# ARIZONA

# HIGHWAY SAFETY IMPROVEMENT PROGRAM

# 2017 ANNUAL REPORT


U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

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# Disclaimer

**Protection of Data from Discovery Admission into Evidence**

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section [HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.”

23 U.S.C. 409 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

# Executive Summary

This annual report has been prepared by the Arizona Department of Transportation (ADOT), TSM&O Division, Traffic Safety Section (TSS) based on best available data and information collected from various internal and external sources.

Arizona DOT is continuing to make progress in the HSIP implementation on all public roads statewide. ADOT-TSS has been leading the efforts to deliver the HSIP program.

Arizona SHSP has been updated in October 2014 to reflect MAP-21 requirements and FHWA guidance. The SHSP implementation phase began in early 2015. This annual report reflects Arizona 2014 SHSP emphasis areas and performance measures.

NOTE: Data are presented by different reporting periods, e.g. funding data or project listing is given by Federal Fiscal Year (FFY) whereas annual fatality and serious injury data is by Calendar Year (CY). Fatalities and serious injury tables and charts in the output report are given in 5-year rolling average.

# Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

# Program Structure

***Program Administration***

**Describe the general structure of the HSIP in the State.**

The AZ ADOT HSIP Program Manager issues a call for potential HSIP projects in January of each calendar year. Agencies interested in applying must complete an HSIP application that is updated each year before the call for projects. The application process requires the agency to submit a cover/transmittal letter, a complete application, a cost estimate, a crash data spreadsheet, a B/C ratio calculation sheet, a location map, a project limits map and any warrant studies (if applicable). The documentation is evaluated by the ADOT HSIP Program Manager and staff to determine if the potential project is HSIP eligible, i.e. proven safety countermeasure, fatal and serious injury crashes that countermeasure can potentially reduce, supports the AZ SHSP, and B/C ratio of equal to or greater than 1.5. The approved HSIP eligible project is then ranked by the HSIP Program Manager based on the B/C ratio and SHSP score." A nine member Safety Review Committee, comprised of FHWA, local and ADOT staff reviews and approves the proposed list. The HSIP Program Manager then submits the prioritized list to the State Engineer's Office for final ranking and approval. Once the prioritized HSIP eligible list for the year is approved, the HSIP Program Manager issues the approved HSIP eligibility letter and enters the project in the ADOT Five Year Transportation Facilities Construction Program.

**Where is HSIP staff located within the State DOT?**

Other-TSM&O

**Enter additional comments here to clarify your response for this question or add supporting information.**

**How are HSIP funds allocated in a State?**

Other-80% State, 20% Local

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Describe how local and tribal roads are addressed as part of HSIP.**

Eighty percent (80%) of Arizona's HSIP funds are set aside for statewide safety projects and twenty percent (20%) for local public agencies and tribal. This 80/20 split was adopted to address traffic safety on all public roads with both ADOT and local public agencies (i.e. cities, towns, counties, tribal agencies). This split was re-evaluated as part of the Arizona SHSP update process followed by revision in the Arizona HSIP Manual published in May 2015. As ADOT and local public agencies identify high crash locations using any acceptable screening method and develop safety improvement projects, ADOT reviews them on a statewide basis and prioritize projects for funding. ADOT LPA, in consultation with MPOs and COGs, provides assistance to local agencies throughout the process of identifying and developing the projects.

**Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.**

Traffic Engineering/Safety
Design
Planning
Maintenance
Operations
Districts/Regions
Other-ADOT Traffic Safety Section (TSS) and Local Public Agency Section (LPAS)

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Describe coordination with internal partners.**

Safety analyses begin with the compilation and correlation of data elements on a statewide system. Coordination takes place within ADOT including the State Engineer's Office, the Director's Office, Project Managers, District Engineers and others involved in safety projects as well as the Department of Public Safety (State enforcement agency). Once the project is identified, depending on the nature of the project, justification of HSIP funding through evaluation and formal eligibility process is established by ADOT and FHWA Arizona Division Office.

**Identify which external partners are involved with HSIP planning.**

Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
Local Government Agency
Tribal Agency
FHWA

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Describe coordination with external partners.**

External coordination involves participation and membership in COG/MPOs Safety Committee meetings and advisory groups. ADOT TSS encourages local and state agencies to submit their draft HSIP applications in advance of the final submittal date for the call for projects so the application can be reviewed and comments provided to the agencies to ensure a successful application.

**Have any program administration practices used to implement the HSIP changed since the last reporting period?**

No

**Are there any other aspects of HSIP Administration on which the State would like to elaborate?**

No

***Program Methodology***

**Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?**

Yes

**To upload a copy of the State processes, attach files below.**

File Name:
HSIP Appendix_C.pdf
HSIP Appendix_ B.pdf
HSIP Appendix_A.pdf
2015 HSIP Manual (RevFeb17).pdf

**Select the programs that are administered under the HSIP.**

Roadway Departure
Shoulder Improvement
HRRR
Other-RSA
Other-Tree Removal

**Enter additional comments here to clarify your response for this question or add supporting information.**

| | |
|---|---|
| **Program:** | HRRR |
| **Date of Program Methodology:** | 5/1/2015 |

**What is the justification for this program? [Check all that apply]**

2017 Arizona Highway Safety Improvement Program

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

**What is the funding approach for this program? [Check one]**

Competes with all projects

**What data types were used in the program methodology? [Check all that apply]**

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only | Traffic Volume<br>Lane miles | Functional classification |

**What project identification methodology was used for this program? [Check all that apply]**

Crash frequency
Relative severity index

**Are local roads (non-state owned and operated) included or addressed in this program?**

Yes

**Are local road projects identified using the same methodology as state roads?**

Yes

**Describe the methodology used to identify local road projects as part of this program.**

**How are projects under this program advanced for implementation?**

selection committee

**Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).**

**Rank of Priority Consideration**

Ranking based on B/C : 1
Available funding : 2

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Program:** Roadway Departure

**Date of Program Methodology:** 6/29/2012

**What is the justification for this program? [Check all that apply]**

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

**What is the funding approach for this program? [Check one]**

Competes with all projects

**What data types were used in the program methodology? [Check all that apply]**

**Crashes** **Exposure** **Roadway**

All crashes
Fatal and serious injury crashes only

**What project identification methodology was used for this program? [Check all that apply]**

Crash frequency
Relative severity index

**Are local roads (non-state owned and operated) included or addressed in this program?**

Yes

**Are local road projects identified using the same methodology as state roads?**

Yes

**Describe the methodology used to identify local road projects as part of this program.**

**How are projects under this program advanced for implementation?**

Competitive application process
Other-Based on B/C Ratio and systemic projects based on crash type.

**Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).**

**Rank of Priority Consideration**

Ranking based on B/C : 2
Available funding : 1

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Program:** Shoulder Improvement

**Date of Program Methodology:** 4/30/2010

**What is the justification for this program? [Check all that apply]**

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

**What is the funding approach for this program? [Check one]**

Competes with all projects

**What data types were used in the program methodology? [Check all that apply]**

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only | Volume | Functional classification |

**What project identification methodology was used for this program? [Check all that apply]**

Crash frequency
Relative severity index

**Are local roads (non-state owned and operated) included or addressed in this program?**

Yes

**Are local road projects identified using the same methodology as state roads?**

Yes

**Describe the methodology used to identify local road projects as part of this program.**

**How are projects under this program advanced for implementation?**

2017 Arizona Highway Safety Improvement Program
Other-Based on B/C Ratio and systemic projects based on crash type.

**Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).**

**Rank of Priority Consideration**

Ranking based on B/C : 2
Available funding : 1

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Program:** Other-RSA

**Date of Program Methodology:** 1/10/2006

**What is the justification for this program? [Check all that apply]**

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

**What is the funding approach for this program? [Check one]**

Funding set-aside

**What data types were used in the program methodology? [Check all that apply]**

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes | Volume | Median width<br>Horizontal curvature<br>Roadside features |

**What project identification methodology was used for this program? [Check all that apply]**

Crash frequency

**Are local roads (non-state owned and operated) included or addressed in this program?**

Yes

**Are local road projects identified using the same methodology as state roads?**

2017 Arizona Highway Safety Improvement Program
Yes

**Describe the methodology used to identify local road projects as part of this program.**

**How are projects under this program advanced for implementation?**

Other-Based on B/C Ratio and systemic projects based on crash type.

**Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).**

**Rank of Priority Consideration**

Ranking based on B/C : 2
Available funding : 1

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Program:** Other-Tree Removal

**Date of Program Methodology:** 6/15/2010

**What is the justification for this program? [Check all that apply]**

Addresses SHSP priority or emphasis area
FHWA focused approach to safety

**What is the funding approach for this program? [Check one]**

Competes with all projects

**What data types were used in the program methodology? [Check all that apply]**

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only | | |

**What project identification methodology was used for this program? [Check all that apply]**

Crash frequency

**Are local roads (non-state owned and operated) included or addressed in this program?**

2017 Arizona Highway Safety Improvement Program

No

**Are local road projects identified using the same methodology as state roads?**

Yes

**Describe the methodology used to identify local road projects as part of this program.**

**How are projects under this program advanced for implementation?**

Other-Based on B/C Ratio and systemic projects based on crash type.

**Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).**

**Rank of Priority Consideration**

Ranking based on B/C : 2
Available funding : 1

**Enter additional comments here to clarify your response for this question or add supporting information.**

**What percentage of HSIP funds address systemic improvements?**

14

**HSIP funds are used to address which of the following systemic improvements? Please check all that apply.**

Rumble Strips
Pavement/Shoulder Widening
Install/Improve Signing
Install/Improve Pavement Marking and/or Delineation
Clear Zone Improvements

**Enter additional comments here to clarify your response for this question or add supporting information.**

**What process is used to identify potential countermeasures? [Check all that apply]**

Engineering Study
Road Safety Assessment
Crash data analysis

2017 Arizona Highway Safety Improvement Program
SHSP/Local road safety plan
Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Does the State HSIP consider connected vehicles and ITS technologies?**

Yes

**Describe how the State HSIP considers connected vehicles and ITS technologies.**

ITS technologies are critical components in Arizona's transportation management systems and are effective at improving safety, as well as mobility. Arizona has leveraged ITS technologies for freeway traffic management with so many miles of freeways currently managed. ITS technologies are critical for providing data to travelers through the AZ511 system, including the highway road closure system. Connected vehicles are emerging as new technology that has the ability to significantly reduce crashes and save lives. ADOT is investing in connected vehicle technologies so that we can maximize the benefits as the technology becomes available in passenger vehicles. The infrastructure components of connected vehicles will allow significantly improved traffic management systems, such as speed harmonization, queue warning, work zone traffic management. The primary goal of connected vehicles is improving safety and Arizona believes that this emerging technology will save lives. Therefore, State HSIP fund can be utilized for connected vehicles and ITS technologies.

**Does the State use the Highway Safety Manual to support HSIP efforts?**

Yes

**Please describe how the State uses the HSM to support HSIP efforts.**

The HSM has been used on a limited bases primarily to support B/C ratio analysis and determining CMFs. Arizona's emphasis on predictive modeling over the last year has been focused on bring Safety Analyst on-line.

**Have any program methodology practices used to implement the HSIP changed since the last reporting period?**

No

**Are there any other aspects of the HSIP methodology on which the State would like to elaborate?**

No

# Project Implementation

***Funds Programmed***

**Reporting period for HSIP funding.**

Federal Fiscal Year

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Enter the programmed and obligated funding for each applicable funding category.**

| FUNDING CATEGORY | PROGRAMMED | OBLIGATED | % OBLIGATED/PROGRAMMED |
|---|---|---|---|
| **HSIP (23 U.S.C. 148)** | $40,000,000 | $39,369,134 | 98.42% |
| **HRRR Special Rule (23 U.S.C. 148(g)(1))** | $0 | $3,366,690 | 0% |
| **Penalty Funds (23 U.S.C. 154)** | $0 | $0 | 0% |
| **Penalty Funds (23 U.S.C. 164)** | $0 | $0 | 0% |
| **RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))** | $0 | $0 | 0% |
| **Other Federal-aid Funds (i.e. STBG, NHPP)** | $0 | $0 | 0% |
| **State and Local Funds** | $0 | $1,463,184 | 0% |
| **Totals** | $40,000,000 | $44,199,008 | 110.5% |

**Enter additional comments here to clarify your response for this question or add supporting information.**

**How much funding is programmed to local (non-state owned and operated) or tribal safety projects?**

20%

**How much funding is obligated to local or tribal safety projects?**

30%

**Enter additional comments here to clarify your response for this question or add supporting information.**

**How much funding is programmed to non-infrastructure safety projects?**

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$0

**How much funding is obligated to non-infrastructure safety projects?**

3%

**Enter additional comments here to clarify your response for this question or add supporting information.**

See answers to question 29 for a description of non-infrastructure safety projects.

**How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?**

$0

**How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?**

$0

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.**

None

**Does the State want to elaborate on any other aspects of it's progress in implementing HSIP projects?**

No

***General Listing of Projects***

**List the projects obligated using HSIP funds for the reporting period.**

| | | | | | | | | | | | | | RELATIONSHIP TO SHSP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT NAME** | **IMPROVEMENT CATEGORY** | **SUBCATEGORY** | **OUTPUTS** | **OUTPUT TYPE** | **HSIP PROJECT COST($)** | **TOTAL PROJECT COST($)** | **FUNDING CATEGORY** | **FUNCTIONAL CLASSIFICATION** | **AADT** | **SPEED** | **OWNERSHIP** | **METHOD FOR SITE SELECTION** | **EMPHASIS AREA** | **STRATEGY** |
| F0018 ADOT SE DISTRICT, US95, US60, SR89 and SR74 | Roadway | Rumble strips - edge or shoulder | 81.39 | Miles | $997779 | $997779 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Other | 5,290 | 65 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| F0025, I-17 Velda Rose-Sunset Point MP242-252 | Roadway | Roadway - other | 47 | Miles | $396228 | $396228 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Interstate | 31,765 | 75 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| F0029 SR 95 AT KIOWA BLVD - MP 184 RIGHT TURN LANES RAISED MED | Roadway | Roadway - other | 0.2 | Miles | $265926 | $265926 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other | 22,394 | 45 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H5958 US60 MP 111.13 TO MP 112.77 | Roadway | Roadway - other | 1 | Numbers | $29649.46 | $31441.63 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other Freeways and Expressways | 17,459 | 45 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8230 I-10 DRAGOON ROAD TO JOHNSON ROAD PHASE I MP 318 | Roadway | Roadway - other | 1.83 | Miles | $176361 | $56604 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Interstate | 14,944 | 75 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8246 SR264 BURNSIDE - FISH WASH, MP441 to MP450 | Shoulder treatments | Widen shoulder - paved or other | 8.83 | Miles | $9786342 | $10221610 | HSIP (23 U.S.C. 148) | Rural Minor Arterial | 4,320 | 65 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8256 SR260 CHENEY RANCH LOOP - BISON RIDGE TRAIL, MP 334- MP 337.5 | Shoulder treatments | Widen shoulder - paved or other | 3.5 | Miles | $1242367 | $1317463 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Other | 17,459 | 55 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8258 SR 64 GRAND CANYON AIRPORT - FS RD 328, MP 234 to MP 237 | Shoulder treatments | Widen shoulder - paved or other | 2.81 | Miles | $2618502 | $2618502 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Other Freeways and Expressways | 6,790 | 55 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8265 SR 92 @ FOOTHILLS DR MP 321 | Pedestrians and bicyclists | Medians and pedestrian refuge areas | 1 | Intersections | $344195 | $344195 | HSIP (23 U.S.C. 148) | Rural Minor Arterial | 25,696 | 45 | State Highway Agency | Other | Pedestrians | Making walking and street crossing easier |
| H8308 SR88 SUPERSTITION BLVD MP 196 | Intersection geometry | Intersection geometry - other | 1 | Intersections | $5280800 | $5280800 | HSIP (23 U.S.C. 148) | Urban Major Collector | 5,822 | 40 | State Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| H8377 SR89A COYOTE SPRINGS RD TO LEGEND HILL RD 324.7 - MP-331.2 | Shoulder treatments | Widen shoulder - paved or other | 7.2 | Miles | $3303800 | $4042734 | HSIP (23 U.S.C. 148) | Rural Major Collector | 1,689 | 50 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8388 US 95 AT AVE 8E, MP 30 | Intersection traffic control | Intersection traffic control - other | 1 | Intersections | $89200 | $135000 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other | 12,424 | 55 | State Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |

| | | | | | | | | | | | | | RELATIONSHIP TO SHSP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT NAME** | **IMPROVEMENT CATEGORY** | **SUBCATEGORY** | **OUTPUTS** | **OUTPUT TYPE** | **HSIP PROJECT COST($)** | **TOTAL PROJECT COST($)** | **FUNDING CATEGORY** | **FUNCTIONAL CLASSIFICATION** | **AADT** | **SPEED** | **OWNERSHIP** | **METHOD FOR SITE SELECTION** | **EMPHASIS AREA** | **STRATEGY** |
| H8408 US93 WILLOW BEACH - WHITE HILLS ROAD MP 17.35 to MP 28.09 | Shoulder treatments | Widen shoulder - paved or other | 10 | Miles | $1750110 | $1750110 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Other | 15,193 | 45 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8557 I-8 GILA BEND REST AREA - I-10, MP 125 to MP 175 | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 53 | Miles | $130000 | $130000 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Interstate | 7,019 | 75 | State Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| H8744 I-40 WEST KINGMAN TI INTERIM IMPROVEMENTS, MP 49 | Intersection geometry | Auxiliary lanes - add left-turn lane | 1 | Lanes | $414694 | $439574 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other | 37,485 | 75 | State Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| H8825 I-19 TREE THINNING MP .8 TO MP 58 | Roadway | Roadway - other | 50 | Miles | $1206554 | $1206554 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Interstate | 25,341 | 75 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8826 SR87 PAYSON TO FOREST ROAD/ TREE THINNING, MP 254 | Roadway | Roadway - other | 29 | Miles | $797762 | $845984 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Other | 5,888 | 50 | State Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| H8919 SR77 RIVER RD - SUFFOLK DR, MP 72 to MP 73 | Lighting | Lighting - other | 2.86 | Miles | $707250 | $707250 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other | 45,631 | 45 | State Highway Agency | Other | Pedestrians | Making walking and street crossing easier |
| HS010 ROAD SAFETY ASSESSMENT | Non-infrastructure | Road safety audits | 1 | Numbers | $12259 | $12259 | HSIP (23 U.S.C. 148) | Various | 0 | 65 | State Highway Agency | Other | Data Improvement | More effective processes and safety management sys |
| HS013 I-10 PHOENIX CORRIDOR SAFETY STUDY | Non-infrastructure | Data/traffic records | 7.5 | Miles | $8770 | $8770 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other Freeways and Expressways | 0 | 65 | State Highway Agency | Other | Data Improvement | More effective processes and safety management sys |
| HX253 SR69 KACHINA PLACE TO HEATHER HEIGHTS, MP 281 to MP 295 | Intersection traffic control | Modify traffic signal timing - left-turn phasing (permissive to protected-only) | 4 | Numbers | $63869 | $36594 | HSIP (23 U.S.C. 148) | Urban Principal Arterial - Other | 34,474 | 55 | State Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| M5149 I-17 NB MP 305-312 & I-40 E/WB MP 204-221 | Non-infrastructure | Data/traffic records | 1 | Numbers | $142000 | $142000 | HSIP (23 U.S.C. 148) | Rural Principal Arterial - Interstate | 20,245 | 75 | State Highway Agency | Other | Data Improvement | More effective processes and safety management sys |
| PNGHS NACOG 2016 APPROVED WORK PROGRAM-HSIP FUNDS | Non-infrastructure | Transportation safety planning | 1 | Numbers | $435000 | $435000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Data Improvement | More effective processes and safety management sys |
| PWGHS WACOG 2016 APPROVED WORK PROGRAM | Non-infrastructure | Transportation safety planning | 1 | Numbers | $400000 | $400000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Data Improvement | More effective processes and safety management sys |
| SH465 CITY OF FLAGSTAFF VARIOUS LOCATIONS | Pedestrians and bicyclists | Pedestrian signal | 100 | Numbers | $3000 | $3000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Pedestrians | Making walking and street crossing easier |

| | | | | | | | | | | | | | RELATIONSHIP TO SHSP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT NAME** | **IMPROVEMENT CATEGORY** | **SUBCATEGORY** | **OUTPUTS** | **OUTPUT TYPE** | **HSIP PROJECT COST($)** | **TOTAL PROJECT COST($)** | **FUNDING CATEGORY** | **FUNCTIONAL CLASSIFICATION** | **AADT** | **SPEED** | **OWNERSHIP** | **METHOD FOR SITE SELECTION** | **EMPHASIS AREA** | **STRATEGY** |
| SH504 CITY OF FLAGSTAFF BUTLER AVENUE GUARDRAIL UPGRADES | Roadway | Roadway - other | 76 | Locations | $36155 | $36155 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH511 SWITZER CANYON/TURQUOISE DR | Intersection geometry | Intersection geometry - other | 1 | Numbers | $130000 | $130000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| SH527 MOHAVE COUNTY VARIOUS RURAL RD - SFTY IMPRVMNTS | Roadway delineation | Roadway delineation - other | 12 | Miles | $191865 | $191865 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH535 75TH AVE & CACTUS TI | Intersection geometry | Intersection geometry - other | 1 | Intersections | $936776 | $1177000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| SH536 75TH AVE & PEORIA TI | Intersection geometry | Intersection geometry - other | 1 | Intersections | $1149557 | $1149557 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| SH561 TUCSON DISTRICT, TOHONO OODHAM NATION | Roadway delineation | Roadway delineation - other | 40 | Miles | $805683 | $805683 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH571 REAY LANE IRRIGATION CANAL DITCH RELOCATION | Roadway | Roadway - other | 1 | Numbers | $20746 | $20746 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH575 BIA ROUTE 6, US70-SR170 ON SAN CARLOS RESERVATION | Roadway delineation | Roadway delineation - other | 12 | Miles | $148529 | $148529 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH576 APACHE JUNCTION IRONWOOD DR SAFETY PULLOUTS | Shoulder treatments | Widen shoulder - paved or other | 1 | Miles | $20746 | $20746 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Town or Township Highway Agency | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH586 YUMA COUNTY - SOMERTON AVE & COUNTY 18TH ST. | Intersection geometry | Intersection geometry - other | 1 | Numbers | $593431 | $593431 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| SH590 COUNTY ROUTE 1/GOLDEN SHORES PKWY | Intersection geometry | Intersection geometry - other | 1 | Numbers | $1202439 | $1202439 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | County Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| SH595 CITY OF FLAGSTAFF VARIOUS LOCATIONS | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 6867 | Numbers | $265000 | $265000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH601 City of Safford - Various | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 874 | Numbers | $14980 | $14980 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Town or Township Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |

| | | | | | | | | | | | | | RELATIONSHIP TO SHSP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT NAME** | **IMPROVEMENT CATEGORY** | **SUBCATEGORY** | **OUTPUTS** | **OUTPUT TYPE** | **HSIP PROJECT COST($)** | **TOTAL PROJECT COST($)** | **FUNDING CATEGORY** | **FUNCTIONAL CLASSIFICATION** | **AADT** | **SPEED** | **OWNERSHIP** | **METHOD FOR SITE SELECTION** | **EMPHASIS AREA** | **STRATEGY** |
| SH602 CITYWIDE TRAFFIC SIGN REPLACEMENT, NOGALES | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 896 | Numbers | $66932 | $66932 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH606 TOWN-WIDE SIGN REPLACEMENT PROJECT, CLIFTON | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 546 | Numbers | $2000 | $2000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Town or Township Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH627 City Of Avondale SIGN MGMT SYSTEM/SIGN UPGRADE | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 4734 | Numbers | $33000 | $33000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH633SIGN UPGRADE, PARADISE VALLEY VARIOUS LOCATIONS | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 2348 | Numbers | $190234 | $190234 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Town or Township Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH635 59TH AND OLIVE AVENUES | Intersection geometry | Intersection geometry - other | 1 | Numbers | $100382 | $100382 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| SH636 Avondale PEDESTRIAN COUNTDOWN SIGNALS | Pedestrians and bicyclists | Pedestrian signal | 256 | Numbers | $50000 | $50000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Pedestrians | Making walking and street crossing easier |
| SH641 MARICOPA-SIGN MANAGEMENT SYSTEM | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 3730 | Numbers | $241800 | $241800 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | County Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH642 TOHONO O'ODHAM ROADWAY SAFETY IMPROVEMENTS | Roadway delineation | Roadway delineation - other | 40 | Miles | $2520000 | $2520000 | HRRR Special Rule (23 U.S.C. 148(g)(1)) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH643 TOHONO OODHAM NATION IR 16, 20, 24, 30 & 35 | Roadway delineation | Roadway delineation - other | 40 | Miles | $1353309.9 | $1353309.9 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH643 TOHONO OODHAM NATION IR 16, 20, 24, 30 & 35 | Roadway delineation | Roadway delineation - other | 40 | Miles | $846690 | $846690 | HRRR Special Rule (23 U.S.C. 148(g)(1)) | Unavailable | 0 | | Indian Tribe Nation | Other | Lane Departure | Minimizing the consequences of leaving the road |
| SH647 Town of Eloy VARIOUS LOCATIONS | Roadway signs and traffic control | Sign sheeting - upgrade or replacement | 34.5 | Miles | $140593 | $140593 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Town or Township Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH648 VARIOUS LOCATIONS PED HEADS, CASA GRANDE | Pedestrians and bicyclists | Pedestrian signal - audible device | 123 | Numbers | $31833 | $31833 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| SH650 SIGN UPGRADE (SAFETY IMPROVEMENTS) | Roadway signs and traffic control | Roadway signs and traffic control - other | 7517 | Numbers | $113295 | $113295 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| T0022 VARIOUS LOCATIONS - | Roadway signs and traffic control | Roadway signs and traffic control - other | 1400 | Numbers | $70000 | $70000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Older Drivers | Improve retroreflectivity and visibility |

| | | | | | | | | | | | | | RELATIONSHIP TO SHSP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT NAME** | **IMPROVEMENT CATEGORY** | **SUBCATEGORY** | **OUTPUTS** | **OUTPUT TYPE** | **HSIP PROJECT COST($)** | **TOTAL PROJECT COST($)** | **FUNDING CATEGORY** | **FUNCTIONAL CLASSIFICATION** | **AADT** | **SPEED** | **OWNERSHIP** | **METHOD FOR SITE SELECTION** | **EMPHASIS AREA** | **STRATEGY** |
| SUPERIOR SIGN STRIPING UPGRADE | | | | | | | | | | | | | | |
| T0031 Various Locations-Gln Flashing Yellow Arrow PH1 | Intersection traffic control | Intersection traffic control - other | 34 | Intersections | $174309 | $174309 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | City of Municipal Highway Agency | Other | Intersections | Reduce fatalities through geometric configuration |
| T0032 8TH ST AND 21ST AVE - YUMA | Pedestrians and bicyclists | Pedestrian beacons | 1 | Numbers | $105000 | $105000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Pedestrians | Making walking and street crossing easier |
| T0039 NACOG MULTI-AGENCY SIGN PROCUREMENT - PHASE 2 | Roadway signs and traffic control | Roadway signs and traffic control - other | 4500 | Numbers | $45000 | $45000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Older Drivers | Improve retroreflectivity and visibility |
| T0055 FLORENCE BLVD; PEDSTRIAN SAFETY IMPROVEMENTS | Pedestrians and bicyclists | Pedestrian beacons | 1 | Numbers | $105000 | $105000 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | Other Local Agency | Other | Pedestrians | Making walking and street crossing easier |
| T0096 PAG REGIONAL ROAD SAFETY ASSESSMENT | Non-infrastructure | Road safety audits | 12 | Numbers | $428122 | $428122 | HSIP (23 U.S.C. 148) | Unavailable | 0 | | County Highway Agency | Other | Data Improvement | More effective processes and safety management sys |

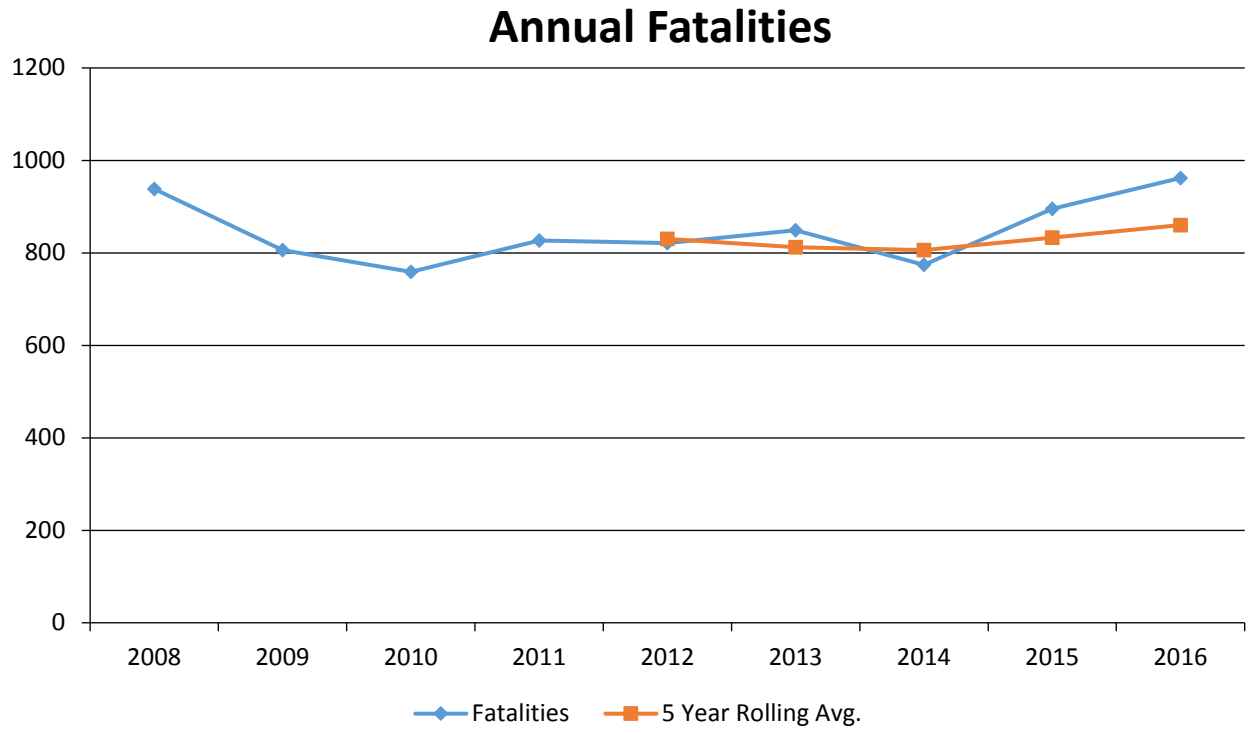
**Enter additional comments here to clarify your response for this question or add supporting information.**

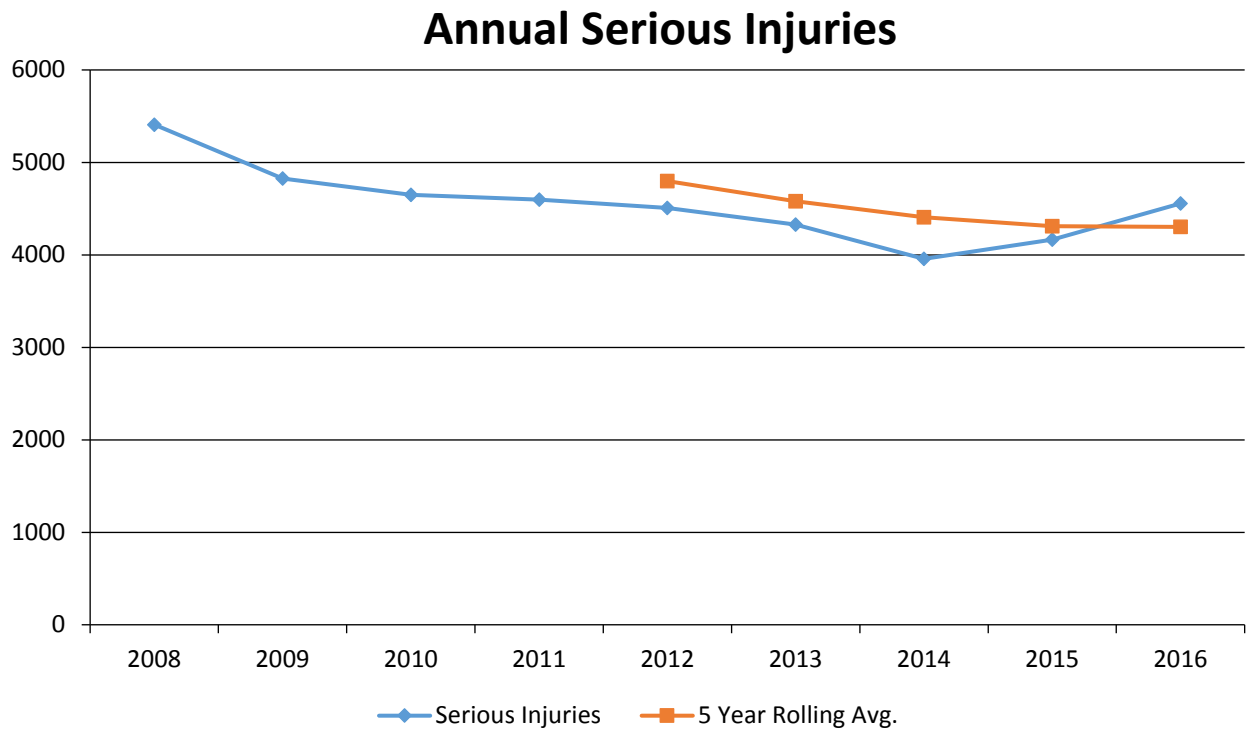
# Safety Performance

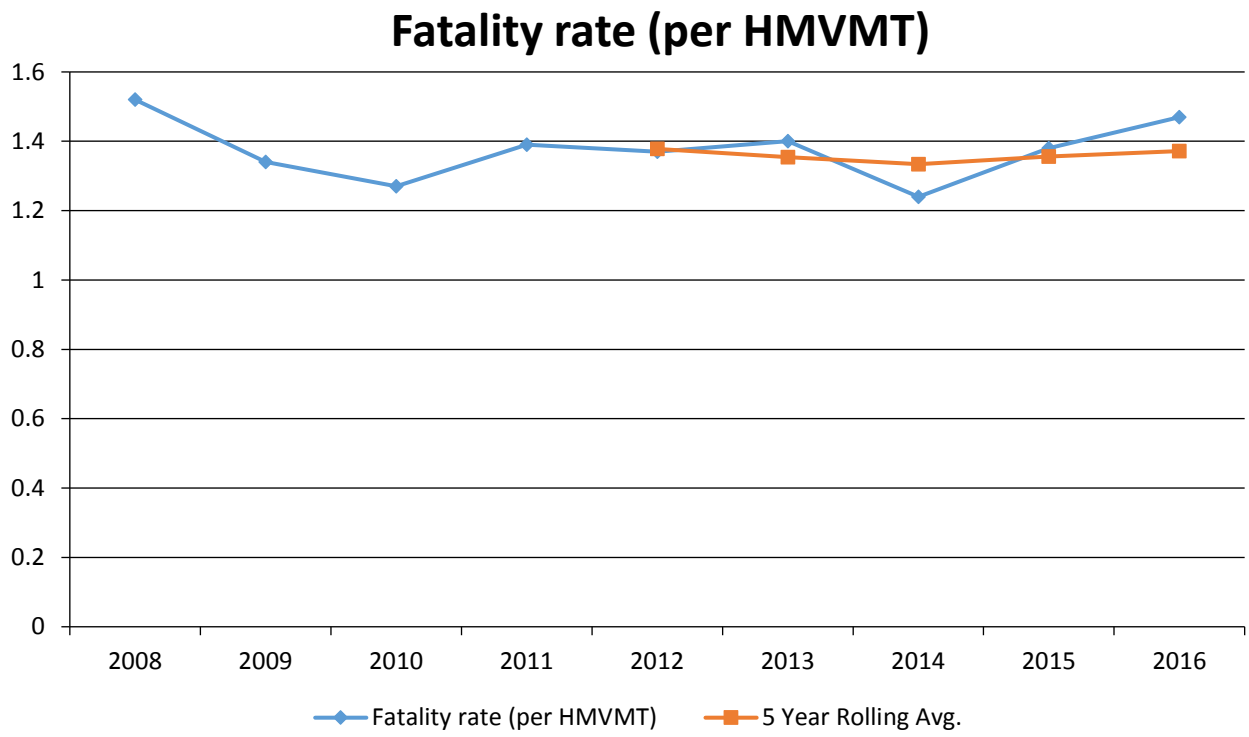
***General Highway Safety Trends***

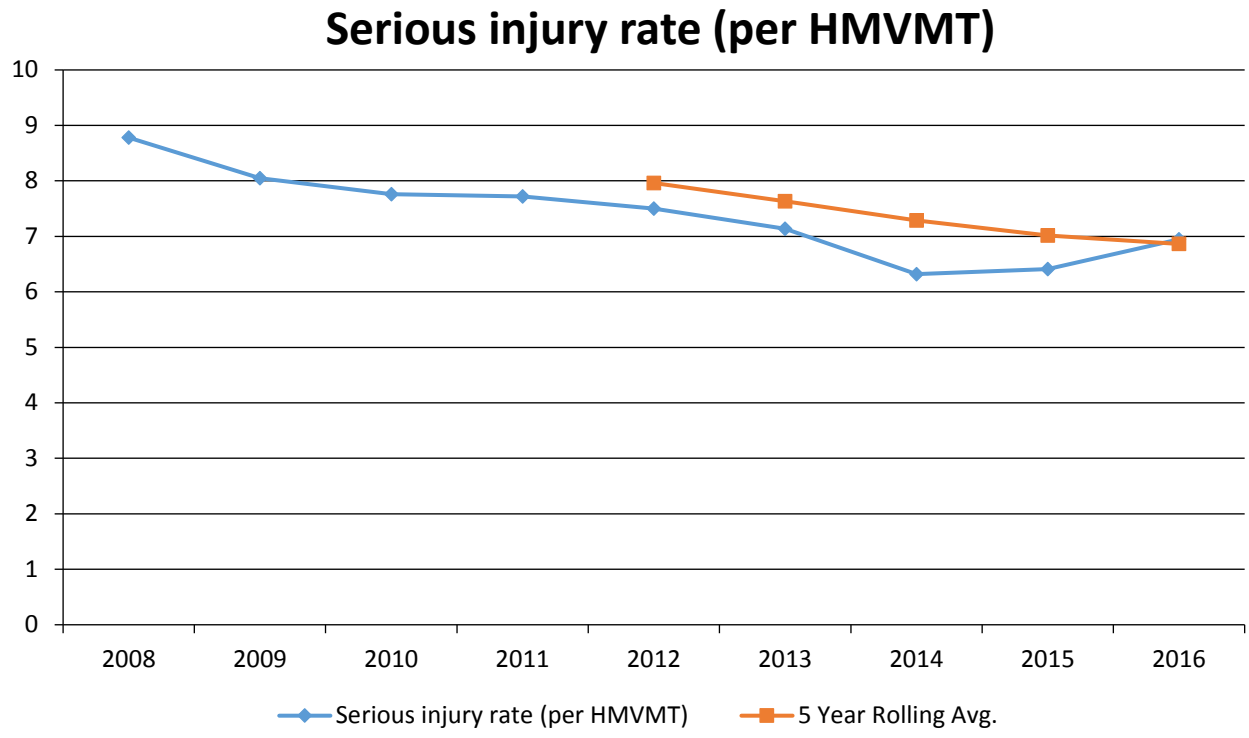
**Present data showing the general highway safety trends in the State for the past five years.**

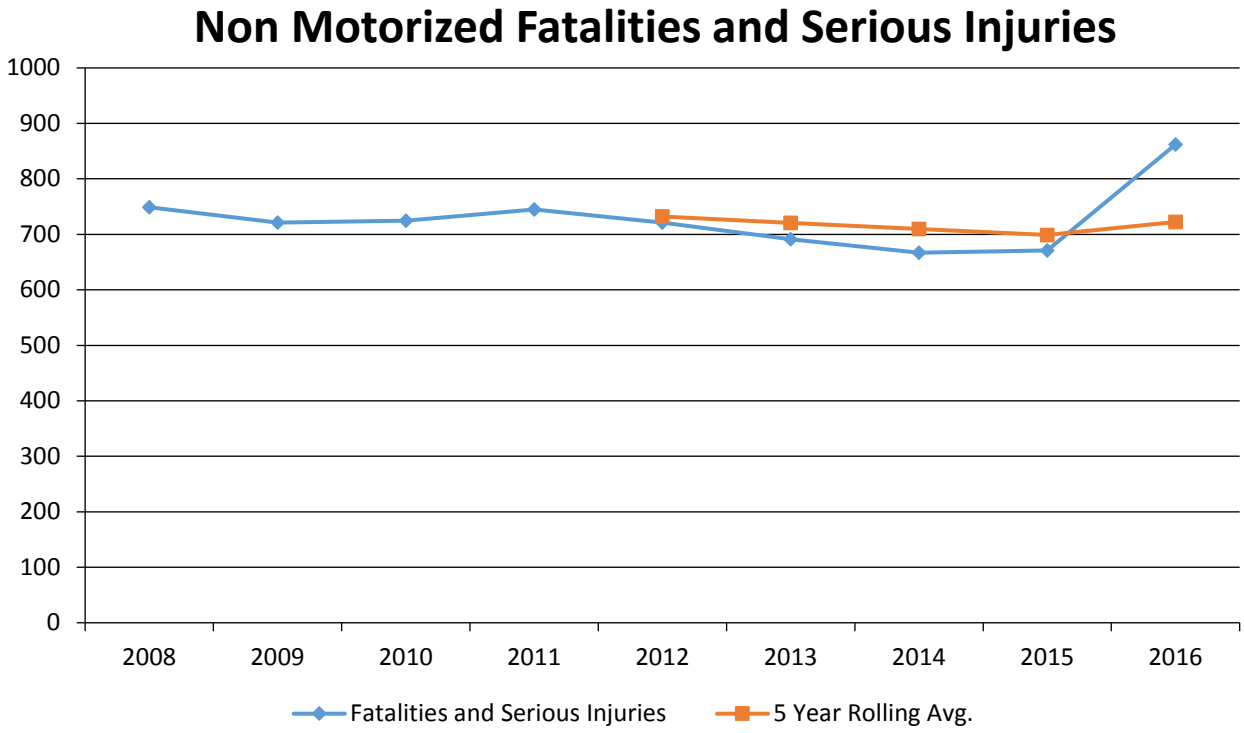
| PERFORMANCE MEASURES | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|
| Fatalities | 938 | 806 | 759 | 827 | 821 | 849 | 774 | 895 | 962 |
| Serious Injuries | 5,409 | 4,827 | 4,648 | 4,598 | 4,508 | 4,328 | 3,957 | 4,164 | 4,556 |
| Fatality rate (per HMVMT) | 1.520 | 1.340 | 1.270 | 1.390 | 1.370 | 1.400 | 1.240 | 1.380 | 1.470 |
| Serious injury rate (per HMVMT) | 8.780 | 8.050 | 7.760 | 7.720 | 7.500 | 7.140 | 6.320 | 6.410 | 6.950 |
| Number non-motorized fatalities | 144 | 147 | 173 | 177 | 149 | 189 | 184 | 191 | 228 |
| Number of non-motorized serious injuries | 605 | 574 | 552 | 568 | 572 | 502 | 483 | 480 | 634 |


Annual Fatalities
1200
1000
800
600
400
200
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
6000
5000
4000
3000
2000
1000
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
10
9
8
7
6
5
4
3
2
1
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Serious injury rate (per HMVMT)
5 Year Rolling Avg.




**Enter additional comments here to clarify your response for this question or add supporting information.**

**Describe fatality data source.**

FARS

**Enter additional comments here to clarify your response for this question or add supporting information.**

**To the maximum extent possible, present this data by functional classification and ownership.**

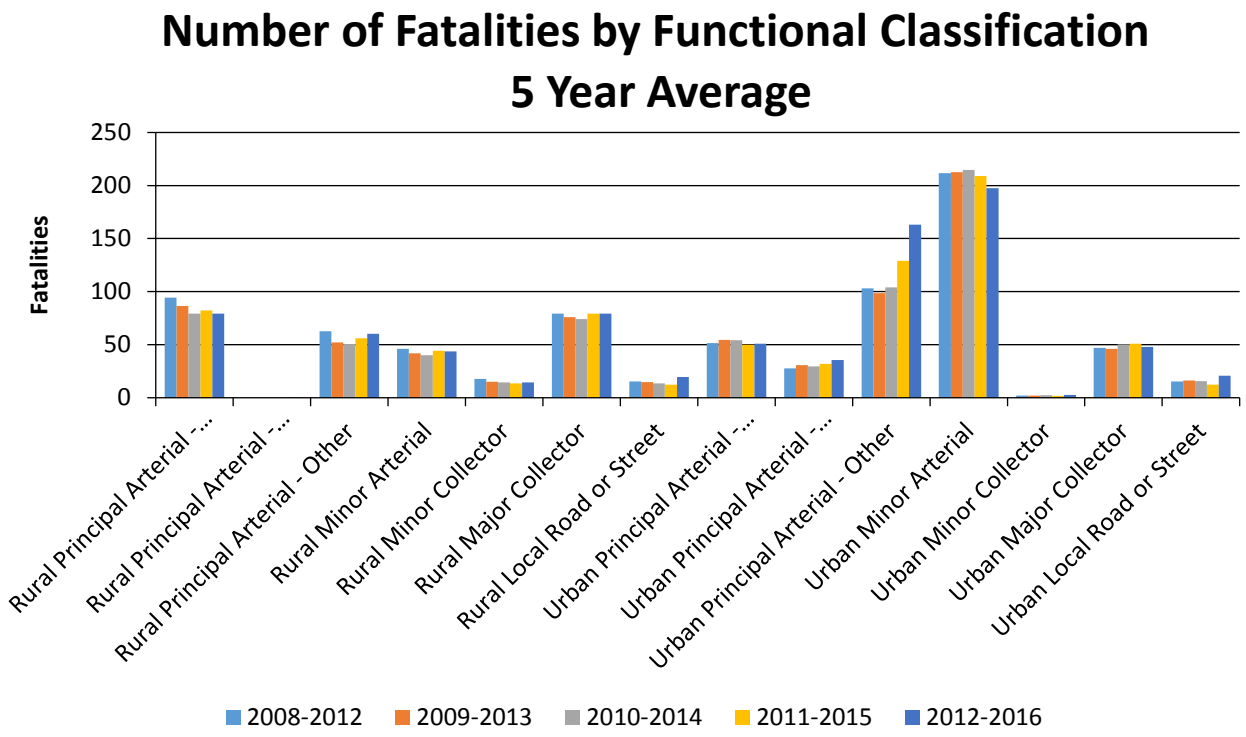
**Year 2016**

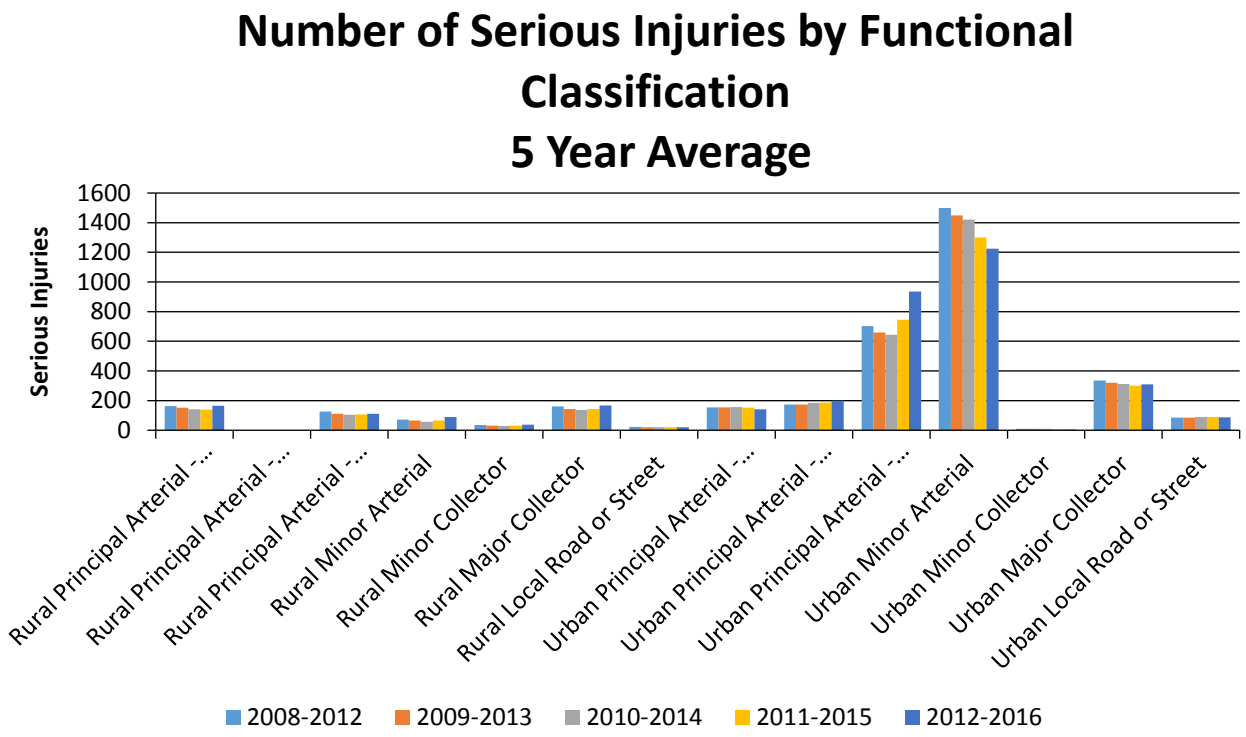
| Functional Classification | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
|---|---|---|---|---|
| Rural Principal Arterial - Interstate | 79.2 | 165.2 | 4.53 | 9.5 |
| Rural Principal Arterial - Other Freeways and Expressways | 0.2 | 0 | 2.41 | 0 |
| Rural Principal Arterial - Other | 60.4 | 110.8 | 6.71 | 12.33 |
| Rural Minor Arterial | 43.6 | 89.6 | 10.69 | 22.08 |

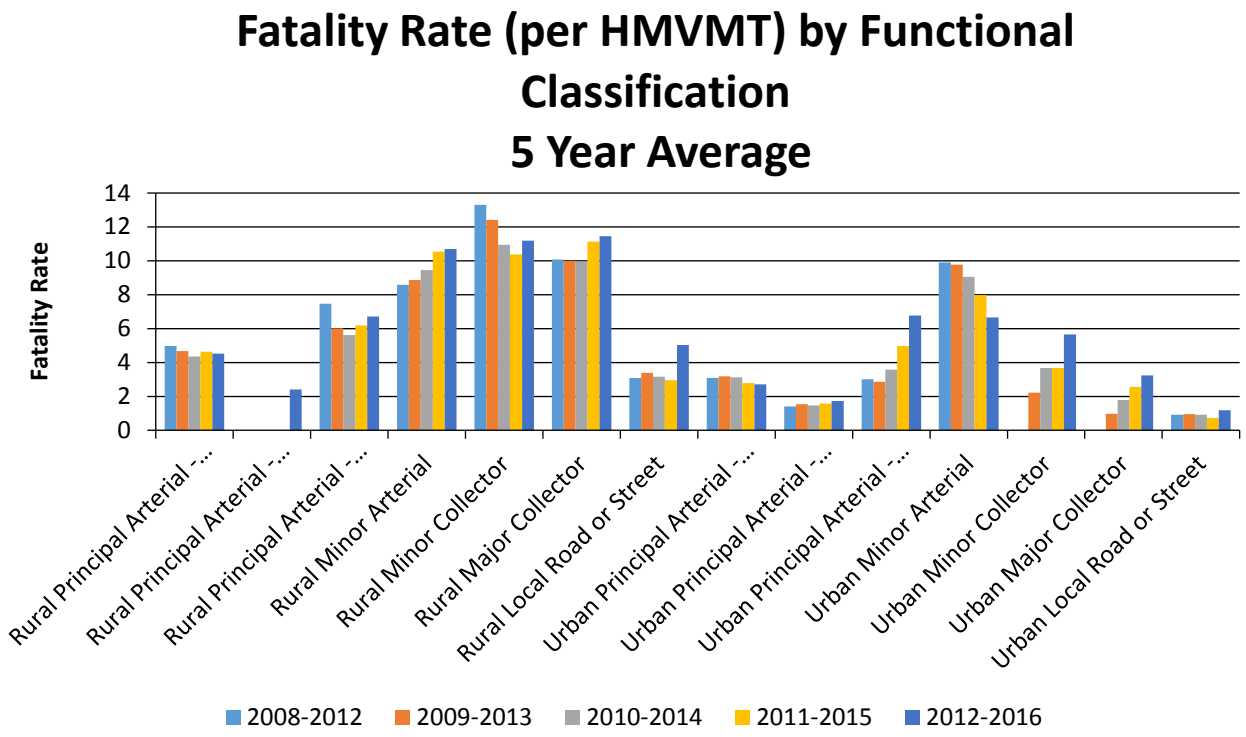
| Functional Classification | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
|---|---|---|---|---|
| Rural Minor Collector | 14.4 | 38.2 | 11.19 | 31.32 |
| Rural Major Collector | 79.4 | 167.8 | 11.46 | 24.21 |
| Rural Local Road or Street | 19.6 | 19.4 | 5.03 | 4.87 |
| Urban Principal Arterial - Interstate | 50.8 | 142 | 2.7 | 7.55 |
| Urban Principal Arterial - Other Freeways and Expressways | 35.6 | 199.4 | 1.73 | 9.66 |
| Urban Principal Arterial - Other | 163.2 | 935.2 | 6.76 | 38.45 |
| Urban Minor Arterial | 197.6 | 1,225 | 6.66 | 41.58 |
| Urban Minor Collector | 2.6 | 5.4 | 5.66 | 11.82 |
| Urban Major Collector | 48 | 310.2 | 3.24 | 21.54 |
| Urban Local Road or Street | 20.8 | 87.4 | 1.18 | 5 |

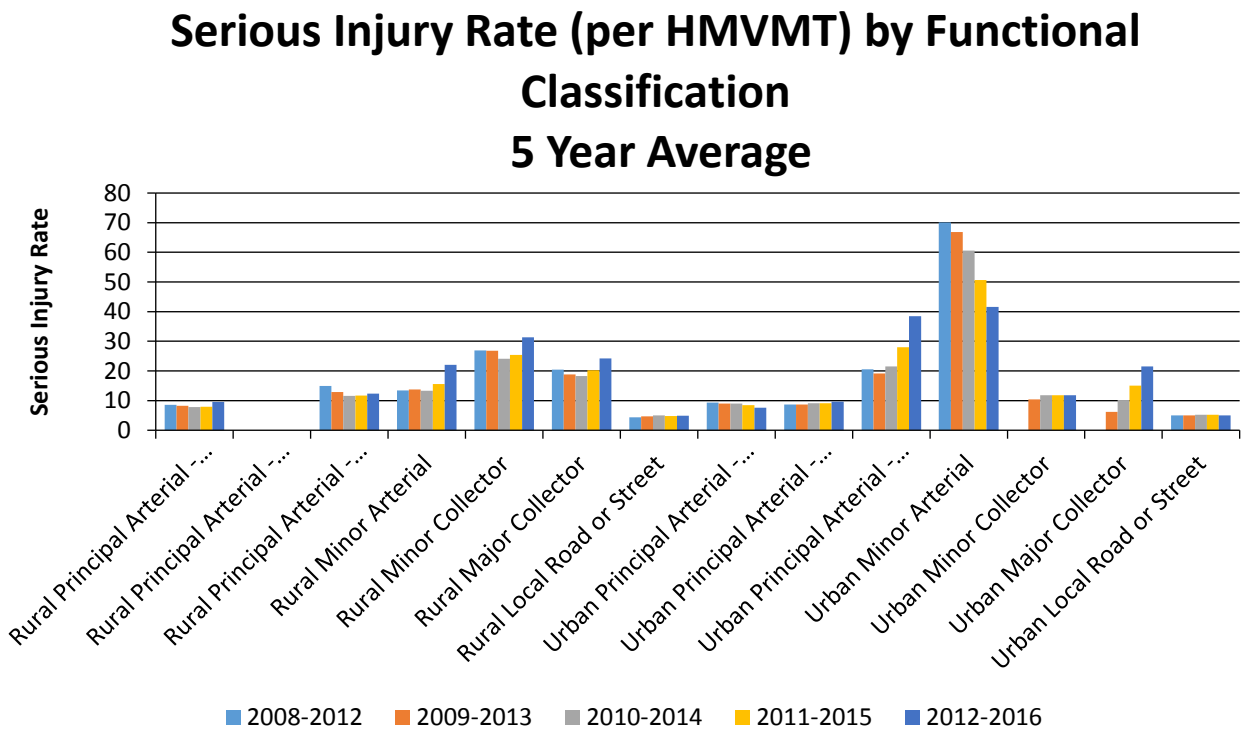
## Year 2013

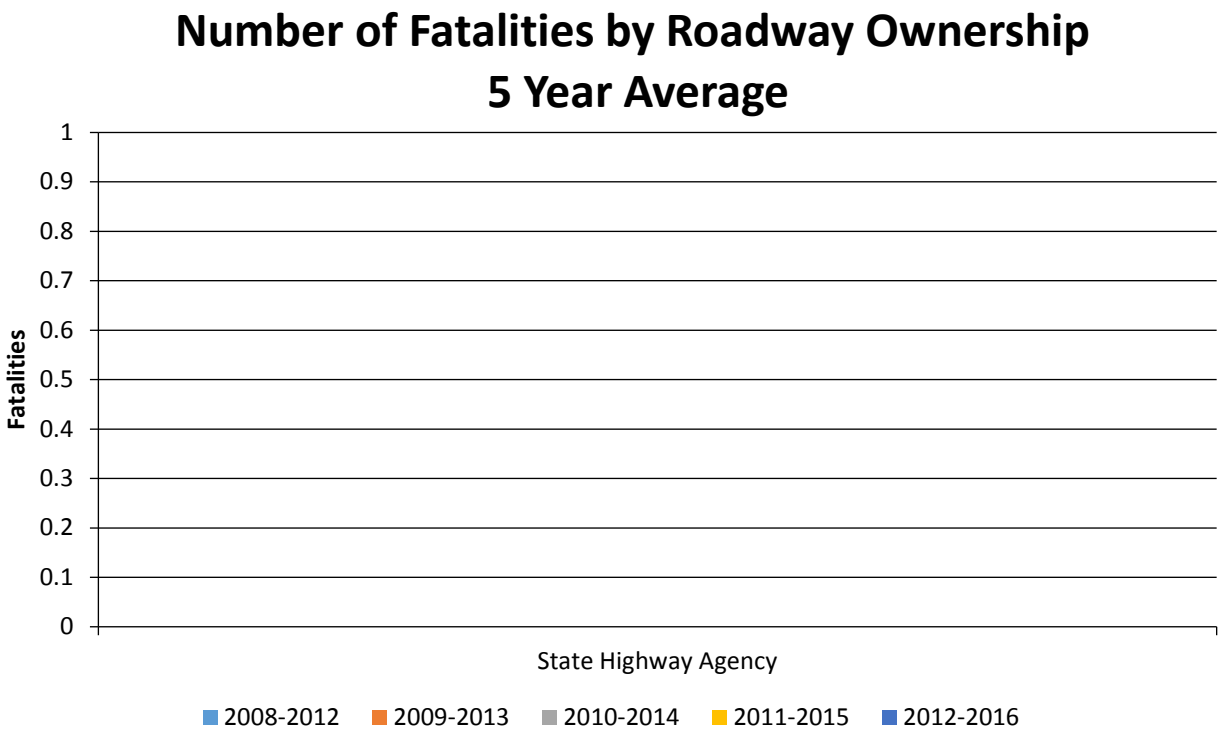
| Roadways | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
|---|---|---|---|---|
| State Highway Agency | 0 | 0 | 0 | 0 |
| County Highway Agency | | | | |
| Town or Township Highway Agency | | | | |
| City of Municipal Highway Agency | | | | |
| State Park, Forest, or Reservation Agency | | | | |
| Local Park, Forest or Reservation Agency | | | | |
| Other State Agency | | | | |
| Other Local Agency | | | | |
| Private (Other than Railroad) | | | | |
| Railroad | | | | |
| State Toll Authority | | | | |
| Local Toll Authority | | | | |
| Other Public Instrumentality (e.g. Airport, School, University) | | | | |
| Indian Tribe Nation | | | | |

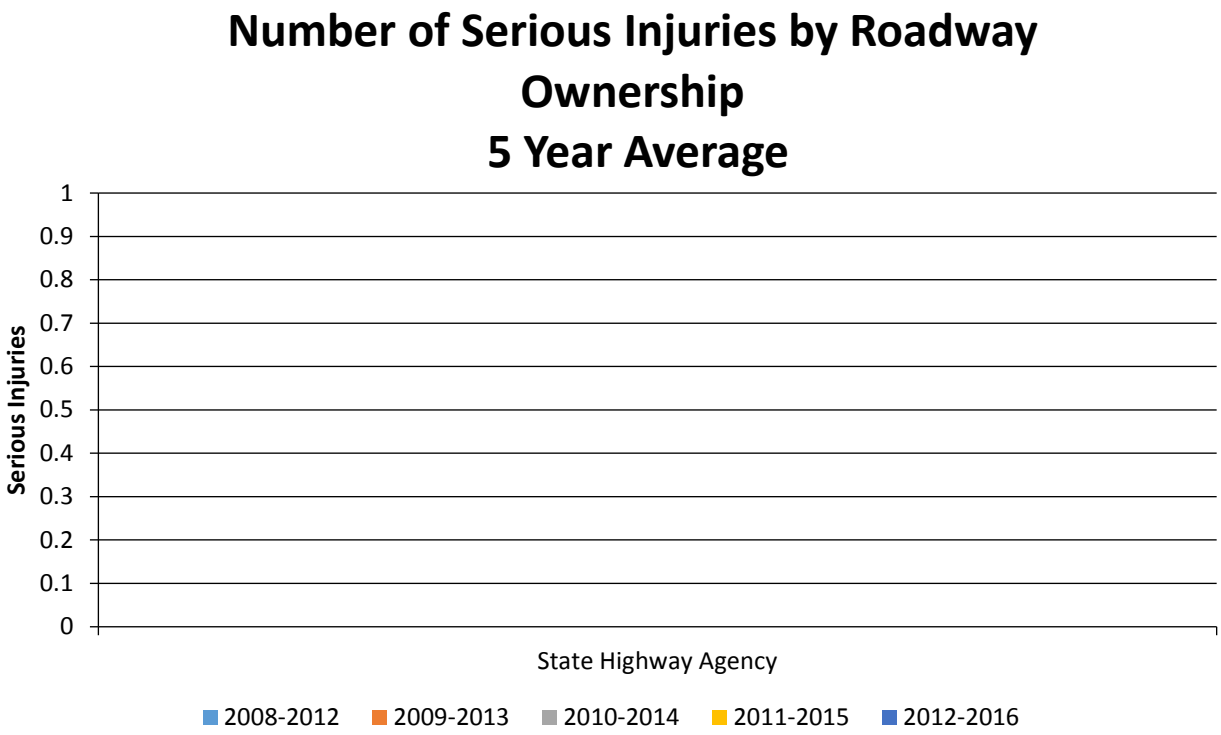

Number of Fatalities by Functional Classification
5 Year Average
Fatalities
250
200
150
100
50
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial - Other
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016

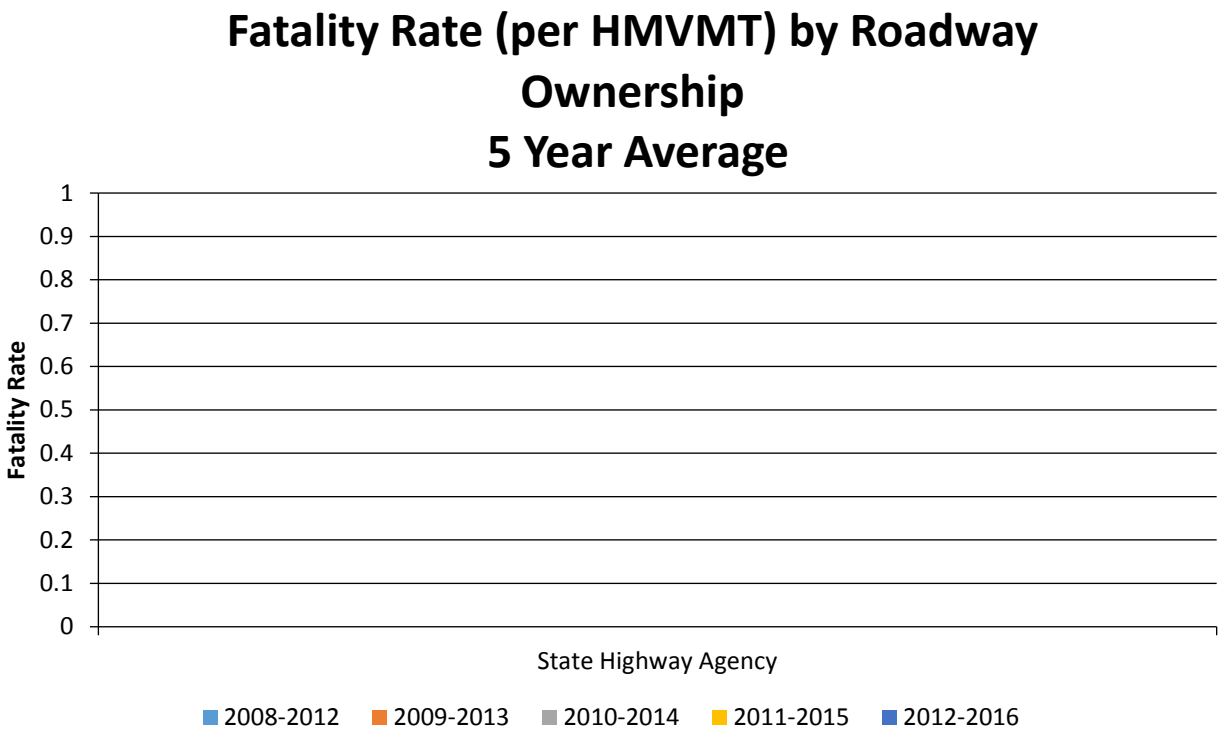

Number of Serious Injuries by Functional Classification
5 Year Average
Serious Injuries
1600
1400
1200
1000
800
600
400
200
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016

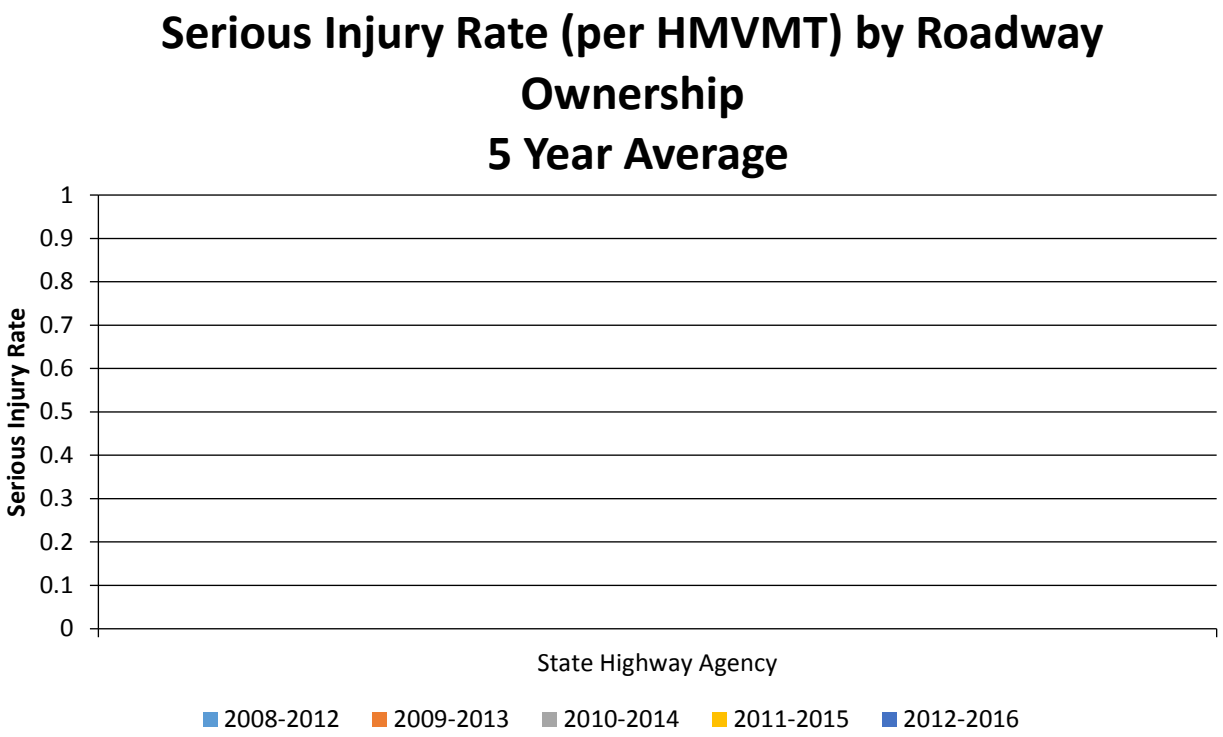

Fatality Rate (per HMVMT) by Functional Classification
5 Year Average
Fatality Rate
14
12
10
8
6
4
2
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016


Serious Injury Rate (per HMVMT) by Functional Classification
5 Year Average
Serious Injury Rate
80
70
60
50
40
30
20
10
0
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Principal Arterial -...
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Principal Arterial -...
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016


Number of Fatalities by Roadway Ownership
5 Year Average
Fatalities
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
State Highway Agency
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016


Number of Serious Injuries by Roadway Ownership
5 Year Average
Serious Injuries
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
State Highway Agency
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016


Fatality Rate (per HMVMT) by Roadway Ownership
5 Year Average
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Fatality Rate
State Highway Agency
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016




**Enter additional comments here to clarify your response for this question or add supporting information.**

As of this reporting period, AADT and crash data by Roadway Ownership as required in this question was not available in order to complete the Highway Safety Trends by Roadway Ownership table. The required data is included in the MIRE fundamental data elements and as such will be collected. See Question 49 for timelines.

**Are there any other aspects of the general highway safety trends on which the State would like to elaborate?**

No

***Safety Performance Targets***

**Safety Performance Targets**

**Calendar Year 2018 Targets ***

**Number of Fatalities** 934.6

**Describe the basis for established target, including how it supports SHSP goals.**

Arizona established our safety performance projections based on the 5-year rolling averages of statewide crash data. While the targets cover central areas of our State Strategic Highway Safety Plan, the projections do not reflect the goals of the plan

which call for a 3-7-percent reduction in fatalities and serious injury crashes by the end of 2019.

**Number of Serious Injuries** 4330.4

**Describe the basis for established target, including how it supports SHSP goals.**

Arizona established our safety performance projections based on the 5-year rolling averages of statewide crash data. While the targets cover central areas of our State Strategic Highway Safety Plan, the projections do not reflect the goals of the plan which call for a 3-7-percent reduction in fatalities and serious injury crashes by the end of 2019.

**Fatality Rate** 1.412

**Describe the basis for established target, including how it supports SHSP goals.**

Arizona established our safety performance projections based on the 5-year rolling averages of statewide crash data. While the targets cover central areas of our State Strategic Highway Safety Plan, the projections do not reflect the goals of the plan which call for a 3-7-percent reduction in fatalities and serious injury crashes by the end of 2019.

**Serious Injury Rate** 6.551

**Describe the basis for established target, including how it supports SHSP goals.**

Arizona established our safety performance projections based on the 5-year rolling averages of statewide crash data. While the targets cover central areas of our State Strategic Highway Safety Plan, the projections do not reflect the goals of the plan which call for a 3-7-percent reduction in fatalities and serious injury crashes by the end of 2019.

**Total Number of Non-Motorized Fatalities and Serious Injuries** 790.0

**Describe the basis for established target, including how it supports SHSP goals.**

Arizona established our safety performance projections based on the 5-year rolling averages of statewide crash data. While the targets cover central areas of our State Strategic Highway Safety Plan, the projections do not reflect the goals of the plan which call for a 3-7-percent reduction in fatalities and serious injury crashes by the end of 2019.

**Enter additional comments here to clarify your response for this question or add supporting information.**

It should be noted that the above "projections" are not the same as the SHSP goals because the SHSP "goals" were based on the calendar years during the economic downturn, reduced VMT and lower numbers of crashes. The current projections are based on the most current crash data and VMT which has been steadily increasing.

**Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.**

To establish the State's CY 2018 safety targets, ADOT conducted a very successful coordination effort with its partners and stakeholders. This effort resulted in the state Governor's Office of Highway Safety (GOHS) and each of the eight Arizona MPOs committing to support the Department's safety performance targets.

The following steps highlight the Department's coordination with external stakeholders:

1. On August 15 and 16, 2016, hosted an FHWA pilot NHI training "Performance-Based Planning and Programming". In attendance were representatives from FHWA, ADOT, MPOs, COGs, and Valley Metro (Phoenix area transit agency). The audience consisted of a mix of policy makers, planning professionals, and transportation engineers.
2. On December 6, 2016, hosted an FHWA/NHTSA facilitated "Safety Target Setting Workshop". In attendance were representatives from NHTSA, FHWA, ADOT, GOHS, DPS, and MPOs.
3. On January 18, 2017, during the Arizona Annual Rural Transportation Summit, held a workshop on Transportation Performance Management with a discussion that continued the theme of the December 6, 2016, event.
4. On May 5, 2017, held a meeting of the Arizona Transportation Performance Management Committee. Members of this committee include ADOT, FHWA AZ-Division, AZ MPOs, and AZ COGs. The committee meets every other month jointly with the Statewide Transportation Planners meeting. The purpose and mission of this committee is to coordinate Arizona transportation system's performance measures and target setting in compliance with federal laws and regulations. The committee was established during the Fall of 2016.
5. On May 5, 2017, briefed representatives from the two largest Arizona MPOs (MAG and PAG) regarding the process that ADOT is utilizing to set safety performance targets.
6. On May 16, 2017, conducted a meeting between the three Directors of ADOT, GOHS, and DPS to reach consensus on the State's safety performance targets. The FHWA Arizona Division Administrator was in attendance. The process that ADOT followed in reaching the recommended safety performance targets was described. Attendees agreed to support the suggested targets.
7. On June 1, 2017, held a special two-hour meeting of the Arizona Transportation Performance Management Committee to discuss the approach that was used in establishing the safety performance targets. Members of the committee committed to support the State safety performance targets.

**Does the State want to report additional optional targets?**

No

**Enter additional comments here to clarify your response for this question or add supporting information.**

***Applicability of Special Rules***

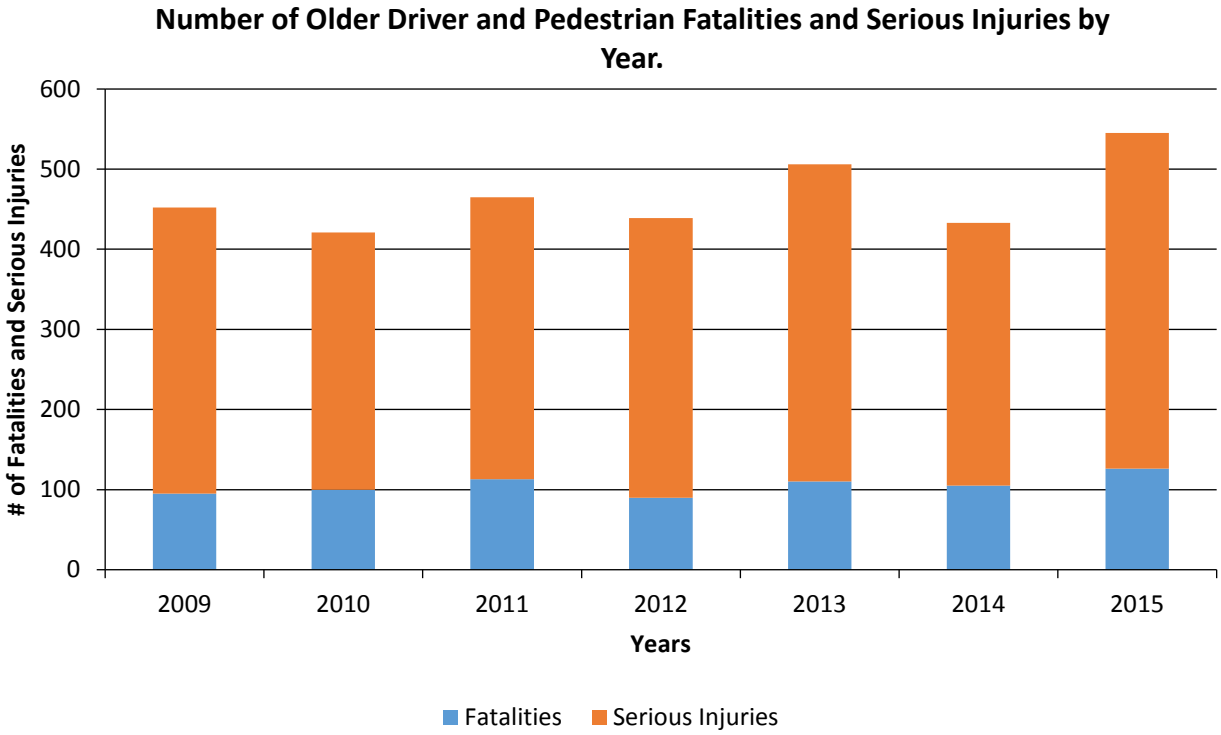
**Does the HRRR special rule apply to the State for this reporting period?**

Yes

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Provide the number of older driver and pedestrian fatalities and serious injuries for the past seven years.**

| PERFORMANCE MEASURES | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Number of Older Driver and Pedestrian Fatalities | 95 | 100 | 113 | 90 | 110 | 105 | 126 |
| Number of Older Driver and Pedestrian Serious Injuries | 357 | 321 | 352 | 349 | 396 | 328 | 419 |




**Enter additional comments here to clarify your response for this question or add supporting information.**

# Evaluation

***Program Effectiveness***

**How does the State measure effectiveness of the HSIP?**

Change in fatalities and serious injuries
Benefit/Cost Ratio

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.**

Projects implemented during this reporting period were selected based on all crashes, HSIP manual was updated on May 2015, only fatal and serious injury crashes are allowed to be used in B/C ratio calculations.

**What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?**

# RSAs completed
Increased awareness of safety and data-driven process
HSIP Obligations

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Are there any significant programmatic changes that have occurred since the last reporting period?**

No

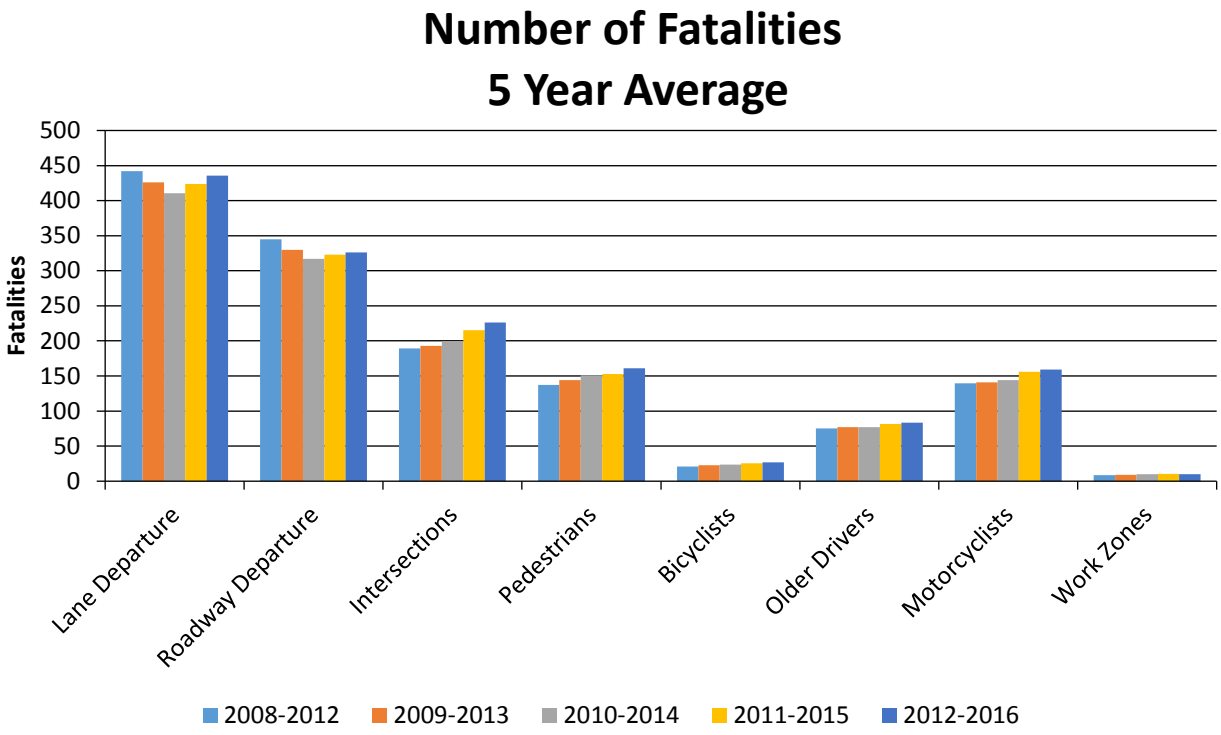
***Effectiveness of Groupings or Similar Types of Improvements***

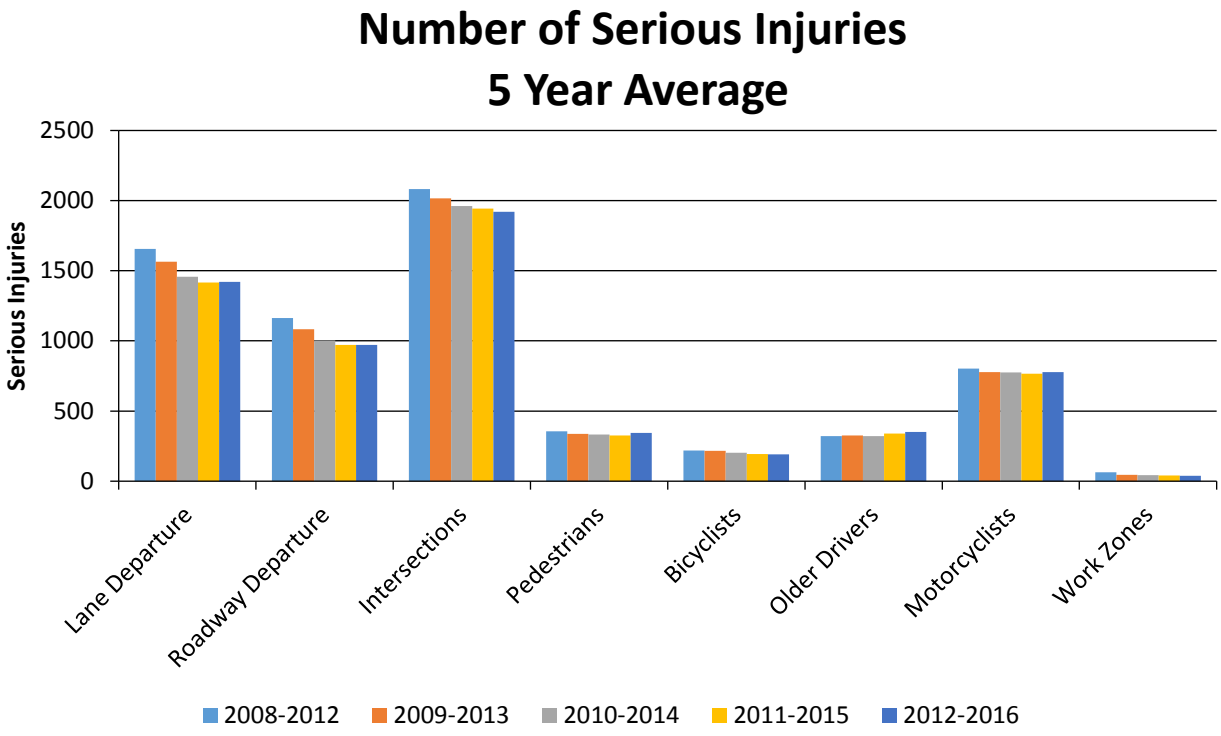
**Present and describe trends in SHSP emphasis area performance measures.**

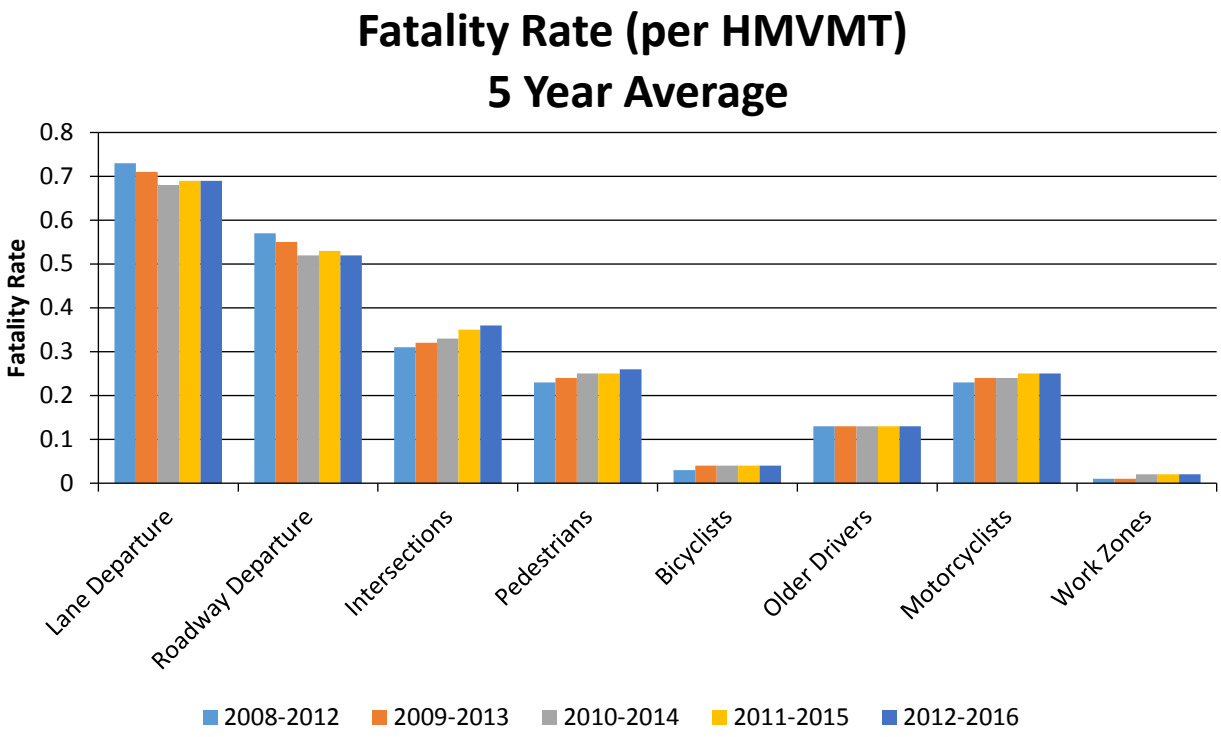
**Year 2016**

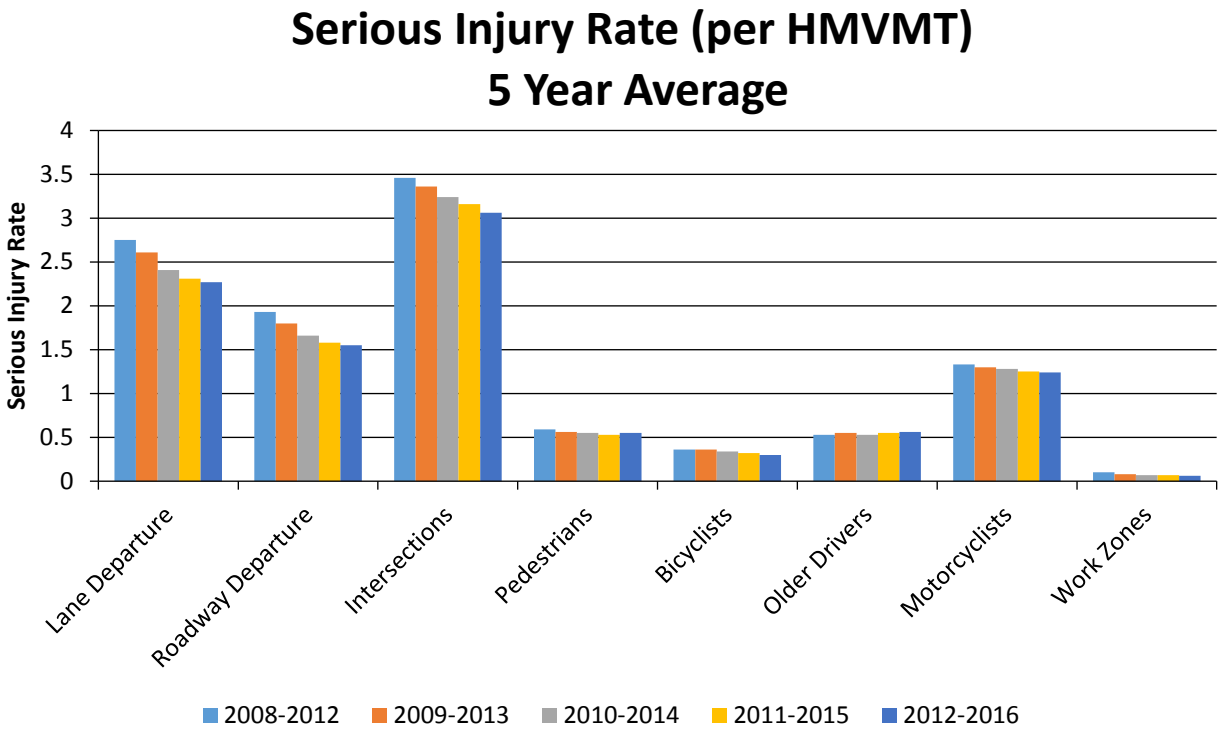
2017 Arizona Highway Safety Improvement Program

| SHSP Emphasis Area | Targeted Crash Type | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) | Other 1 | Other 2 | Other 3 |
|---|---|---|---|---|---|---|---|---|
| Lane Departure | | 435.8 | 1,420.6 | 0.69 | 2.27 | | | |
| Roadway Departure | | 326 | 970.4 | 0.52 | 1.55 | | | |
| Intersections | | 226.4 | 1,919.4 | 0.36 | 3.06 | | | |
| Pedestrians | | 161.2 | 343.8 | 0.26 | 0.55 | | | |
| Bicyclists | | 27 | 190.4 | 0.04 | 0.3 | | | |
| Older Drivers | | 83.4 | 350.2 | 0.13 | 0.56 | | | |
| Motorcyclists | | 159 | 777.2 | 0.25 | 1.24 | | | |
| Work Zones | | 10 | 37.8 | 0.02 | 0.06 | | | |


Number of Fatalities
5 Year Average
Fatalities
500
450
400
350
300
250
200
150
100
50
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016


Number of Serious Injuries
5 Year Average
Serious Injuries
2500
2000
1500
1000
500
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
2008-2012
2009-2013
2010-2014
2011-2015
2012-2016




**Enter additional comments here to clarify your response for this question or add supporting information.**

**Has the State completed any countermeasure effectiveness evaluations during the reporting period?**

2017 Arizona Highway Safety Improvement Program

No

**Enter additional comments here to clarify your response for this question or add supporting information.**

***Project Effectiveness***

**Provide the following information for previously implemented projects that the State evaluated this reporting period.**

| LOCATION | FUNCTIONAL CLASS | IMPROVEMENT CATEGORY | IMPROVEMENT TYPE | PDO BEFORE | PDO AFTER | FATALITY BEFORE | FATALITY AFTER | SERIOUS INJURY BEFORE | SERIOUS INJURY AFTER | ALL INJURY BEFORE | ALL INJURY AFTER | TOTAL BEFORE | TOTAL AFTER | EVALUATION RESULTS (BENEFIT/COST RATIO) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I-10 (356-362.1) | Rural Principal Arterial - Interstate | Roadway | Superelevation / cross slope | 24.00 | 13.00 | 1.00 | 1.00 | 3.00 | | 10.00 | 7.00 | 38.00 | 21.00 | 2.71 |
| US 93 (91.6-101.3) | Rural Principal Arterial - Other | Roadway | Roadway widening - add lane(s) along segment | 38.00 | 18.00 | 7.00 | | 6.00 | 5.00 | 12.00 | 12.00 | 63.00 | 35.00 | 3.79 |
| 8th St & Somerton | Rural Local Road or Street | Roadway | Superelevation / cross slope | 4.00 | 1.00 | | | | | 1.00 | 3.00 | 5.00 | 4.00 | 0.68 |
| I-8 (71-82) | Rural Principal Arterial - Interstate | Roadway | Pavement surface - miscellaneous | 38.00 | 39.00 | 1.00 | 3.00 | 6.00 | 3.00 | 18.00 | 13.00 | 63.00 | 58.00 | -4.74 |
| SR 83 (7.3-12) | Rural Major Collector | Roadway | Roadway - other | 3.00 | 2.00 | | | 1.00 | | 3.00 | 2.00 | 7.00 | 4.00 | -4.53 |
| SR 347/Casa Blanca | Rural Minor Arterial | Roadway | Roadway - other | 3.00 | 9.00 | | | 1.00 | 1.00 | 3.00 | 4.00 | 7.00 | 14.00 | -1.31 |
| SR287/Eleven Mile Corner | Urban Minor Arterial | Roadway | Roadway - other | 17.00 | 5.00 | 2.00 | | 7.00 | | 9.00 | 3.00 | 35.00 | 8.00 | 7.4 |
| I-40 (342-353.6) | Rural Principal Arterial - Interstate | Roadway | Superelevation / cross slope | 116.00 | 78.00 | 7.00 | 6.00 | 12.00 | 10.00 | 66.00 | 33.00 | 201.00 | 127.00 | 1.6 |
| SR 177 (139-145.6) | Rural Major Collector | Roadway | Roadway - other | 19.00 | 12.00 | 1.00 | | 11.00 | 1.00 | 8.00 | 11.00 | 39.00 | 24.00 | 14.9 |

**Enter additional comments here to clarify your response for this question or add supporting information.**

Projects implemented during this reporting period were selected based on all crashes, HSIP manual was updated on May 2015, only fatal and serious injury crashes are allowed to be used in B/C ratio calculations.

**Are there any other aspects of the overall HSIP effectiveness on which the State would like to elaborate?**

No

## Compliance Assessment

**What date was the State's current SHSP approved by the Governor or designated State representative?**

10/14/2014

**What are the years being covered by the current SHSP?**

From: 2014 To: 2019

**When does the State anticipate completing it's next SHSP update?**

2019

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.**

| | NON LOCAL PAVED ROADS - SEGMENT | | NON LOCAL PAVED ROADS - INTERSECTION | | NON LOCAL PAVED ROADS - RAMPS | | LOCAL PAVED ROADS | | UNPAVED ROADS | |
|---|---|---|---|---|---|---|---|---|---|---|
| MIRE NAME (MIRE NO.) | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE |
| **ROADWAY SEGMENT** | | | | | | | | | | |
| Segment Identifier (12) | 100 | 100 | | | | | 100 | 100 | 0 | 100 |
| Route Number (8) | 100 | 100 | | | | | | | | |
| Route/Street Name (9) | 100 | 100 | | | | | | | | |
| Federal Aid/Route Type (21) | 100 | 100 | | | | | | | | |
| Rural/Urban Designation (20) | 100 | 100 | | | | | 100 | 100 | | |
| Surface Type (23) | 100 | 100 | | | | | 100 | 100 | | |
| Begin Point Segment Descriptor (10) | 100 | 100 | | | | | 100 | 100 | 0 | 100 |
| End Point Segment Descriptor (11) | 100 | 100 | | | | | 100 | 100 | 0 | 100 |
| Segment Length (13) | 100 | 100 | | | | | | | | |
| Direction of Inventory (18) | 100 | 0 | | | | | | | | |
| Functional Class (19) | 100 | 100 | | | | | 100 | 100 | 0 | 100 |
| Median Type (54) | 100 | 100 | | | | | | | | |

| MIRE NAME (MIRE NO.) | NON LOCAL PAVED ROADS - SEGMENT | | NON LOCAL PAVED ROADS - INTERSECTION | | NON LOCAL PAVED ROADS - RAMPS | | LOCAL PAVED ROADS | | UNPAVED ROADS | |
|---|---|---|---|---|---|---|---|---|---|---|
| | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE |
| Access Control (22) | 100 | 100 | | | | | | | | |
| One/Two Way Operations (91) | 100 | 100 | | | | | | | | |
| Number of Through Lanes (31) | 100 | 0 | | | | | 100 | 0 | | |
| Average Annual Daily Traffic (79) | 100 | 100 | | | | | 100 | 100 | | |
| AADT Year (80) | 100 | 100 | | | | | | | | |
| Type of Governmental Ownership (4) | 100 | 0 | | | | | 100 | 0 | 0 | 0 |
| **INTERSECTION** | | | | | | | | | | |
| Unique Junction Identifier (120) | | | 100 | 0 | | | | | | |
| Location Identifier for Road 1 Crossing Point (122) | | | 100 | 0 | | | | | | |
| Location Identifier for Road 2 Crossing Point (123) | | | 100 | 0 | | | | | | |
| Intersection/Junction Geometry (126) | | | 0 | 0 | | | | | | |
| Intersection/Junction Traffic Control (131) | | | 0 | 0 | | | | | | |
| AADT for Each Intersecting Road (79) | | | 100 | 100 | | | | | | |
| AADT Year (80) | | | 100 | 100 | | | | | | |
| Unique Approach Identifier (139) | | | 0 | 0 | | | | | | |
| **INTERCHANGE/RAMP** | | | | | | | | | | |
| Unique Interchange Identifier (178) | | | | | 100 | 100 | | | | |
| Location Identifier for Roadway at Beginning of Ramp Terminal (197) | | | | | 0 | 0 | | | | |
| Location Identifier for Roadway at Ending Ramp Terminal (201) | | | | | 0 | 0 | | | | |
| Ramp Length (187) | | | | | 100 | 0 | | | | |
| Roadway Type at Beginning of Ramp Terminal (195) | | | | | 100 | 0 | | | | |

| MIRE NAME (MIRE NO.) | NON LOCAL PAVED ROADS - SEGMENT | | NON LOCAL PAVED ROADS - INTERSECTION | | NON LOCAL PAVED ROADS - RAMPS | | LOCAL PAVED ROADS | | UNPAVED ROADS | |
|---|---|---|---|---|---|---|---|---|---|---|
| | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE |
| Roadway Type at End Ramp Terminal (199) | | | | | 100 | 0 | | | | |
| Interchange Type (182) | | | | | 0 | 0 | | | | |
| Ramp AADT (191) | | | | | 100 | 0 | | | | |
| Year of Ramp AADT (192) | | | | | 100 | 0 | | | | |
| Functional Class (19) | | | | | 0 | 0 | | | | |
| Type of Governmental Ownership (4) | | | | | 0 | 0 | | | | |
| **Totals (Average Percent Complete):** | **100.00** | **83.33** | **62.50** | **25.00** | **54.55** | **9.09** | **100.00** | **77.78** | **0.00** | **80.00** |

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.**

ADOT proposes the following steps to meet the requirement to have complete access to the MIRE fundamental data elements on all public roadways by September 30, 2026. Each of the following steps describes necessary actions and completion dates to meet this goal.

**Step 1.** Establish a MIRE task force committee comprising representatives from the Transportation Systems Management and Operations Division (TSMO), the Information Technology Group (ITG), and the Multimodal Planning Division (MPD) who will take responsibility in ensuring completion of the following steps.

ADOT has formed a preliminary MIRE task force committee consisting of nine total members, three from each division stated above:

**Transportation Systems Management and Operations Division (TSMO)**

- John Riemer
- Pradeep Tiwari*
- Kerry Wilcoxon

**Information Technology Group (ITG)**

- Mark Flahan
- Scott Parkey*
- Tom Tyndall

**Multimodal Planning Division (MPD)**

- Mick Cseri*
- James Meyer
- Patrick Whiteford

* Indicates MIRE task force co-leader responsible for ensuring the following steps are completed.

Each division of the MIRE task force committee will work closely to ensure the following steps are completed timely and accurately.

**Step 2.** Create an outreach plan to facilitate communication between ADOT and Tribal and local agencies. The plan will include specific measures to promote awareness and understanding of the MIRE FDE plan and establish a mutual understanding of potential future data needs. This step will be completed in 2017. ADOT parties involved: MPD/ITG/TSMO.

**Step 3.** Verify the completeness and compatibility of the data that ADOT has at the State level for ADOT-maintained roads, noting the collection methodology and frequency. This step should also include verifying which division collects, receives, and maintains the data as well as how the data is stored, managed, and who has access to it. This step will be completed in 2017. ADOT parties involved: MPD/ITG/TSMO.

**Step 3b.** For all new elements, ADOT will establish a database schema.

**Step 4.** Determine the roadway characteristics and format of the data that each of the 15 Counties, 46 Cities, 45 Towns, 22 Tribes, and other agencies is collecting for their non-ADOT-maintained roadways. The collection methodology and frequency, quality control / quality assurance measures employed for the collected data, database schema, and software that each locality uses should also be confirmed. This step will begin in 2017. ADOT parties involved: MPD/ITG/TSMO.

**Step 4b.** Determine if the locality data is complete and compatible with ADOT's existing data. This step will begin in 2017 and be completed simultaneously with Step 2. This step will determine if data needs to be collected by ADOT for the non-ADOT-maintained roadways. ADOT parties involved: MPD/TSMO.

**Step 5.** Finalize the data collection needs for both ADOT and non-ADOT-maintained roadways. This step should be completed directly following Step 3. This step will be completed in 2018. ADOT parties involved: MPD/TSMO.

**Step 6.** Create a detailed data collection and maintenance plan to include specific costs, resource needs, prioritization, and schedules. The data collection plan should specify the anticipated data collection methodology, who is responsible for collecting the data, how it will be made available to ADOT, and how frequently the data will be updated. If a quality assurance / quality control process has not yet been established, ADOT will create one prior to data collection. This step will be completed in 2019. ADOT parties involved: MPD/ITG/TSMO.

**Step 7.** Create a cost estimate for all data collection and maintenance efforts. This step will be completed in 2018. ADOT parties involved: MPD/TSMO.

**Step 8.** Identify funding sources for the data collection and maintenance process. This step will be completed in 2019. ADOT parties involved: MPD/TSMO.

**Step 9.** Allocate funding and resources for the data collection efforts. This step will be completed in 2020. ADOT parties involved: MPD/TSMO.

**Step 10.** Gather all remaining data. This step will be completed by September 2025 to allow one year for post-processing. ADOT parties involved: MPD/TSMO.

**Step 11.** Post-process all data into a user-friendly format compatible with appropriate State data systems. This step *must* be completed by September 2026 to meet federal regulations. ADOT parties involved: MPD/TSMO.

It should be noted that unfortunately Arizona did not meet the requirement of 23 CRF Part 924.11 to incorporate the necessary language for the collection of MIRE data elements in the TRCC Strategic Plan by the July 1, 2017 deadline. Arizona has submitted a satisfactory communication to AZ FHWA and the appropriate language will be incorporated into the TRCC Strategic Plan and approved by the TRCC at the next scheduled meeting.

**Provide the suspected serious injury identifier, definition and attributes used by the State for both the crash report form and the crash database using the table below. Please also indicate whether or not these elements are compliant with the MMUCC 4th edition criteria for data element P5. Injury Status, suspected serious injury.**

| CRITERIA | SUSPECTED SERIOUS INJURY IDENTIFIER(NAME) | MMUCC 4TH EDITION COMPLIANT * | SUSPECTED SERIOUS INJURY DEFINITION | MMUCC 4TH EDITION COMPLIANT * | SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS) | MMUCC 4TH EDITION COMPLIANT * |
|---|---|---|---|---|---|---|
| Crash Report Form | Incapacitating Injury | Yes | N/A | Yes | N/A | Yes |
| Crash Report Form Instruction Manual | Incapacitating Injury | Yes | Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred. Often defined as "needing help from the scene." | Yes | Includes: severe lacerations, broken or distorted limbs, skull or chest injuries, abdominal injuries, unconsciousness when taken from the crash scene. | Yes |
| Crash Database | Incapacitating Injury | Yes | N/A | Yes | N/A | Yes |
| Crash Database Data Dictionary | Incapacitating Injury | Yes | Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing | Yes | Includes: severe lacerations, broken or distorted limbs, skull or chest injuries, abdominal injuries, unconsciousness when taken from the crash scene. | Yes |

| CRITERIA | SUSPECTED SERIOUS INJURY IDENTIFIER(NAME) | MMUCC 4TH EDITION COMPLIANT * | SUSPECTED SERIOUS INJURY DEFINITION | MMUCC 4TH EDITION COMPLIANT * | SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS) | MMUCC 4TH EDITION COMPLIANT * |
|---|---|---|---|---|---|---|
| | | | before the injury occurred. Often defined as "needing help from the scene." | | | |

**Enter additional comments here to clarify your response for this question or add supporting information.**

**Did the State conduct an HSIP program assessment during the reporting period?**
No

**When does the State plan to complete it's next HSIP program assessment.**

2018

**Enter additional comments here to clarify your response for this question or add supporting information.**

May 31, 2018

## Optional Attachments

Program Structure:

HSIP Appendix_C.pdf
HSIP Appendix_ B.pdf
HSIP Appendix_A.pdf
2015 HSIP Manual (RevFeb17).pdf

Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

## Glossary

| | |
|---|---|
| **5 year rolling average** | means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate). |
| **Emphasis area** | means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process. |
| **Highway safety improvement project** | means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem. |
| **HMVMT** | means hundred million vehicle miles traveled. |
| **Non-infrastructure projects** | are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities. |
| **Older driver special rule** | applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013. |
| **Performance measure** | means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives. |
| **Programmed funds** | mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects. |
| **Roadway Functional Classification** | means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. |
| **Strategic Highway Safety Plan (SHSP)** | means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148. |
| **Systematic** | refers to an approach where an agency deploys countermeasures at all locations across a system. |
| **Systemic safety improvement** | means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types. |
| **Transfer** | means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section. |