resources, create materials for therapists to use with clients, and increase confidence of therapists regarding this topic.
- The Fitness to Drive Website and online discussion board were updated and promoted to serve as a gathering place for resources, questions, and projects of the Community of Practice. There are 48 participants on the discussion board.
- The results of these efforts in the form of 2016 Survey Results, lessons learned from the community of practice, and best practices were shared at the annual AOTA Conference, the annual ADED Conference, and the annual OTAC Conference, and the Colorado Driver Workshop was developed for occupational therapists wanting to learn more.

#### TRAFFIC RECORDS PROGRAM

It is the goal of CDOT's Office of Transportation Safety (OTS) and Traffic & Safety Engineering (TSE) branch to provide an integrated, responsive, timely and accurate crash records system. In support of this goal, the TSE branch undertook several projects in FFY 2017 - 2018.

## **Program Administration**

The Traffic Records' Program is administered by the Traffic Records Unit in the Traffic & Safety Engineering Branch in partnership with OTS. TSE administered thirteen projects with a planned budget of \$1,099,920.

## **Enhancing the Traffic Records System**

CDOT continues to work with its data partners to improve the crash record system. These projects include:

Continued evaluation of a data sharing system, which includes exploring a variety of data sharing methods.

Assessing Colorado's traffic records system, including an active role in the Statewide Traffic Records Advisory Committee (STRAC). NHTSA completed the five year Traffic Records Assessment in April 2015. STRAC and CDOT have been working on implementing many of the recommendations from the assessment, and will continue to do so for the next two years.

Continued support of the Traffic Records Forum and other conferences. These provide training to expand expertise on new methods and technologies to improve crash records reporting, collection, management and dissemination.

Continued electronic crash and citation reporting projects supported through six grants and the guidance of NHTSA & STRAC. The goal of these projects is to replace paper reports.

Improve crash location data with two projects that developed linear referencing systems, and/or geo-coded crashes reports in two counties for county roads (off system crashes).

The Colorado State Patrol began a two and a half year project to implement a new Niche Records Management System. The change will improve their records and will be used by other agencies to achieve e-submission of crash records.

CDOT and STRAC continued the contract with a vendor to act as the Traffic Records Coordinator (TRC). This team completes work for STRAC, CDOT and traffic records systems throughout the state. The vendor is able to expend time and resources towards completing tasks and projects that are in STRAC's Strategic Plan that have previously been delayed due to lack of resources. The vendor also acts as a mediator for interagency projects to ensure better cooperation for Colorado's benefit. A new crash form and coding manual are expected to be released in 2019, and has been a major project of the TRC.

#### **CDOT Traffic Data Collection and Analysis**

CDOT's Traffic Records activities include tasks designed to provide CDOT with timely and accurate data. It also allows for more strategic allocation of resources to address both persistent and emerging traffic safety problems. The data collection and analysis help to identify high-risk drivers, communities and highways, which emphasize saving lives, injuries and cost to the citizens of Colorado.

## **EVALUATION MEASURES**

The Federal MAP-21 statute mandates the use of following four performance measures (PM): a reduction in the number and rate of both traffic fatalities and serious injuries. Colorado defines a serious injury as an evident incapacitating injury. In 2017, a PM to measure combined serious injuries and fatalities incurred from non-motorized crashes was added to the requirement.

Program Name: Colorado Problem Identification Report and MV Evaluation

Contractor: Colorado Department of Public Health and Environment

This project addressed all performance measures.

The goal of this project was to maximize the relevancy of analyzed motor vehicle data to support decision-making by the Office of Transportation Safety's Highway Safety Office and its partners.

CDOT's Highway Safety Office is required to produce an annual Problem Identification Report to monitor trends in motor vehicle injuries and fatalities, as well as high-risk driving behaviors, such as impaired driving, speeding, and distraction among a variety of population (e.g. youth, seniors, motorcyclist, pedestrians, and etc). This project partially funded a motor vehicle epidemiologist at the Colorado Department of Public Health and Environment to produce the 2018 Problem Identification Report and Dashboard, respond to ad hoc data requests, and serve as a data resource for various task forces and CDOT's community grantees. This project also partially funded a prevention and technical assistance coordinator to provide training and support on data-informed strategy selection and program evaluation to CDOT's community grantees and motor vehicle safety partners.

This project impacted Colorado's Performance Measures through the following components:

- Developed and published the 2018 Motor Vehicle Problem Identification Dashboard and Report.
- Supported the development and dissemination of and training on CDOT's FY2019 request for applications.
- Provided over 30 technical assistance sessions to CDOT's grantees and partners on strengthening action plans, implementing evidence based strategies, improving data collection, evaluation planning, and developing competitive applications for CDOT's FY2019 grant funding.
- Provided 33 technical reviews of CDOT's FY2019 grant applications.
- Supported grantee and partner data and technical assistance needs by participating in 40 motor vehicle safety task force and committee meetings.
- Developed and led 14 presentations to stakeholders on motor vehicle data, using the 2018 Problem Identification Report and Dashboard, strengthening community partnerships, applying research on shared risk and protective factor research to motor vehicle outcomes, and engaging communities in changing environmental systems for motor vehicle safety.
- Responded to over 30 ad hoc data requests from CDOT and local and state partners to identify and evaluate their traffic safety efforts.

Program Name: Modernized Trinidad Police Vehicles

Contractor: Trinidad PD.

This project addressed the **performance measure** of timeliness. The time between the actual crash and the time the crash data is pushed to the state system was used as an evaluation measure. From June 3, 2018 to July 31, 2018, the average number of days between the time of the accident and the time it was submitted to the Department of Revenue was 7 days.

That number was compared to the average time for submittal between August 1, 2018 and September 17, 2018. Trinidad Police Department (TPD) significantly improved their project measurement by reducing that number to 2 days.

The **goal** of the project was to acquire E-Crash programming and retrofit police vehicles with the technology required for digital upload of accident data to the Department of Revenue (DOR).

# **Project Description**

The project involved soliciting a programming group to design and build the DOR schema and the MDT interface for officers. Programming was tested in beta until June 3, 2018 when TPD began submitting live data to the state. In addition, hardware was purchased that met the criteria for in car technology/electronic submission. All 16 of TPD's patrol vehicles were fitted with mounts and wiring to support the mobile units. Training was completed for officers in May but is ongoing during onboarding of new employees.

### Results

Trinidad Police Officers have been able to use mobile technology to provide digital, crash data to DOR. Reports begin on scene, ensuring faster submission and more accurate data. TPD has improved efficiency in submission to DOR and has been able to identify areas of higher collision risk within the city with the 2018 CDOT grant funding.

Program Name: Mobile Data Computer Project Contractor: Cañon City Police Department

This project addressed performance measure Reduce the time expended by officers uploading crash and citation data and submitting into the state system, and reduce the error rate of crash reporting on critical elements.

The goal of this program was to increase the reporting efficiency, accuracy and safety of the officers of the Cañon City Police Department.

The project impacted the performance measure by:

- Acquiring and deploying 30 mobile data computers for use by officers in the field.
- Acquiring and deploying an electronic crash reporting system that directly uploaded crash data to the Department of Revenue.
- Crash reporting software was developed for CO state form 2447 and electronic submission to DOR was implemented successfully 8/31/18. The time required by officers to complete and upload crash reports was reduced by 40%
- The number of crash reports rejected by DOR for critical errors was reduced by 100%
- Electronic traffic citation records database was not completed and will be finalized in the FFY 2019 Phase II of the project.

Purchasing authority was not received from the funding entity until six months into the grant cycle. As a result, not all traffic records were completely digitized and citation data transmission to the State Court Administrator was not accomplished. An extension of this project was requested and approved for the 18-19 FFY to accomplish the remaining project objectives.

Program Name: DMV/DOR Conviction/ License Hold Reporting

Contractor: Aurora Municipal Court

This project addressed performance measures of data encryption, reduce the number of failed convictions reported to State of Colorado DRIVES System and saving court staff time to correct failed conviction errors.

The goal of this program was to upgrade electronic conviction submission, driver record processing and compliance auditing with the State of Colorado's DRIVES system. This system integrates communication protocols, processes, and audit procedures between the City of Aurora Municipal Court and DRIVES. Utilizing artificial intelligence and expert rules based on the State of Colorado's statutes and compliance protocols, driver records will be administered for greater accuracy, efficient identification, and enhanced security.

The project impacted the performance measure by:

- Monitoring and encrypting data; providing domain and DNS configurations; maintaining and supporting a private Aurora network for data transmission.
- Providing reliable, flexible and accurate integrated communication between the City
  of Aurora platform and the Colorado Division of Motor Vehicles' (DRIVES) system to
  share data, and process, dispose, and certify driver records through electronic
  submission.
- Performing data cleansing to detect and diagnose incorrect, incomplete, and duplicate data and alert the Court of issues. Reviewing large-volume source data (from municipal court input/import and from shared data through DMV) and maintaining scalable database(s), as well as front-end and back-end system data, including cross-referencing for accuracy.

The outcome of this program was successful implementation and interchange of secure, encrypted data between the City of Aurora and the State of Colorado DRIVES system. COA employee time has been reduced in error checking and correction due to implementation of this software upgrade.

Program Name: E-Crash Device Traffic Accident Module

Contractor: Arapahoe County Sheriff's Office

The goal of this project was to improve deputy efficiency and to decrease the amount of time our records staff spends manually entering accident reports into our RMS. The project impacted the performance measure by:

- Reducing the amount of time a deputy spends manually writing accident reports.
   Our Traffic Safety Unit write 85% of all citations and accident reports for the Arapahoe County Sheriff's Office.
- Improved turn-around time on accident report availability to citizens. With the
  interface from our RMS to the state Department of Revenue, the amount of waiting
  time will be reduced for citizens to obtain accident report information for insurance
  purposes and repairs.
- Reduction in accident report errors. As data is manually entered it leaves more opportunity for human error in failing to complete necessary information. With this new accident component we will see a reduction in staff time spent addressing errors.

As we move forward with this project we expect to see a large decrease in staff time spent writing, reviewing and correcting errors on accident reports. We also expect to see a reduction in the use of paper and quicker turn-around on accident report availability to citizens with the interface to the Department of Revenue.

Program Name: E-ticket/ E-crash Expansion Contractor: Weld County Sheriff's Office

This project addressed performance measures in the areas of crash/timeliness (CO PM01) and citation/adjudication/timeliness (CO PM 04).

The goals of this project were to implement E-crash and E-ticketing in every Patrol vehicle within the first 6 months of the grant period to improve timeliness, reduce errors and expedite the submission of data to the State and courts.

### Results:

- E-Ticketing and E-Crash software was successfully installed and working on March 28, 2018.
- E-ticket and E-crash data is being submitted electronically to the State and Courts.
- Average rejection rate for MTC Summons is 5.65%; the objective was a reduction to 7% or less.
- Average rejection rate for State Summons is 2.0%; the objective was a reduction to 7% or less.
- Average rejection rate for Traffic Accident reports is 0%; the objective was a reduction of 7% or less.
- Average time to submit E-ticket data to the State is 1 day; the objective was a reduction to 5 days or less.
- Average time to submit E-ticket data to the Courts is 4.8 days after the payment grace period; the objective was a reduction to 5 days for less.
- The administrative records approval time for E-crash reports was reduced by 2.78%.

Program Name: Traffic Records Coordinator Contractor: Cambridge Systematics / CDOT

This project focused on program management, project coordination, strategic planning, evaluation, and training associated with the Statewide Traffic Records Advisory Committee (STRAC). It monitored progress of the Strategic Highway Safety Plan (SHSP) Data Emphasis Area teams. The goal of this project is to improve the timeliness, accuracy, completeness, uniformity, integration and accessibility of the various traffic records systems in Colorado through the development and implementation of strategic planning.

The project impacted these goals by:

- Reviewed best practices, led, organized and facilitated ten crash reporting form and manual sessions to gain input from stakeholders on the development of a new crash reporting form
- Developed, facilitated, and presented traffic safety and records presentations for the crash reporting form and manual sessions, and the bi-monthly STRAC meetings
- Worked with Denver PD and DOR to develop a plan to submit electronic crash reports and eliminate the backlog of crash reports not submitted
- Updated action plans and provided reports of the SHSP Emphasis Area Plans
- Updated the Traffic Records Resource Guide
- Developed and finalized the new STRAC Strategic Plan and Annual Report
- Updated the Traffic Records Assessment Status Report
- Began work for a statewide E-Citation, including a statewide survey for citation data needs

The significant outcome of this project has been the production of the revised crash form and manual, through collaboration with many state and local agencies. The new form will provide Colorado with better, more up-to-date crash data. The new form will also incorporate additional MMUCC elements, which will result in the new crash form having a higher MMUCC compliance.

Program Name: FARS Program Support- Supplemental Contractor: Traffic and Safety Engineering Branch, CDOT

Project Description: Two funding sources were available to enable Colorado to maintain the Fatality Analysis Reporting System (FARS). This year, no funds were needed for supplemental funding to the main funding allocated from NHTSA. A new contract for FARS was started in 2017.

This project was necessary in previous years to support the ongoing cooperative agreement with NHTSA/NCSA. It enabled Colorado to provide an overall measure of highway safety, to help identify traffic safety problems and suggest solutions to those problems. It also facilitated an objective basis to evaluate the effectiveness of motor vehicle safety standards and highway safety programs.

The goal of this project was to facilitate an objective basis to evaluate the effectiveness of motor vehicle safety standards and highway safety programs.

This project addresses the performance measures to provide an overall measure of highway safety, to help identify traffic safety problems, and to suggest solutions to those problems.

Results: The FARS Database for Colorado was completed for 2017 and kept up to date for 2018. All deadlines and data requests were filled on time, and to NHTSA requirements.

Program Name: Technology Transfer

Contractor: Traffic and Safety Engineering Branch, CDOT

This project addresses all of the traffic record performance measures as it trains project managers and safety professionals to manage their projects better and to handle the changing needs of traffic records. It does not target any particular measure.

The goal of this project was to enable the attendees to learn:

- The latest safety data collection methods and the best practices by DOTs.
- How to best collect and utilize more accurate traffic records and highway safety data.
- How to plan and participate in a successful Traffic Records Coordinating Committee (TRCC), similar to Colorado's STRAC.
- To network with a variety of transportation and highway safety professionals.
- How better data can help save more lives.

Project Description: This project funds the attendance of core STRAC members (to be determined based on priority) to attend the 44<sup>th</sup> International Traffic Records Forum, hosted by National Safety Council and Association of Transportation Safety Information Professionals, and sponsored by NHTSA, FHWA, FMCSA, and BTS (Bureau of Transportation Statistics). The Traffic Records Forum is a valuable event where the users of crash records network with peers from other states. They share the knowledge of professionals from a variety of agencies, coordinate successful examples as demonstrations to others, train on new programs, and learn challenges and successes of other state agencies. They also share new research projects, applications of technology, and resources that are available. The Forum provides the opportunity for safety professionals to meet with traffic records software developers to discuss current and future needs.

Results: Three STRAC members were funded to attend the forum and another was scheduled to go, but had to withdraw. All attendees wrote a summary report of lessons learned. The forum was held in Milwaukee, WI.

Program Name: Crash Location Geocoding for Larimer and Weld Counties

Contractor: North Front Range Metropolitan Planning Organization

This project addressed performance measure: C-C-2: The percentage of crash records with no missing data elements.

The goal of this project was:

Objective #1 is to review of the geocoded results for 2011-2015 to ensure accuracy. Objective #2 is to improve documentation of location data cleaning and geocoding methodology.

Objective #3 is to geocode crashes from 2007-2010 and 2016 lacking latitude and longitude data using ArcGIS geocoder.

Project Description: Hired an intern to review, cleanse and geo-code crash records, 2007 – 16.

Results: Crash records 2011-2015 were reviewed for completeness. 618 missing records were identified and added back into the final file.

The draft methodology documentation was edited and expanded to provide more detail on each step and standardize file names.

Crash data from 2007-2010 was processed for location cleaning and geocoding. Of the 39,194 crash records in these four years, 16,353 crashes did not have latitude and longitude attributes in the original dataset. Through the cleaning and geocoding process, 16,279 of those crashes were geocoded and 54 were found to be outside of the bi-county area. The revised data will be submitted to CDOT for inclusion in the state database.

No progress was made during the 4th quarter. The intern who had been working on this project left to pursue another opportunity. The 2016 crash dataset was not Geocoded. The project used only \$1,752 of the \$4,430 budgeted.

Program Name: Crash Data Cleansing and Analysis Improvement

Contractor: Weld County

The goal of this project was to improve the accuracy, completeness and consistency of all off system crashes in Weld County for the years 2007-2016. The objective of the project was to complete the following fields within each off-system crash within Weld County: crash type, vehicle direction, vehicle movement, lighting, road description, road location, number of vehicles in crash, and other information that could be obtained by comparing the officer's narrative to the crash data (when available). Records were also corrected to create a unified street naming convention. The result of the work will be a county-owned and corrected database for these years. This "cleansed" data was provided to both COOT and the county.

The contract amount for this project was \$31,250. The total expenditures included \$25,000 for contractual services provided by DiExSys, LLC. The difference was covered through county local agency matching in-kind services in the amount of \$6,250. The number of crash records corrected averaged 40% of the total reviewed and provides improved data results for the county database. The county's efforts to identify critical crash locations will be significantly improved as a result of this effort. There were no problems encountered while using the cleaned database provided by the contractor.

These project activities are being applied immediately to improve the county's continuing traffic safety operations. The cleansed data is being used in a comprehensive study of critical road segments and intersections throughout the county. Similar studies in the past required additional staff members to spend many hours of manual inspection and data entry of each crash report provided to the county.

Program Name: Colorado State Patrol Niche Records Management System

Implementation

Contractor: Colorado State Patrol

This project addressed the following performance measures:

C-A-1: Reduce the percentage of rejected DR 2/3447 reports from DOR.

C-C-1: Reduce the percentage of crash records with no missing critical data elements.

C-C-2: Reduce the percentage of crash records with no missing data elements.

C-C-3: Reduce the percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value.

The goal of this project is to improve data quality and implement a standard Records Management System platform that will increase the integrity and usefulness of the data being captured, as well as streamline and automate processes, and decrease the administrative burden on CSP troopers.

Project Description/ Objectives for FFY18

- 1. Develop the requirements and proof of concept for data audits and data accuracy performance measurements.
- 2. Develop draft test plan and scripts.
- 3. Develop draft business requirements and business process mapping.
- 4. Develop draft system configuration and permission requirements.

Results: The final contract was completed August 7, 2018; therefore CSP was unable to post positions and onboard the resources to support the project. CSP was able to purchase computers for the resources that will be contracted to support the project. CSP also made significant strides to improve the quality of crash data by developing an audit report for the crash data. CSP leveraged the audit report to identify issues with the data that need either corrections or areas where the system updates would improve the data. CSP also worked with DOR to test and update the interface and import process to send crash reports to DRIVES.

Program Name: E-Crash: NicheRMS to DOR Interface

Contractor: RMS Consortium (RMSC)

This project addressed performance measures - To achieve timely and accurate reporting of crash data through an electronic means utilizing an interface from NicheRMS to DOR.

The goal of this project was to improve timeliness, completeness and accuracy of crash data submitted to DOR.

Project Description – Contractor was hired to develop an RMSC-specific interface. Once completed, RMSC IT staff installed the interface in a test environment. Testing by IT, police staff, and feedback from DOR will determine when the interface is functioning as desired. Once finalized, it will be installed in a live NicheRMS system for real crash data to be transmitted rather than mailed.

Results – Planet Technologies was hired to develop the RMSC interface. The project is going well. However, DOR's IT resources were not immediately available and this resulted in the inability to connect the interface to the DOR system for testing and finalization. This resulted in the inability to complete the project before the grant period ended.

Project milestones achieved so far:

- Configured Azure, which is a cloud to run Niche and the interface.
- Built the Azure function and the interface code to run in designated intervals.
- Built the in-between database, to keep track of what the interface has and has not sent to DOR.
- Configured the interface to use the Niche and the in-between databases. Next steps When DOR is available, provide a test environment the will test actual production interface operation. Finally, a new 2019 405C grant application was submitted and approved so the work can be completed. Expect e-crash submission by mid-2019.

### **MOTORCYCLE SAFETY**

Motorcyclist fatalities decreased from 125 in 2016 to 103 in 2017, a 18% decrease. Unhelmeted motorcyclist fatalities decreased from 77 in 2016 to 67 in 2017, a 13% decrease. Projects in the Motorcycle Safety program support the Highway Safety Office's (HSO) goals to reduce motorcycle injury and fatal crashes. The Motorcycle Safety program supported projects that increased motorists' awareness of motorcycles; educated drivers on safely sharing the road with motorcycles; and, encouraged motorcyclists to be trained and licensed, educated on the use of proper riding gear, and the dangers of impaired riding.

# **Program Administration**

1 project was managed with a planned budget of \$25,000.

# **Efforts and activities to increase Motorcycle Safety included:**

- Educated motorcyclists about the dangers of impaired riding;
- Continued efforts to build partnerships with community coalitions and motorcycle organizations to develop outreach programs that focus on motorcycle safety issues; and
- Educating motorcyclists on the proper selection and use of motorcycle helmets

Program Name: Ride Smart Foothills Motorcycle Safety

Contractor: Drive Smart Evergreen/Conifer

This project addressed performance measures C-7, reduce the number of motorcyclist fatalities and C-8) Reduce the # of unhelmeted motorcyclist fatalities

The goal of this project was to reduce the percentage of motorcyclist fatalities in Jefferson County involving a driver or motorcycle operator with a BAC of .08 or higher from 50% (2013) to 40% by September 30, 2018 by engaging the motorcycle community in development of local safety messaging and educational information to increase use of safety gear and safe riding.

The project ran from Oct 2017- April 2018 and impacted the performance measures by:

- Developed 16 new partnerships in promoting safe riding behaviors: 2 hospitals, 3 law enforcement agencies, 3 community organizations, 3 motorcycle clubs and 6 motorcycle retailers.
- Ride Smart and Jefferson County Sheriff's Department hosted 1 rider safety education event at the Sheriff's Office training center, reaching approx.15 riders.
- Motorcycle safety awareness and education through activities with community partners, distributing over 900 resources including Live to Ride maps, metal safety signage, brochures and posters.
- In partnership with 2 hospitals initiated a project to create short videos with safety testimonials from riders affected by nonuse of safety gear or while riding impaired. Videographer engaged and 6 riders identified and committed for testimonials. Project suspended half-way into the grant term due to lack of funding.
- Cultivated partnerships with 8 motorcycle club leaders and mentors to begin to create a safety culture from within the club environments.

### **COMMUNICATIONS**

The Office of Communications (OC) provides strategic communications efforts for the Colorado Department of Transportation's Highway Safety Office (HSO). Two positions are funded each year within the OC for this purpose.

In FY 2018, the OC provided a range of services to increase public awareness and support of major transportation safety issues to ultimately influence behavior of motor vehicle operators. The program activities are detailed on the following pages.

## **Program Administration**

The Communications Program is administered by Amy Ford, Director of the Office of Communications, with assistance by her staff, Sam Cole and Jeri Jo Johnson. Other assistance is provided by OC staff whose salaries are state-funded. This group, with assistance from their contractors, was responsible for 13 tasks, with a budget of \$2.2 million.

# **Summary of Strategic Communications Efforts**

In FY 2018, the OC engaged in public relations, media relations and paid advertising media strategies to support 14 high-visibility DUI enforcement periods as well as community-based safety programs. These programs promoted the use of smartphone breathalyzers, alternative transportation, and designated drivers to prevent impaired driving. Paid advertising was used to educate the public on the availability of breathalyzers, which can help drivers understand how alcohol affects driving ability. In addition, the OC reached out to Colorado's growing Hispanic population with a culturally-relevant Spanish DUI campaign targeting community events. Billboards and a social media strategy were also used to reach this population.

The OC supported three Click It or Ticket enforcement periods and launched a digital and online social campaign to educate the public on the dangers of not buckling up. This social norming campaign featured actual Coloradans and why they buckle up. A separate seat belt campaign highlighted the danger posed by unbuckled passengers in a crash and encouraged drivers to always be 'lifeguards' in their own vehicles by telling passengers to buckle up. In addition, Spanish-language seat belt materials and ads targeted Hispanic communities.

The OC also developed new online assets for child passenger safety awareness. Car seat check events were held during Child Passenger Safety Week, which were heavily promoted during the campaign. The OC also launched a distracted driving campaign to encourage drivers to enable the DO NOT DISTRUB WHILE DRIVING mode on their phone.

The OC launched a motorcycle safety campaign statewide cautioning drivers to always check their vehicles' blind spots for motorcyclists. An on-line campaign delivered safety reminders and a partnership with 9News ensured additional coverage of the topic. Other campaigns educated teens about Graduated Driver License laws through a series of videos on seat belts, passenger limits and cell phones. Finally, a pedestrian campaign warned pedestrians about the dangers of jay walking and drivers about the dangers of not yielding to pedestrians.

Program Name: High-Visibility DUI Enforcement – PR/Evaluation

Contractors: Amelie Company; Communication Infrastructure Group; PRR

This project addressed performance measures C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above and S-1. Conduct driver attitude and awareness survey of Highway Safety enforcement and communications activities, and self-reported driving behavior.

The goal of this program was to raise awareness of DUI enforcement and to reduce the number of statewide motor vehicle impaired driving fatalities and injury crashes.

### Results:

- Publicized 14 Heat Is On high-visibility DUI enforcement periods via press releases, social media and media interviews
- Developed DUI awareness events at Geeks Who Drink gatherings, festivals, and sporting events
- Developed "Coloradoans Blow Before Driving" marketing campaign consisting of billboard ads, posters, digital ads, social media ads, launch "stunt" video, and concepts for social media influencers
- Developed and distributed survey on drinking and driving in Colorado, including questions about breathalyzer attitudes and beliefs
- Provided (donated) breathalyzers to 200 young adults who will be later targeted with for an on-line survey concerning their use habits
- Developed and distributed DUI educational materials to 7 non-profits or NGO's

Significant outcomes included: 1) 200 people tested breathalyzers at events in conjunction with DUI enforcement; 2) 2800 breathalyzers were sold during unique promotional program offering a 50% discount; 3) More than 1,100 news stories reported on the DUI program and enforcement periods, which produced more than 180 million impressions indicating broad public outreach; 4) Colorado is now number one in breathalyzer use in the nation; and 5) An on-line survey of 360 Coloradans provided new information on people's beliefs and attitudes towards smartphone breathalyzers as a way to avoid driving impaired.

Program Name: High-Visibility DUI Enforcement - Paid Media

Contractor: Vladamir Jones

This project addressed performance measure C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this program was to raise awareness of DUI enforcement and to reduce the number of statewide motor vehicle impaired driving fatalities and injury crashes.

### Results:

- Supported the summer Heat Is On enforcement periods with an advertising campaign
- Supported the public education campaign, "Coloradoans Blow Before Driving" with a paid media campaign involving billboards, digital ads, social media outreach and a strategy involving social media influencers
- Provided recognition of the Heat Is On message

Significant outcomes included a total of 36,349,124 campaign impressions from paid media tactics. This included 17.5 million impressions from bar/restaurant installations, event street teams, and metro billboards. In addition, there were a total of 17,172,159 on-line impressions from Google, Facebook and digital tactics, indicating wide reach. There were over 2.5m digital impressions with a click-through rate of 0.14%, above the benchmark of 0.05%, as well as nearly 53,000 impressions in Google search with a click-through rate of 7.42%, above the benchmark of 4.54%. Paid social ads on Facebook generated 40,557 clicks with a click-through rate of 1.09%, above the benchmark of .09%. The social ads produced 2,219 reactions, 681 shares and 567 comments. An estimated 2800 smartphone breathalyzers were acquired by alcohol users during the campaign making Colorado #1 in breathalyzer use nationally.

Program Name: High-Visibility DUI Enforcement – Latino

Contractor: Hispanidad and Vladimir Jones

This project addressed performance measures C-5. Reduce the number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above.

The goal of this project was to raise awareness of DUI enforcement and to reduce the number of statewide motor vehicle impaired driving fatalities and injury crashes specific to the Hispanic population in Colorado.

#### Results:

- Distribution Spanish DUI collateral to law enforcement agencies
- Produced two :15 Spanish videos (Soplar) in coordination with general market "Colorado Blows Before Driving" breathalyzer campaign.
- Trafficked "Soplar" :30 PSA video to Univision, Telemundo, Azteca America and Estrella.
- Developed messaging materials for Fiestas Patrias event on September 9, 2018 at Civic Center Park.
- Facilitated interviews about DUI enforcement periods with Univision and Telemundo
- Engaged with 300 attendees at Fiestas Patrias event to discuss BAC levels and BACTrack breathalyzers
- Recruited Hispanic-serving organizations to participate in campaign to educate and learn from marijuana users about impaired driving

Significant outcomes included all four Spanish stations ran the "Soplar":30 spot in August and September. Overall the campaign garnered 600,000 paid social impressions and 205 million earned media impressions, indicating a broad reach among the target audience.

Program Name: Motorcycle Safety

Contractor: R and R

This project addressed performance measures C-7. Reduce the number of motorcyclist fatalities.

The goal of this project was to raise awareness among drivers to watch for motorcycles

#### Results:

- Developed an awareness campaign targeting motorists to be aware motorcycles on roadways; included public and media relations tactics and maintenance of www.comotorcyclesafety.com, which includes specific tips for drivers
- Developed campaign concept on blind spots with a focus on the size
- Partnered with 9NEWS to develop an exclusive segment on the campaign concept short recap video produced from this segment for social media use
- Three blind spot posters created and printed (11x17) in addition to (6) larger posters printed on foam core for CDOT's use and partnerships
- Four motorcycle videos produced highlighting a motorcycle crash victim and her family
- Updated www.comotorcyclesafety.com website, which includes specific tips for drivers.

Significant outcomes included a total of 500,000 paid media impressions and 4 million earned media impressions, indicating a wide audience reach. Through proactive pitching, the Motorcycle Safety Campaign garnered segments from 9News, FOX31 and CW2.

Program Name: Click It or Ticket PR Evaluation

Contractors: Communication Infrastructure Group; PRR

This project addressed performance measures C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions, B-1. Increase the observed seat belt use for passenger vehicles, S-1 Conduct driver attitude and awareness survey of Highway Safety enforcement and communication activities, and self-reported driving behavior.

The goal of this project was to raise awareness of seat belt use enforcement and to reduce the number of unrestrained fatalities and injury crashes among vehicle occupants statewide.

### Results:

- PR outreach included press releases and social posts for the March Rural Enforcement, May Mobilization Enforcement, and July Rural Enforcement high visibility periods. This resulted in widespread media coverage for all three CIOT enforcement periods
- Creative materials were developed for a high-visibility CIOT marketing campaign and featured stories from real Coloradans about why they buckle up
- A community toolkit and tip-sheet were developed and distributed to 10 traffic safety partners across the state

Significant outcomes included widespread earned media coverage of PR efforts: March Rural CIOT Enforcement Campaign - 22 online stories and 22 TV stories. May Mobilization - 17 online stories and 37 TV stories. July Rural CIOT Campaign - 15 online stories and 36 TV stories. Overall 8 million earned media impressions were received. An on-line survey of 360 Coloradans revealed that 74% said the seat belt law is their main motivation for buckling up. For those who don't buckle up, changes to the seat belt mechanism, such as the noise reminder and comfort of the seat belt, may increase usage. The types of messages that have the greatest impact are facts about the number of people saved by seat belts and stories of real Coloradans saved by seat belts.

Program Name: Click It or Ticket Paid Media

Contractor: Vladamir Jones

This project addressed performance measures C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions and. B-1. Increase the observed seat belt use for passenger vehicles.

The goal of this project was to raise awareness of seat belt use enforcement and to reduce the number of unrestrained fatalities and injury crashes among vehicle occupants statewide.

# Results:

 Supported the May Mobilization CIOT enforcement period through a paid media campaign using on-line videos, radio, static posts and social media garnering over 20 million impressions.

Significant outcomes included a total of 20.3 million paid media impressions, indicating a broad reach among the target audience. This included 11,920 ad clicks for on-line ads. The campaign was able to target low seat belt use counties with high-frequency radio schedules during the enforcement period. Gas station TV allowed further reach into communities through a bonus matching schedule that extended the campaign timeline. The on-line video campaign averaged a 43% video completion rate while Facebook video campaigns led to 67% of all clicks. Finally, a custom Facebook frame bolstered awareness and reach.

Program Name: Hispanic Occupant Protection

Contractors: Hispanidad

This project addressed performance measures C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions. C-9. Reduce the number of driver's age 20 or younger involved in fatal crashes and B-1. Increase the observed seat belt use for passenger vehicles.

The goal of this project was to raise awareness of the importance of seat belts, child passenger safety and all facets of occupant protection (OP) to prevent injury and death among Colorado's Hispanic population.

# Results:

- Produced CIOT Hispanic seat belt advertising campaign featuring real Coloradans buckling up as part of an overall social norming campaign
- Distributed Spanish and English What's Your Reason? seat belt posters to eight law enforcement agencies along the Front Range and 60 Mexican restaurants or grocery stores in four counties
- Facilitated a Global Fest event sponsorship by providing four multi-language CDOT Buckle Up banners at the exits of the event location
- Facilitated a sponsorship event, including a crashed vehicle display, at the Mile High Flea Market for Fiestas Patrias.
- Facilitated interviews with Telemundo and Univision for the Colorado State Patrol on seat belt safety

Program Name: Teen Driving and GDL

Contractor: Amelie

This project addressed performance measure C-9. Reduce the number of drivers age 20 or younger involved in fatal crashes.

The goal of this project was to reduce the number of young people, under age 20, killed or injured in vehicle crashes by increasing awareness of safety issues, such as seat belt use.

#### Results:

- Designed campaign focused on Colorado GDL Laws, specifically seat belt safety, not using phones and passenger restrictions.
- Created 6 illustrated videos and static/GIF ads for Instagram, Snapchat and Facebook.
- Created a poster that was printed and shared with 14 traffic safety partners
- Created a Media Toolkit for partners to utilize creative material on their own channels.
- Held a press event at Green Mountain High School in Lakewood to launch the campaign

Significant outcomes included two million paid media impressions and 56 million earned media impressions from 33 online and television news stories about teen driving safety. The campaign produced over a quarter million views of the GDL video and over 6000 visits to the COTeenDriver.com website. The campaign outperformed Facebook and Instagram industry average engagement rate, creating an average engagement rate 12 times the usual and nearly doubled industry average click through rate. It also achieved industry average swipe up rate on Snapchat and tripled average watch time.

Program Name: Child Passenger Safety

Contractor: Communication Infrastructure Group

This project addressed performance measure C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of this project was to reduce the number of children killed in motor vehicle crashes by increasing awareness of the importance of the proper child safety seat for every age and every stage.

#### Results:

- Implemented a communications plan during Child Passenger Safety Week to educate parents and caregivers statewide on using proper child safety restraints for every age and every stage
- Created and distributed over 2000 educational materials for grantees, law enforcement and community-based organizations
- Designed seat check event poster, a Car Seats Colorado ad for Kidz in Motion conference, and a branded pocket folder
- Developed social media copy, videos and graphics for Car Seats Colorado campaign
- Updated Car Seat Ambassadors webpage and added new content
- Promoted Child Passenger Safety Week via media plan promoting car seat check events across the state achieving wide coverage by the media
- Developed car seat tech partner communications toolkit, PR tips sheet, and PSA scripts.
- Developed social and earned media strategic plan to support pre-pregnancy planning, recycle program, height chart, etc.
- Developed a Recycle Program and PR approach to warning parents about used car seats
- Implemented a Winter Coat awareness program, including social posts and b-roll, to warn parents about the dangers of puffy jackets and car seats

Significant outcomes included 40,000 paid impressions via social media and 8 million earned impressions from 88 news stories (radio, television and online), indicating wide exposure of the campaign.

Program Name: Media Program Support

Contractor: Amelie and CIG

This project addressed performance measures C-1. Reduce the number of traffic fatalities and C-2. Reduce the number of serious injuries in traffic crashes.

The goal of this project was to support the communications senior staff with tactical program implementation in order to maximize the reach and effectiveness of programming.

#### Results:

- Developed traffic safety presentations and displays for conferences and meetings attended by over 500 traffic safety advocates
- Researched assorted traffic safety topics to help inform presentations
- Drafted VMS messages to promote traffic safety via weekly reminders
- Developed video news release strategy for greater market penetration
- Developed coordination strategy for moving props used in press events
- Designed new tent toppers for use in outreach events
- Produced 10 Traffic Safety Pulse newsletters and distributed to over 100 partners
- Managed collateral request process to efficiently and quickly share material
- Coordinated traffic safety work with Colorado State Patrol
- Compiled and centralized video, photo and collateral assets to enhance efficiency
- Compiled recommendations for CDOT event locations and visuals for media stories

Program Name: Distracted Driving

Contractor: CIG, Hispanidad and Vladamir Jones

This project addressed performance measures C-1. Reduce the number of traffic fatalities and C-2. Reduce the number of serious injuries in traffic crashes.

The goal of this project was to reduce the number of injury and fatal crashes due to distracted driving by increasing awareness of the types of distracted driving and Colorado's texting law.

#### Results:

- Developed and promoted Get Turned On videos for Distracted Driving Awareness
   Month ad campaign to get people to enable DND While Driving mode on phones
- Implemented Awareness Month PR plan including press release and coordinated media outreach and interviews encouraging people to enable DND While Driving mode on phones – including a new effort aimed at the Hispanic community
- Evaluated distracted driving prevention apps and featured on campaign webpage
- Coordinated with media on social awareness contest
- Implemented social media campaign promoting Do Not Disturb While Driving Mode
- Updated two victim videos for inclusion in media buy
- Education material provided to six traffic safety organizations

Significant results included 36 million earned media impressions from a total of 240 news stories from television, print or online. A social media campaign provided additional exposure by producing over 150,000 impressions. With 14 million impressions, the paid media campaign also was widely viewed by the target audience. Unique creative assets plus enhanced digital targeting worked together for tailored message delivery. Remarketing strategies were implemented for Get Turned On videos to serve the :15 only to users that saw the :30, which enhanced impact.

Program Name: Pedestrian Safety Communications

Contractor: Amelie and Vladamir Jones

This project addressed performance measures C-1. Reduce the number of traffic fatalities and C-10. Reduce the number of pedestrian fatalities.

The goal of this project was to reduce the number of pedestrian injuries and fatalities by increasing awareness of the hazards and precautions to take as a pedestrian and drivers.

### Results:

- Utilized a public relations plan to reach a broad audience on pedestrian safety
- Designed and executed creative assets based on approved strategy and media plan to generate awareness amongst road users of the importance of using intersections to avoid pedestrian collisions.
- Creative assets included billboards (4 creative versions); radio spots (2:15s and a:30), social ads, and sidewalk chalk art - digital daypart targeting enhanced creative relevance
- Earned media efforts produced 32 million impressions from 15 print, online and television stories.

Significant results included 17 million paid media impressions, which helped build frequency amongst drivers as well as pedestrians. Guerilla chalk art execution placed strategically in high foot traffic areas throughout the Denver Metro generated buzz and earned media interest and coverage. PR efforts produced 33 million earned media impressions.

Program Name: Occupant Protection - Communications

Contractor: Amelie and Vladamir Jones

This project addressed performance measures C-4. Reduce the number of unrestrained passenger vehicle occupant fatalities, all seat positions.

The goal of this project was to increase seat belt use and reduce the number of unrestrained fatalities and injury crashes among vehicle occupants statewide.

### Results:

- Developed PR strategy to attract media attention to the Seat Belt Lifeguard campaign, which resulted in over 12 news stories
- Applied Beware of the Beltless campaign executions to mass media plan in the form of Billboards, Digital Video, Digital Banners, Radio and Social Media.
- Develop social media assets to call for family and victim stories around those
  affected by not wearing a seatbelt to increase awareness around the benefits of
  seat belts to increase seat belt usage.
- Partnered with Lyft to create the "Seat Belt Lifeguard" video for social media
- Created a flyer/infographic with primary seat belt law facts
- Created six Facebook posts about benefits of primary seat belt laws

Significant outcomes included 10 million paid media impressions and 36 million earned media impressions indicating good market penetration and broad coverage. For broadcast media there were six unique story placement and five story pickups. Online there were five unique story placements and two story pickups. Messaging encouraged drivers and passengers to ask friends and passengers to buckle up.

### **PEDESTRIAN SAFETY**

Pedestrian fatalities increased 9%, from 84 in 2016 to 92 in 2017. The Highway Safety Office's Pedestrian Safety program continues to support the goal of reducing pedestrian fatalities by educating the public about the hazards and precautions to take to avoid pedestrian injuries and fatalities and enhanced enforcement efforts. The educational efforts included information about visibility, and pedestrian and roadway user impairment.

# **Program Administration**

4 projects were managed with a planned budget of \$249,118.

#### Efforts and activities included:

- Proactive enforcement of laws addressing pedestrian violations, include public awareness and education campaigns; and
- Pedestrian safety educational programs at schools and other locations.

Program Name: Pedestrian Education and Safety Campaign

Contractor: Aurora Police Department

This project addressed performance measure C-10. Reduce the number of pedestrian fatalities and C-2. Reduce the number of serious injuries in traffic crashes.

The goal of this program was to reduce pedestrian fatalities and injuries, and to educate pedestrians and drivers about pedestrian safety.

The program impacted the Performance Measures by:

- Enforcement operations were conduct by group and individual officers.
- Officers in conjunction performed an educational presentation with Heather Gardens Retirement Community focusing on seniors, and ensuring their understanding of pedestrian safety.
- Pedestrian safety messages were posted to Facebook and other social media outlets.
- Officers collaborated with the Medical Center of Aurora to present an educational discussion with senior citizens about pedestrian safety as part of their "Stepping On" program.

Pedestrian crash fatalities increased this year from 27% to 32% not reaching the goal of 28%. A significant outcome of the program was exceeding the goal of reducing the percentage of injuries to pedestrians involved in crashes. The percentage of pedestrians suffering injuries in crashes was 61%, and the goal was 75%.

Program Name: Multi-Pronged Approach to Addressing Denver Pedestrian Safety

Issues

Contractor: Denver Police Department

This project addressed performance measure C-10. Reduce the number of pedestrian fatalities and C-11 Reduce the # of bicyclist fatalities

The goal of this project was to decrease the number of pedestrian and bicyclist fatalities due to a motor vehicle crash in the City and County of Denver.

Denver Police Department (DPD) officers conducted targeted enforcement where pedestrian fatalities have an increased likelihood of occurring, while educating the motoring public about pedestrian safety violations and public safety. The total grant funds spent is \$80,258.53 or 94.4%. Efforts to reduce pedestrian fatalities are as follows:

- 1. Worked a total of 958.5 hours on this project over the grant period
- 2. DPD was successful in educating pedestrians and motorists, with 10,903 contacts while using plain clothes and spotters. Comparatively, DPD only made 9,470 contacts in 2017.
- 3. There were 313 driver citations and 1 pedestrian citations given over the grant period, with the most driver citations (114) given in the second quarter. In contrast, there were only 368 in 2017. Pedestrian citations decreased from 2017 to 2018 from 7 to 1, respectively.
- 4. The citations were given in numerous intersections across the city which have been determined higher risk for pedestrian safety
- 5. This project was conducted Sunday Saturday; the hours of operation varied, but were conducted during the day and early afternoon.
- 6. The officers were not in plain clothes during the first quarter, but they did wear plain clothes during the second, third, and fourth quarters. Additionally, there were not spotters during the first quarter, but there were spotters during the second, third, and fourth quarters.

Program Name: Boulder Safe Streets

Contractor: City of Boulder

This project addressed performance measure C-10. Reduce the number of pedestrian fatalities and C-11 Reduce the # of bicyclist fatalities

The goal of this project was to provide targeted advertising to demographics who statistically are involved in more collisions and to provide education and enforcement events at intersections, thus increasing awareness of the City of Boulder's crosswalk safety laws.

The project impacted the performance measure by:

- Social media advertising was targeted toward the 20-24-year-old demographic as
  those individuals are overrepresented in pedestrian and bicycle collisions. This
  advertising, conducted through a platform called Snapchat that is popular with this
  demographic, included 1 Snap Chat "filter" and 3 Snap Chat advertising videos
  (one oriented toward pedestrians, one toward bicyclists, and one toward
  motorists).
  - o The ads ran from August 17<sup>th</sup> September 29<sup>th</sup>, 2018
  - 7,600 users watched the 10 second video ads in entirety, which demonstrated user recognition of objective
  - 2,600 users "swiped up" on the ads to view the City of Boulder's Heads Up website, which displayed user engagement
  - 2,300 users took a photo using the Heads Up safety flyer and shared it with their network, which displayed user engagement
- The Heads Up safety messaging was posted on Facebook and Twitter run by the city.
- Bus advertisements ran Sept 1<sup>st</sup> 30<sup>th</sup>, 2018 on the SKIP, which is a high visibility bus route in the city that reaches a high number of residents who live, work, or play nearby.
- Heads Up education and enforcement events were held at 3 high crash intersections. Information and incentives were provided by city staff and enforcement of crosswalk safety laws was conducted by law enforcement officers.
- Heads Up education tables were staffed at 2 Boulder Farmer's Markets, 3 CU Boulder events, and Bike to Work Day in June 2018.

Task Number: 18-09-91-04
Program Name: Safe All Ways
Contractor: West Metro Fire Rescue

This project addressed performance measure C-10. Reduce the number of pedestrian fatalities and C-11 Reduce the # of bicyclist fatalities

The goal of this program was to reduce the number of calls run by West Metro Fire Rescue for serious injuries in traffic crashes for 5-19 year olds by delivering safety presentations in the schools and hosting a safety event with bike, pedestrian and motor vehicle safety activities.

- Presentations were delivered to 5513 students at 22 elementary schools, 4
  middle schools, 5 high schools, 3 special needs schools. Additionally, 6100
  students at 8 schools participated in Walk to School Day and 6 schools for Bike
  to School Day events.
- The results of the evaluation tools including skills assessments and pre/post tests, which indicated 3-8% increases/improvements in knowledge, behavior and attitude:
- 96% of 536 Kindergarten students looked left, right, left again before crossing the street.
- 98% of 1204 2<sup>nd</sup> grade students could properly fit a bike helmet
- 90% of 1132 4<sup>th</sup> grade students kept looking as they crossed the street
- 92% of 1090 6<sup>th</sup> graders identified wearing a helmet as a way to prevent brain injury
- 98% of 592 8th graders identified a crosswalk as the best place to cross a street
- 93% of 959 high school students identified eliminating distractions as a way to prevent death and injury from motor vehicle crashes.
- Bicycle, pedestrian and motor vehicle safety was promoted via interactive, hands-on activities to over 3500 attendees at the Annual Family Fire Muster event, where 100 low cost helmets were distributed and 366 people signed a safe driving pledge.

A significant outcome of this program was the decrease in transports from 82% to 55% on Auto/Ped crashes and from 48% to 42% for MV crashes for patients under age 19, even though the number of calls for these crashes increased from the 2017 to 2018 grant cycle time periods.

# **Canceled/Terminated Projects**

The following projects were either cancelled or terminated during the 2018 Federal Fiscal Year. No funds were expended.

18-03-31-13

18-03-31-15

18-06-61-06

18-06-61-11