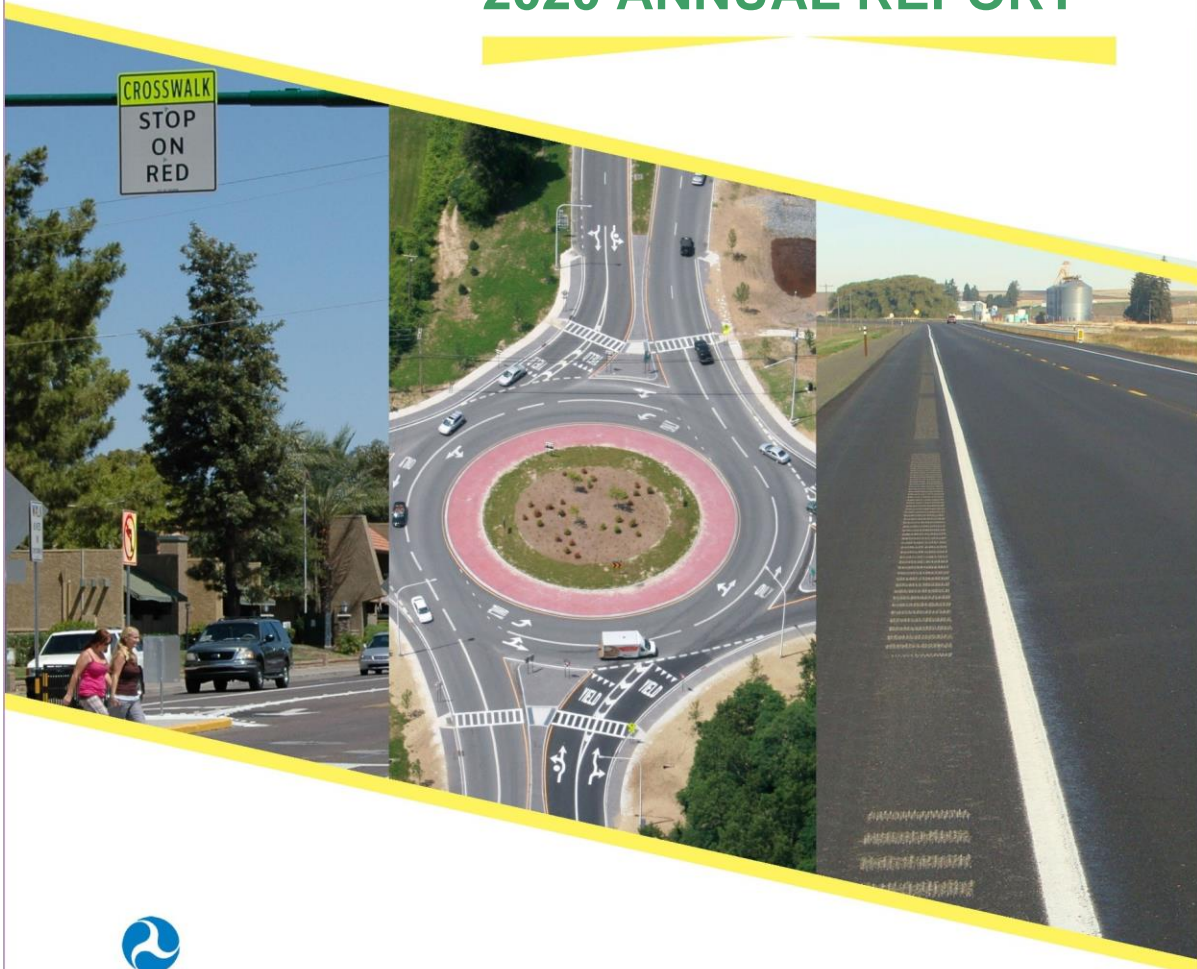




ARIZONA

# HIGHWAY SAFETY IMPROVEMENT PROGRAM 2020 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. 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), the Transportation Systems Management and Operations (TSMO) 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's Strategic Traffic Safety Plan (STSP) was updated in October 2019 meeting the requirements for SHSPs in the Fixing America's Surface Transportation Act (FAST Act) and FHWA guidance. The SHSP implementation phase began in early 2020. ADOT recognizes the importance of the upcoming implementation phase in continuing the collaboration, cooperation, and sharing of knowledge and resources by all safety stakeholders to make safety our top priority.

Arizona's HSIP call for projects for the Fiscal Year 2023 and Fiscal Year 2024 was announced in January 2020 for all public roads. A total of 75 applications were received. The total amount of HSIP funds applied for in the applications that were received represent twice the amount of HSIP funds available. Local and State agencies are actively applying for HSIP funds and participating in the program. The distribution of HSIP funds before 2019 was established at 80% State and 20% Local. However, local roads have 64% of the total number of fatal crashes in Arizona. The current distribution of HSIP funds increased for Local agencies to 30%, 23%, 36% and 69% respectfully for State Fiscal Years 19, 20, 21 and 22

This annual report continues to reflect 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 State Fiscal Year (SFY) 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. compliant with 23 USC 148 / 23 CFR 924, a proven safety countermeasure, identify fatal and serious injury crashes that countermeasure can potentially reduce, supports the AZ SHSP, and B/C ratio of equal to or greater than 2.5. The approved HSIP eligible project is then ranked by the HSIP Program Manager based on the B/C ratio." A Safety Review Committee, comprised of FHWA, ADOT staff, COG/MPO's, Inter Tribal Council and locals, reviews and approves the proposed list. The HSIP Program Manager then presents the list to the Director, TSMO 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 letters and enters the projects in the ADOT Five Year Transportation Facilities Construction Program.

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

Other-TSM&O

Located in the Operational Traffic and Safety Group under Traffic Safety Section.

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

- Central Office via Statewide Competitive Application Process

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

Arizona's HSIP funds are available for all public agencies and tribes to apply for as described in the prior general structure of the HSIP in the State. Prior year commitments are first identified and set aside, then 10% of the remaining eligible funds are set aside for unforeseen safety projects, and finally the remaining funds are available for statewide call for projects. ADOT and local public agencies, including Tribes, identify high crash locations using network screening, Arizona Crash Information System (ACIS) and develop safety improvement projects. In recent years COGs/MPOs have been provided HSIP funds to develop Strategic Transportation Plans (STSP) with projects to support the State Strategic Highway Safety Plan (SHSP). ADOT reviews all potential projects on a statewide basis and prioritize projects for funding based on the B/C ratio analysis.

## 2020 Arizona Highway Safety Improvement Program

ADOT Local Public Agency (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.**

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

### **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). In addition, the ADOT Traffic Safety Section performs a crash data network screening process of the state highway system to identify "hot spots" and shares the top 5 locations for each District with the appropriate stakeholder (District representative and Regional Traffic Engineer). If a 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. The top 5 locations can be recommended for Road Safety Assessment (RSA) and additional safety evaluations.

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

- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency

### **Describe coordination with external partners.**

External coordination involves participation and membership in COG/MPOs Safety Committee meetings, workshops, 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. In addition, the ADOT Traffic Safety Section performs a crash data network screening process of the local highway system to identify "hot spots" and shares the top 5 locations with the appropriate stakeholder (Local Agency or Tribe). If a 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. In addition to the direct involvement through the HSIP application process, agencies can participate in the Road Safety Assessment (RSA) program which can lead to HSIP applications. RSA applications are made available at: <https://azdot.gov/business/transportation-systems-management-and-operations/operational-and-traffic-safety/road-safety>

## ***Program Methodology***

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

Yes

2015 HSIP Manual (RevDec18)

HSIP Appendix A

HSIP Appendix\_B

HSIP Appendix\_C

HSIP Appendix\_D

<https://azdot.gov/business/transportation-systems-management-and-operations/operational-and-traffic-safety>

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

- Other-RSA

### **Program: Other-RSA**

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

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

***What is the funding approach for this program?***

Funding set-aside

***What data types were used in the program methodology?***

#### **Crashes**

- All crashes

#### **Exposure**

- Volume

#### **Roadway**

- Median width
- Horizontal curvature
- Roadside features

***What project identification methodology was used for this program?***

- 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?***

Yes

***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**

Available funding:1

Other-Network Screening:2

Other-Owner Request:2

ADOT Traffic Safety Section performs a crash data network screening process of the state highway system to identify "hot spots" and shares the top 5 locations for each District with the appropriate stakeholder (District representative and Regional Traffic Engineer) and Local Agencies. Locations can be recommended for RSA. ADOT Traffic Safety Section receives RSA application from Districts, Local agencies and Tribes.

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

49.5

**HSIP funds are used to address which of the following systemic improvements?**

- Horizontal curve signs
- Pavement/Shoulder Widening
- Rumble Strips
- Wrong way driving treatments

**What process is used to identify potential countermeasures?**

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input

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

Yes

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

If an application for HSIP funding were submitted it would be considered. Connected vehicles and 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 commercial freight and passenger vehicles. Connected vehicle infrastructure, comprised of the roadside units,



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on-board units, communication network and software platforms, will allow significantly improved traffic management systems through the dissemination of information, such as basic safety messages. Areas of potential improvement will be in speed harmonization, queue warning, and 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 associated ITS technologies. ITS projects compete for HSIP funds with B/C ratio used to prioritize projects for funding.

### **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 methods are used on a regular basis primarily to support B/C ratio analysis and determining CMFs. Arizona's has also supported an emphasis on predictive modeling over the last few years has been focused on bring Safety Analyst on-line. Safety Analyst is currently has been used to identify systemic projects on the State Highway System. HSM methods are also used to support any requested design exceptions.

## Project Implementation

### *Funds Programmed*

#### Reporting period for HSIP funding.

State Fiscal Year

The HSIP funding reporting period is State Fiscal Year 2019. ( July 1, 2018 to June 30, 2019)

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$42,950,727	\$29,563,427	68.83%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$0	\$0	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	\$7,820,024	\$799,740	10.23%
Totals	\$50,770,751	\$30,363,167	59.8%

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

30%

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

30%

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

1%

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

1%

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%

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

None

General Listing of Projects

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

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
F002901D/C: SR 95 AT KIOWA BLVD - RIGHT TURN LANES RAISED MED	Intersection geometry	Auxiliary lanes - add right-turn lane	2	Lanes	\$545358	\$576443	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	22,394	45	State Highway Agency	Spot	Intersections	
F014201D/C: HORIZONTAL CURVE WARNING SIGNS, PHASE I	Roadway signs and traffic control	Curve-related warning signs and flashers	2684	Signs	\$2215321	\$2215321	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Roadway Departure	
F017801X: ROAD SAFETY ASSESSMENT PROGRAM	Non-infrastructure	Road safety audits	1	RSA Program	\$5658	\$5980	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Non-Infrastructure	All Emphasis Areas	
F018101C: MAG REGIONWIDE WRONG WAY SIGNING & MARKING	Roadway signs and traffic control	Roadway signs and traffic control - other	53	Signs	\$2704131	\$2704131	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	
F018601C: MAG REGION SAFETY CORRIDOR SPEED FEEDBACK SIGNS	Roadway signs and traffic control	Roadway signs and traffic control - other	4	Signs	\$225079	\$225079	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	0	65	State Highway Agency	Spot	Speeding and Aggressive Driving	
F019001D/C: SR87; SR 187 TO GIBLERT RD, SIGNALS	Intersection traffic control	Intersection traffic control - other	3	Locations	\$1757000	\$1757000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	6,552	65	State Highway Agency	Spot	Intersections	
F019301D: US 191: M450-M452.5 SHOULDER WIDENING AND RUMBLE STRIPS	Shoulder treatments	Widen shoulder - paved or other	2.5	Miles	\$444153	\$469469	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,655	65	State Highway Agency	Spot	Roadway Departure	
F019401C: I-10/I-40 RURAL SAFETY CORRIDORS	Speed management	Speed management - other	14	Signs	\$446403	\$446403	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	61,214	75	State Highway Agency	Spot	Speeding and Aggressive Driving	
F020801D: SR-347 AND OLD MARICOPA RD INTERSECTION,SIGNAL	Intersection traffic control	Intersection traffic control - other	1	Locations	\$195000	\$195000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	32,674	55	State Highway Agency	Spot	Intersections	
F020901D: 7TH STREET TO AVIATION WAY	Access management	Raised island - install new	1	Miles	\$216890	\$229252	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	27,840	45	State Highway Agency	Spot	Lane Departure	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
F021301D: INSTALL HORIZONTAL CURVE WARNING SIGNS, PHASE III AT VARIOUS LOCATIONS	Roadway signs and traffic control	Curve-related warning signs and flashers	539	Signs	\$160000	\$160000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Roadway Departure	
F021401D: STATEWIDE HORIZONTAL CURVE WARNING SIGNS, PHASE IV	Roadway signs and traffic control	Curve-related warning signs and flashers	682	Signs	\$100000	\$100000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Roadway Departure	
F024301D: US 160 MP 322.6 TO MP 324.5	Lighting	Continuous roadway lighting	2	Miles	\$219719	\$219719	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,787	65	State Highway Agency	Spot	Pedestrians	
F026901D: SR 69 AND SPRING LANE INTERSECTION	Intersection geometry	Auxiliary lanes - add left-turn lane	2	Lanes	\$300000	\$300000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	14,888	65	State Highway Agency	Spot	Intersections	
H8102CAX: I:8: ARABY ROAD/I-8 TI	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$125879	\$125879	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	18,500	55	State Highway Agency	Spot	Intersections	
H838801C: US 95; US 95 AND 8E INTERSECTION	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$294436	\$294436	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	12,424	55	State Highway Agency	Spot	Intersections	
H849801C: YARNELL HILL	Roadway signs and traffic control	Curve-related warning signs and flashers	241	Signs	\$262976	\$277966	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,200	45	State Highway Agency	Spot	Roadway Departure	
H865701C: US 93, WHITE HILLS ROAD - ELEVENTH STREET	Shoulder treatments	Widen shoulder - paved or other	9.91	Miles	\$1818819	\$1922491	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	14,700	65	State Highway Agency	Systemic	Roadway Departure	
H865801C: US 93, ELEVENTH ST - WINDY POINT ROAD	Shoulder treatments	Widen shoulder - paved or other	10	Miles	\$7490732	\$7917703	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	14,700	65	State Highway Agency	Systemic	Roadway Departure	
H883801C: RUINS DRIVE AT SR-87	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$731741	\$731741	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	11,998	50	State Highway Agency	Spot	Intersections	
H891901D: SR 77, RIVER RD -CALLE CONCORDIA	Lighting	Continuous roadway lighting	5	Miles	\$330544	\$330544	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	42,115	50	State Highway Agency	Spot	Pedestrians	
M693701X: SAFETY ANALYST TECHNICAL SUPPORT	Non-infrastructure	Data/traffic records	1	Crash Data Analysis	\$37720	\$39870	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Non-Infrastructure	Data	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
M694901X: SMART WORK ZONE (SMZ) STUDY	Advanced technology and ITS	Congestion detection / traffic monitoring system	1	SMZ Specifications	\$70725	\$74756	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Non-Infrastructure	Work Zones	
PNG1807P: 2018 PL WORK PROGRAM (NACOG)	Non-infrastructure	Transportation safety planning	1	Transportation Safety Plan	\$185000	\$195545	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	Other Local Agency	Non-Infrastructure	Transportation Safety Planning	
SH53101C: HAYDEN / THOMAS ROADS	Intersection geometry	Auxiliary lanes - add right-turn lane	1	Intersections	\$1565071	\$1654280	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0	45	City or Municipal Highway Agency	Spot	Intersections	
SH53301C: PENDLETON DRIVE; VIA CALIENTE TO CIRCULO CERRO	Roadway signs and traffic control	Roadway signs and traffic control - other	5.23	Miles	\$2644700	\$2644700	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Minor Collector	5,599	40	County Highway Agency	Spot	Roadway Departure	
SH54401R: SOUTHERN AVE AT STAPLEY DR	Intersection geometry	Auxiliary lanes - add left-turn lane	2	Lanes	\$526289	\$556287	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	28,800	40	City or Municipal Highway Agency	Spot	Intersections	
SH60001C: CENTRAL YAVAPAI COUNTY, VARIOUS LOCATIONS	Roadway signs and traffic control	Sign sheeting - upgrade or replacement	2192	Signs	\$245390	\$245390	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	Other Local Agency	Spot	Signage	
SH62801C: LED ENHANCED SPEED LIMIT SIGN	Roadway signs and traffic control	Roadway signs (including post) - new or updated	20	Signs	\$25461	\$25461	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	Other Local Agency	Spot	Signage	
SS99101C: 8TH AVENUE & AIRPORT ROAD INTERSECTION	Roadway	Roadway - other	1	Intersections	\$1278249	\$1278249	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	4,595	45	County Highway Agency	Spot	Intersections	
T004801C: RURAL RD AND SOUTHERN AVE, SIGNAL IMPROVEMENTS	Intersection traffic control	Modify traffic signal timing - left-turn phasing (permissive to protected-only)	1	Intersections	\$675324	\$675324	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	64,532	40	City or Municipal Highway Agency	Spot	Intersections	
T011601C: INDIAN SCHOOL ROAD: 47TH AVENUE TO 79TH AVENUE	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	155	Backplates	\$220000	\$220000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	37,000	45	City or Municipal Highway Agency	Spot	Intersections	
T015201C: BUSH HWY MP31.75-MP32.6 MARICOPA RD MP12-MP12.5	Roadway	Pavement surface - high friction surface	1.5	Miles	\$444470	\$469804	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	0	0	County Highway Agency	Spot	Roadway Departure	
T016801D: JK BLVD; CASA GRANDE AVE - MILLIGAN AVE	Roadway	Rumble strips - edge or shoulder	5	Miles	\$150000	\$150000	HRRR Special Rule (23	Urban	Minor Arterial	9,291	55	Town or Township	Spot	Roadway Departure	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
							U.S.C. 148(g)(1))					Highway Agency			
T016901D: MACRAE RD - WOODRUFF RD TO VAH KI INN RD	Roadway	Rumble strips - edge or shoulder	7.2	Miles	\$17805	\$17805	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,991	40	Town or Township Highway Agency	Spot	Roadway Departure	
T017501D: COURTRIGHT RD CENTER EDGELINE RUMBLE STRIPS & PIERCE FERRY RD, MP 11 to MP 21	Roadway	Rumble strips - edge or shoulder	31	Miles	\$213000	\$213000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,792	55	County Highway Agency	Spot	Roadway Departure	
T018301D: ADAPTIVE SIGNAL CONTROL	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	6	Intersections	\$97710	\$97710	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	10,724	44	City or Municipal Highway Agency	Spot	Intersections	
T019101D: STOCKTON HILL RD SAFETY IMPROVEMENT CORRIDOR	Intersection traffic control	Modify traffic signal timing - left-turn phasing (permissive to protected/permissive)	1	Intersections	\$262671	\$277643	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	31,959	35	City or Municipal Highway Agency	Spot	Intersections	
T020201D: PEDESTRIAN HYBRID BEACON @ ACOMA BLVD & PIMA DR	Pedestrians and bicyclists	Pedestrian beacons	1	Locations	\$160000	\$160000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	15,100	35	City or Municipal Highway Agency	Spot	Pedestrians	
T020403D: SKYLINE AND SUNRISE	Intersection geometry	Auxiliary lanes - modify free-flow turn lane	1	Intersections	\$154000	\$162778	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	6,633	35	City or Municipal Highway Agency	Spot	Intersections	

## Safety Performance

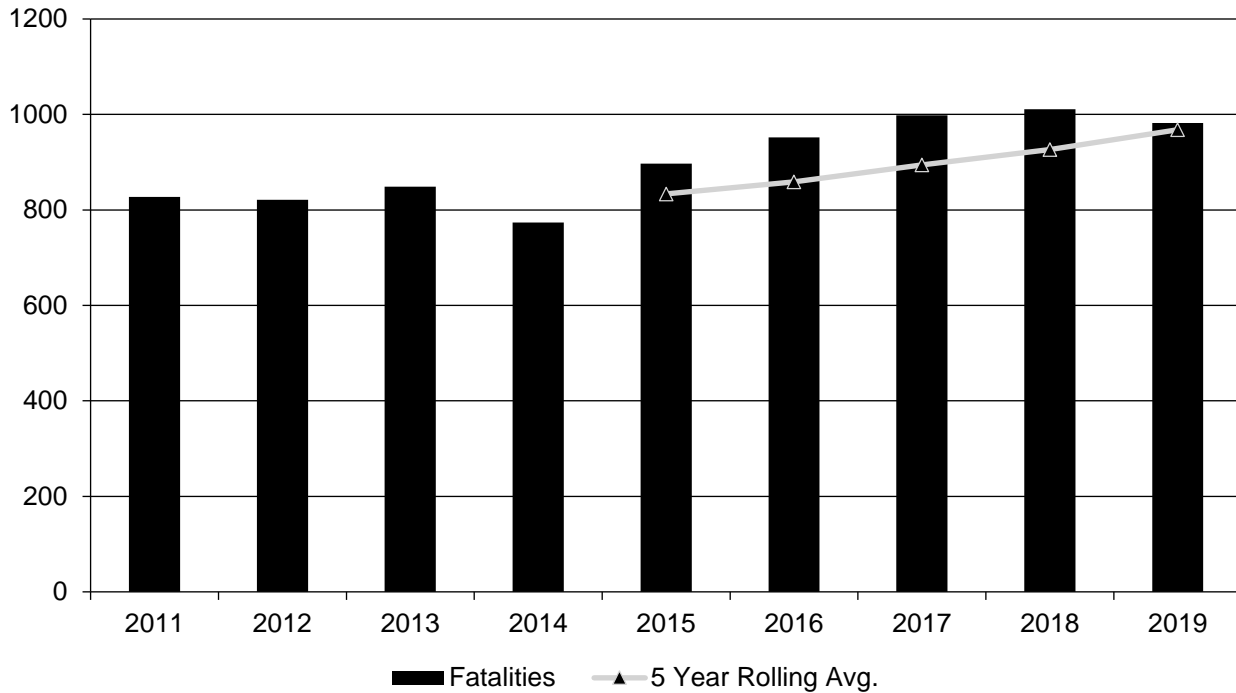
### *General Highway Safety Trends*

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

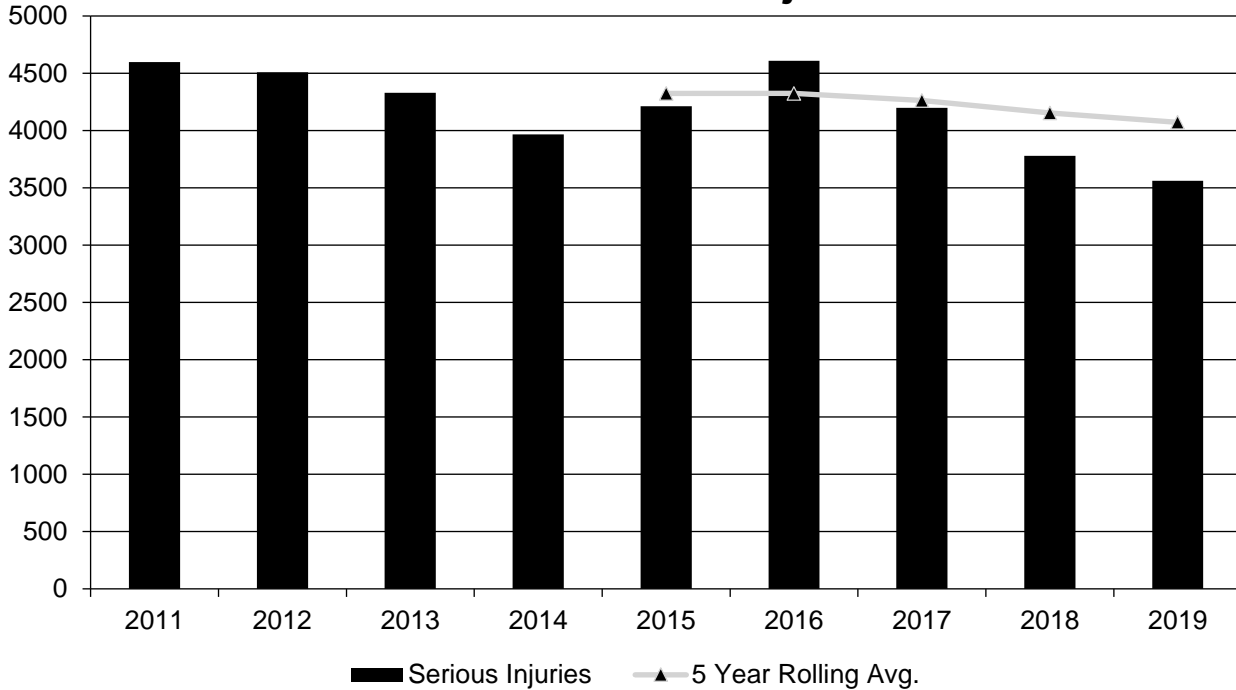
PERFORMANCE MEASURES	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatalities	827	821	849	774	897	952	998	1,011	982
Serious Injuries	4,598	4,508	4,329	3,966	4,213	4,608	4,197	3,780	3,561
Fatality rate (per HMVMT)	1.388	1.365	1.401	1.236	1.379	1.451	1.534	1.528	1.397
Serious injury rate (per HMVMT)	7.718	7.497	7.145	6.332	6.477	7.024	6.450	5.715	5.067
Number non-motorized fatalities	177	149	189	184	191	224	258	269	250
Number of non-motorized serious injuries	568	572	502	484	486	644	569	558	507

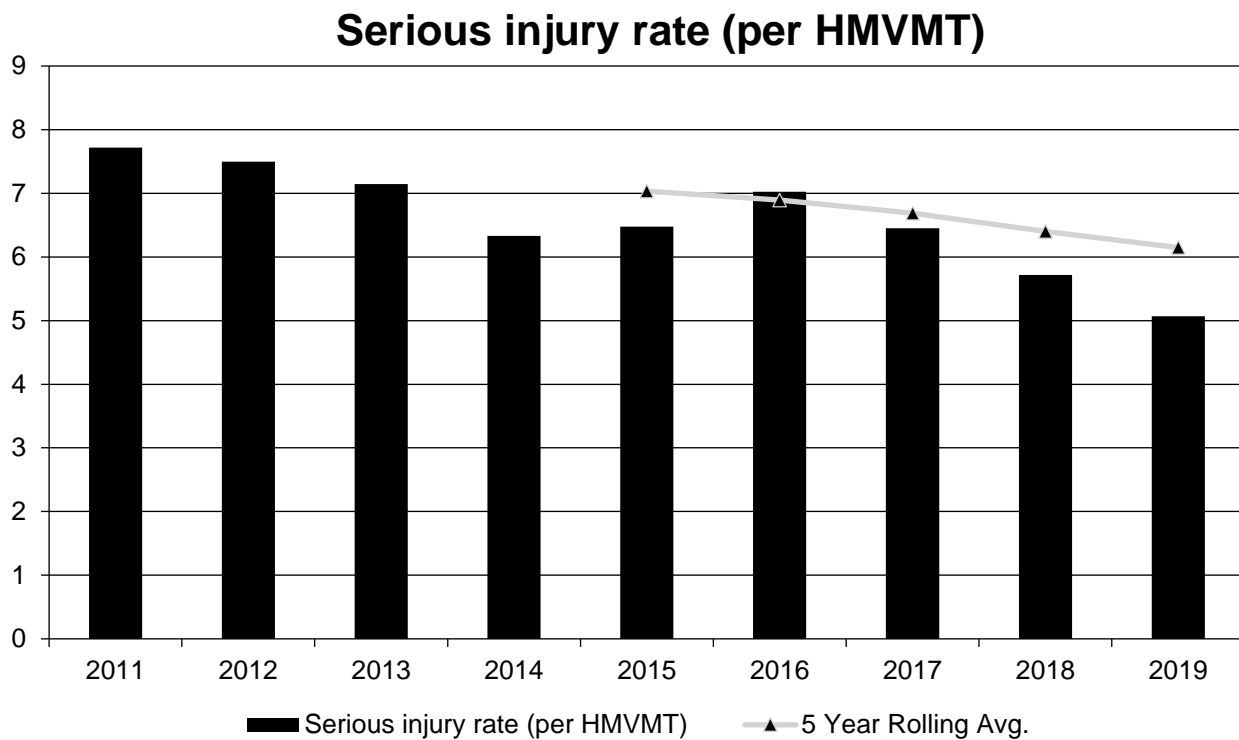
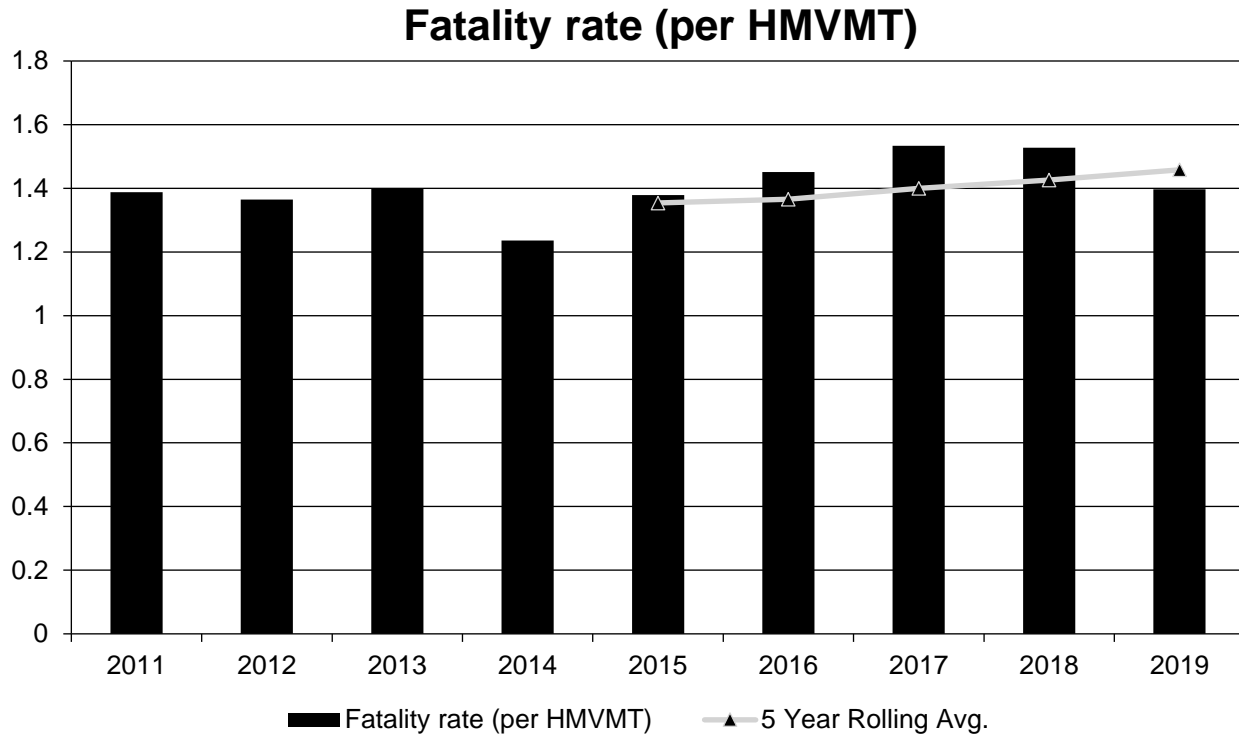


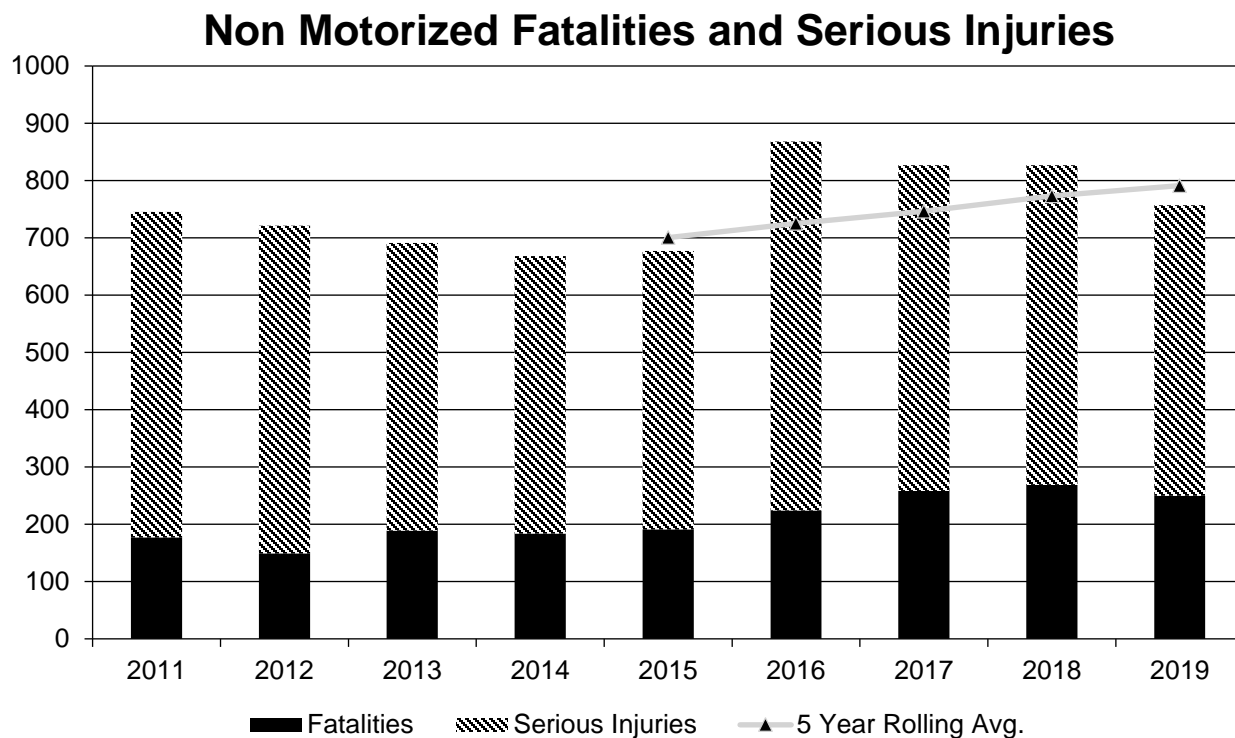
### Annual Fatalities



### Annual Serious Injuries







**Describe fatality data source.**

FARS

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

#### Year 2019

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 (RPA) - Interstate	85.2	210	0.13	0.32
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	71.6	178	0.11	0.27
Rural Minor Arterial	42.6	85.8	0.06	0.13
Rural Minor Collector	11.8	22.2	0.02	0.03
Rural Major Collector	75	155.2	0.11	0.23

## 2020 Arizona Highway Safety Improvement Program

<b>Functional Classification</b>	<b>Number of Fatalities (5-yr avg)</b>	<b>Number of Serious Injuries (5-yr avg)</b>	<b>Fatality Rate (per HMVMT) (5-yr avg)</b>	<b>Serious Injury Rate (per HMVMT) (5-yr avg)</b>
Rural Local Road or Street	9.4	24.8	0.01	0.04
Urban Principal Arterial (UPA) - Interstate	50.8	178.4	0.08	0.27
Urban Principal Arterial (UPA) - Other Freeways and Expressways	38.4	197.8	0.06	0.3
Urban Principal Arterial (UPA) - Other	125	649	0.19	0.98
Urban Minor Arterial	269.2	1,509.6	0.41	2.28
Urban Minor Collector		8.2		0.01
Urban Major Collector	39.6	225	0.06	0.34
Urban Local Road or Street	11.8	55.8	0.02	0.08

## 2020 Arizona Highway Safety Improvement Program

### Year 2019

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	391.2	672.4	0.59	1
County Highway Agency	87	225.4	0.13	0.34
Town or Township Highway Agency	7.6	5.2	0.01	0.01
City or Municipal Highway Agency	378.6	1,374.8	0.57	2.05
State Park, Forest, or Reservation Agency	0	0	0	0
Local Park, Forest or Reservation Agency	0.2	0	0	0
Other State Agency	0	0	0	0
Other Local Agency	0	0	0	0
Private (Other than Railroad)	1	1.4	0	0
Railroad	0	0	0	0
State Toll Authority	0	0	0	0
Local Toll Authority	0	0	0	0
Other Public Instrumentality (e.g. Airport, School, University)	0.2	0	0	0
Indian Tribe Nation	3.2	3.2	0.01	0.01

### ***Safety Performance Targets***

### **Safety Performance Targets**

### **Calendar Year 2021 Targets \***

***Number of Fatalities:985.1***

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

2021 Safety Performance Projections (Targets) created using the following analysis and assumptions: Fatal crashes are showing higher than predicted declines from 2018 through first quarter 2020.2019 Fatalities declined by 2.87%

***Number of Serious Injuries:3661.6***

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

2021 Safety Performance Projections (Targets) created using the following analysis and assumptions: Serious injury crashes are showing higher than predicted declines from 2018 through first quarter 2020.2019 Serious injuries declined by 5.79%

***Fatality Rate:1.431***

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

2021 Safety Performance Projections (Targets) created using the following analysis and assumptions: Fatal crashes are showing higher than predicted declines from 2018 through first quarter 2020.2019 Fatalities declined by 2.87% 2020 first quarter (Jan 1 thru Mar 31) fatalities declined 2% compared to 2019 Q1Statewide VMT expected to continue increasing by 1.6% per year

***Serious Injury Rate:5.353***

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

2021 Safety Performance Projections (Targets) created using the following analysis and assumptions: Serious injury crashes are showing higher than predicted declines from 2018 through first quarter 2020.2019 Serious injuries declined by 5.79%Statewide VMT expected to continue increasing by 1.6% per year

***Total Number of Non-Motorized Fatalities and Serious Injuries:781.9***

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

2021 Safety Performance Projections (Targets) created using the following analysis and assumptions: Fatal and serious injury crashes are showing higher than predicted declines from 2018 through first quarter 2020.2019 Fatalities declined by 2.87% 2019 Serious injuries declined by 5.79%2020 first quarter (Jan 1 thru Mar 31) fatalities declined 2% compared to 2019 Q1

Arizona STSP Vision: Toward zero deaths by reducing crashes for safer Arizona.

STSP Goal: Reduce traffic fatalities on Arizona's Roadways

2019 number of fatalities was 982 and 2018 number of fatalities was 1011

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

Individual meetings are being held with each COG/MPO to discuss the State safety performance targets in addition to a general meeting with the State COG/MPO council. Each COG/MPO is given 180 days from August 31st to establish their own targets or to adopt the State safety performance targets. Sample target letters and wording was provided to aid them in meeting the submittal date. Prior to the State adopting the proposed targets, a meeting was conducted with GOHS to reach consensus on the State's safety performance targets. The process that ADOT followed in reaching the recommended safety performance targets was described. Attendees agreed to support the suggested targets.

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

No

No

**Describe progress toward meeting the State's 2019 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.**

PERFORMANCE MEASURES	TARGETS	ACTUALS
Number of Fatalities	1001.5	968.0
Number of Serious Injuries	4166.9	4071.8
Fatality Rate	1.442	1.458
Serious Injury Rate	6.102	6.147
Non-Motorized Fatalities and Serious Injuries	814.0	791.2

Number of Fatalities: The total number of fatalities for 2019 was anticipated to be 1105. The actual number declined by 2.87% from 2018 and the total number of fatalities is 982.

Number of Serious injuries: 2019 number of serious injuries declined by 5.79% from 2018

Fatality Rate and Serious injury Rate: There was substantial jump in VMT from 2018 to 2019 (6.25%); this is due to a statewide review and update of Federal functional classification.

### ***Applicability of Special Rules***

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

No

**Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.**

PERFORMANCE MEASURES	2013	2014	2015	2016	2017	2018	2019
Number of Older Driver and Pedestrian Fatalities	110	105	126	121	131	170	167
Number of Older Driver and Pedestrian Serious Injuries	396	328	421	421	373	386	358

## Evaluation

### *Program Effectiveness*

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

- Change in fatalities and serious injuries

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

In Arizona the 2019 number of fatalities declined by 2.87% from 2018 and the 2019 number of serious injuries declined by 5.79% from 2018. In the most recent HSIP call for projects, ADOT approved the priority list with the highest B/C ratio of 93.1 and the lowest B/C ratio of 6.8. The minimum B/C ratio for AZHSIP eligibility requirement is 2.5. AZHSIP eligibility requires the state and local agencies receiving HSIP funds to establish and maintain a data inventory of before and after crashes for this safety improvement project in order for an analysis and evaluation to be carried out by ADOT.

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

- # RSAs completed
- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs

Number of RSA's with countermeasures implemented

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

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

Year 2019

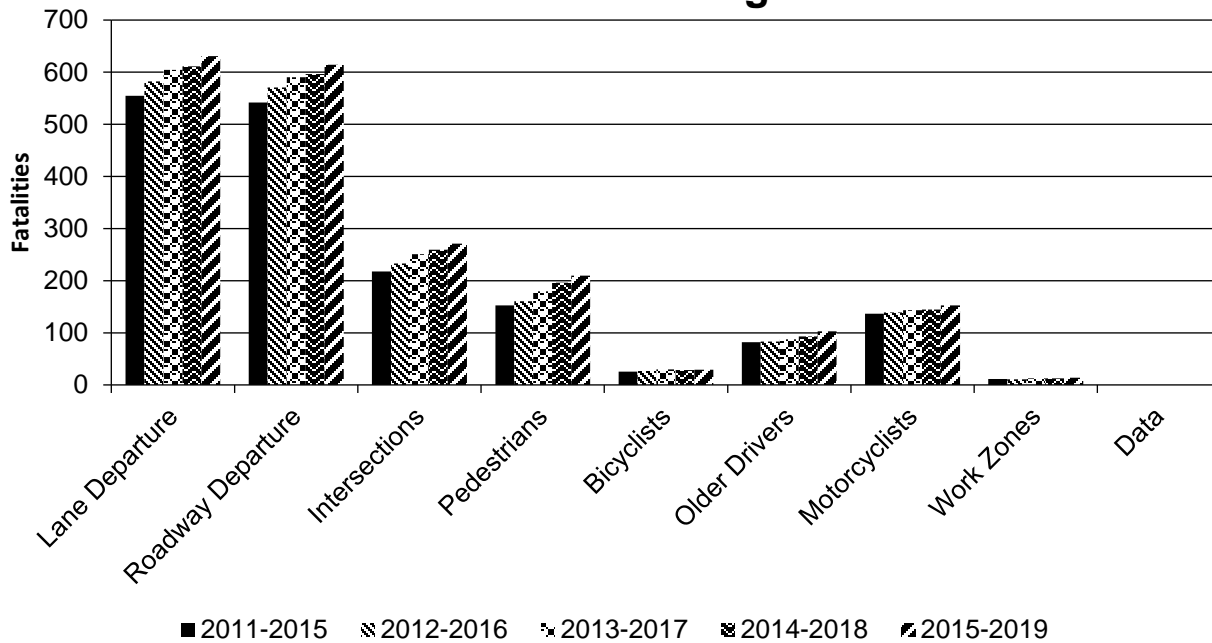
SHSP Area	Emphasis	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Lane Departure			631	1,843.2	0.95	2.78	0	0	0
Roadway Departure			614	1,601.6	0.93	2.41	0	0	0
Intersections			271.2	1,828.2	0.41	2.76	0	0	0
Pedestrians			209.4	371.6	0.31	0.56	0	0	0
Bicyclists			29	181.2	0.04	0.27	0	0	0



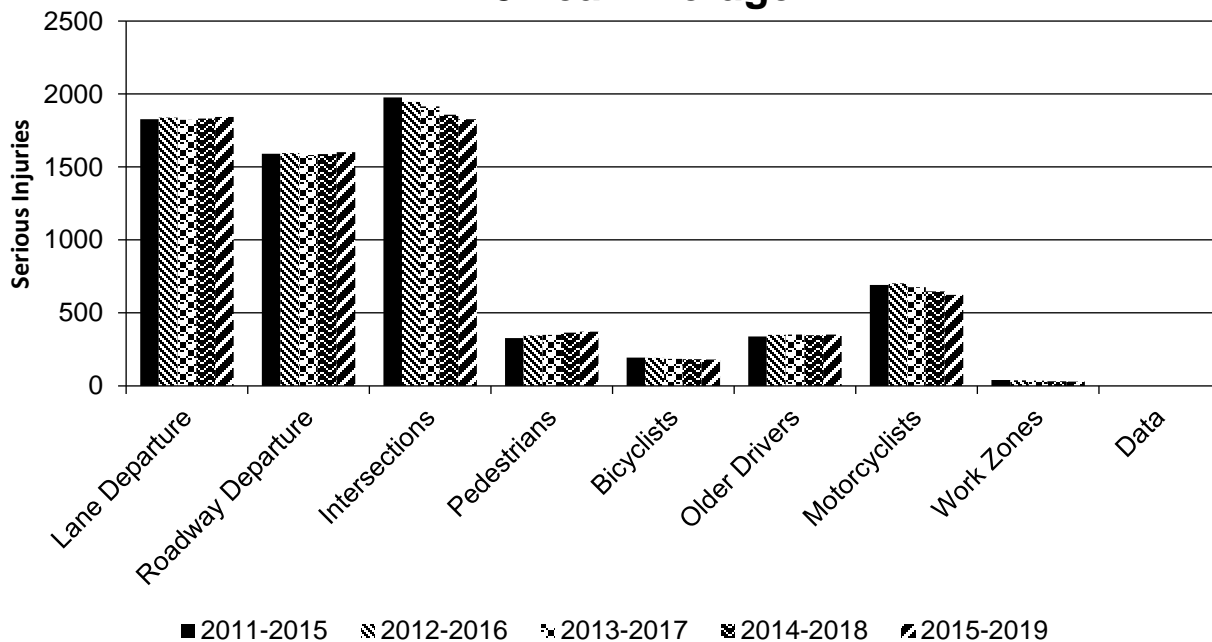
## 2020 Arizona Highway Safety Improvement Program

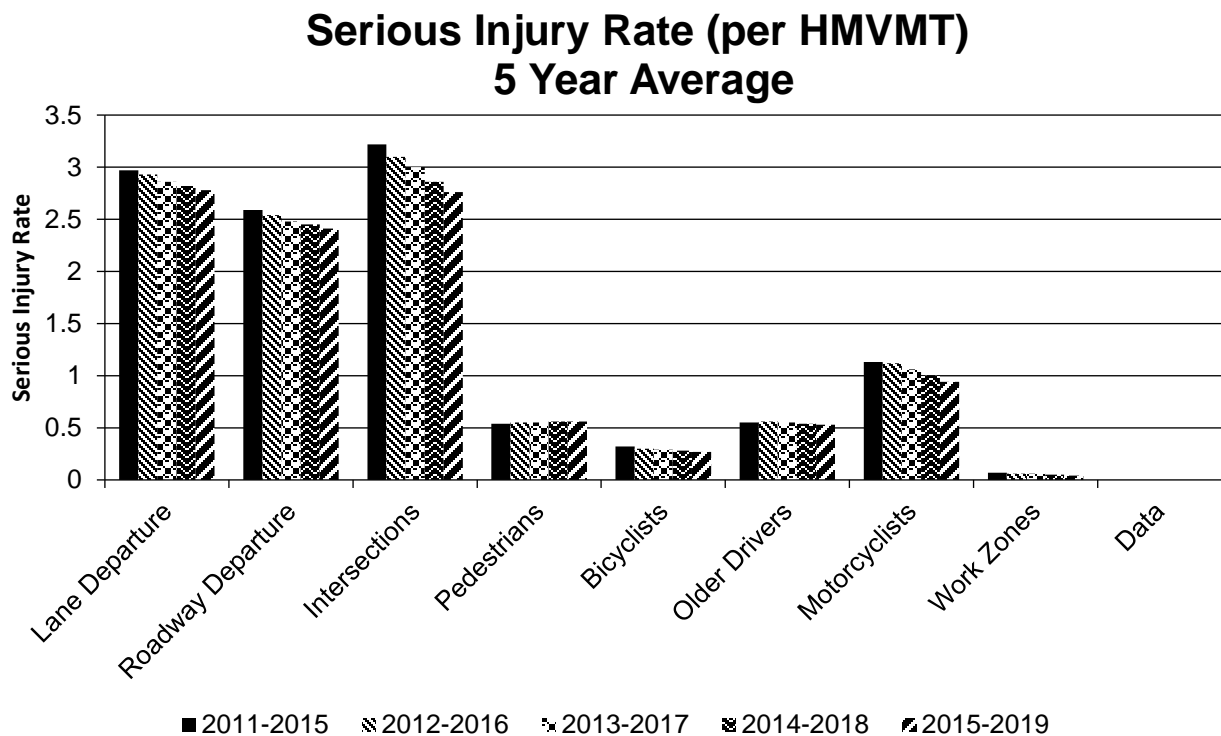
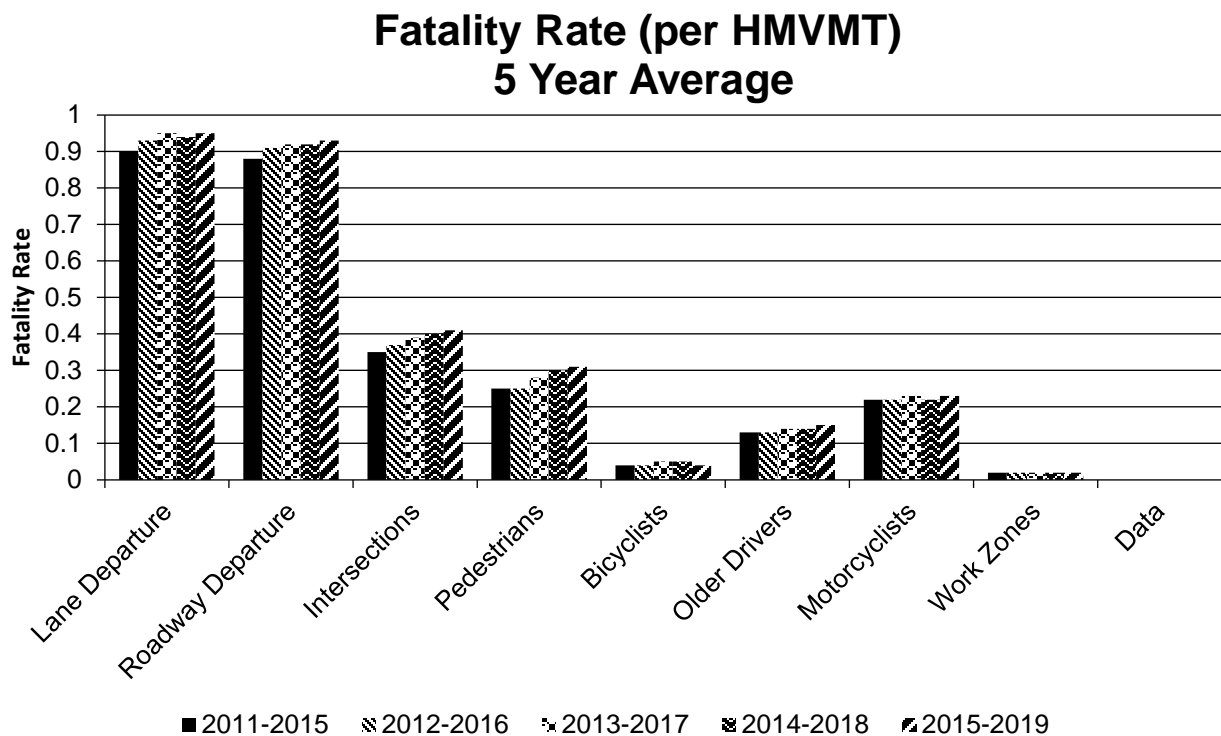
SHSP Area	Emphasis	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Older Drivers			103	351.6	0.15	0.53	0	0	0
Motorcyclists			152.8	624.8	0.23	0.94	0	0	0
Work Zones			13.6	28.6	0.02	0.04	0	0	0
Data			0	0	0	0	0	0	0

### Number of Fatalities 5 Year Average



### Number of Serious Injuries 5 Year Average





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

Yes

**Please provide the following summary information for each countermeasure effectiveness evaluation.**

<b>CounterMeasures:</b>	Lane adjustments and new signs
<b>Description:</b>	Westbound U.S. 60 MP 172.4 to MP 173.52
<b>Target Crash Type:</b>	All
<b>Number of Installations:</b>	
<b>Number of Installations:</b>	
<b>Miles Treated:</b>	1.12 Miles
<b>Years Before:</b>	2
<b>Years After:</b>	2
<b>Methodology:</b>	Simple before/after Crash data review for 12 months before and 12 months after, results are 75% reduction in the total number of crashes and 91% reduction in total number of crashes for PM peak (4:00 -6:30 pm weekdays)
<b>Results:</b>	
<b>File Name:</b>	Hyperlink

***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 OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
Westbound US 60 MP 172.4 to MP173.52	Urban Principal Arterial (UPA) - Other	Roadway	Roadway - other	591.00	153.00	2.00	1.00	13.00	3.00	311.00	72.00	917.00	229.00	

ADOT implemented lane adjustments and new signs that dramatically reduced minor rear-end crashes on westbound U.S. 60 MP 172.4 to MP 173.52. 2 years before and after crash data review shows 75% reduction in the total crashes and 91% reduction in total crashes for PM Peak (4:00 pm - 6:30 pm weekdays)

ADOT won an award from the National Operations Center of Excellence on this project.

Compliance Assessment

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

10/01/2019

What are the years being covered by the current SHSP?

From: 2019 To: 2024

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

2024

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

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

ROAD TYPE	*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 SEGMENT	Segment Identifier (12) [12]	100	100					100	90	100	90
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100	100					100	100		
	Begin Point Segment Descriptor (10) [10]	100	100					100	90	100	90
	End Point Segment Descriptor (11) [11]	100	100					100	90	100	90
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100					100	100	100	100
	Median Type (54) [55]	100	100								

ROAD TYPE	*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) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	50		
	Average Annual Daily Traffic (79) [81]	100	100					100	5		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100					100	50	100	20
INTERSECTION	Unique Junction Identifier (120) [110]			100	100						
	Location Identifier for Road 1 Crossing Point (122) [112]			100	50						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	50						
	Intersection/Junction Geometry (126) [116]			60	60						
	Intersection/Junction Traffic Control (131) [131]			60	60						
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	50						
	Unique Approach Identifier (139) [129]			100	50						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100	100				
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					100	70				

ROAD TYPE	*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
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	70				
	Ramp Length (187) [177]					100	50				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					100					
	Roadway Type at End Ramp Terminal (199) [189]					100					
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					100	10				
	Year of Ramp AADT (192) [182]					100	10				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		100.00	100.00	90.00	65.00	90.91	46.36	100.00	75.00	100.00	78.00

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

**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.**

This discussion focuses on the steps (actions) ADOT is taking to meet the requirement for States to have access to the MIRE fundamental data elements on all public roads by September 30, 2026 and is updated each year based on current progress.

Each of the following steps describes necessary actions and completion dates to meet the 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:

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 internal staff 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 2021. ADOT parties involved: MPD/ITG/TSMO.



2020 Arizona Highway Safety Improvement Program

**Step 3.** Verify the completeness of MIRE data elements and fill in data gaps on the Federal aid system via a gap analysis. So far more than 5,636 miles have been collected. This work will continue to be done until data gaps are filled in. This step will be completed in 2023. ADOT parties involved: MPD/ITG/TSMO.

**Step 3b.** For all new elements, ADOT will establish a database schema. Much of this is being done with junction and junction leg datasets.

**Step 4.** Develop data collection and integration plan by determining 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 began in 2021. ADOT parties involved: MPD/ITG/TSMO.

**Step 4b.** Perform a statewide assessment of federal functional classification. The goal being to align mileage percentage breakdowns with FHWA guidance. This task has been completed as of 2020: MPD.

**Step 4c.** Determine if the locality data is complete and compatible with ADOT’s existing data. This step will begin in 2020 and be completed simultaneously with Step 3. 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 2023. ADOT parties involved: MPD/TSMO.

**Step 6.** Create a detailed data 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. This plan will likely leverage local agencies to assist with data verification. This step will be completed in 2024. ADOT parties involved: MPD/ITG/TSMO. Identify training needs for data collection from all stakeholders.

**Step 7.** Create a cost estimate for all data collection and maintenance efforts. This step will be completed in 2024. ADOT parties involved: MPD/TSMO.

**Step 8.** Identify funding sources (HSIP and SPR) for the data collection and maintenance process. This step will be completed in 2020. ADOT parties involved: MPD/TSMO.

**Step 9.** Allocate funding and resources for the data collection efforts. This step will be completed in 2021. ADOT parties involved: MPD/TSMO.

**Step 10.** Gather all remaining data and perform a data effectiveness evaluation. 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.

## **Optional Attachments**

Program Structure:

2015 HSIP Manual (RevDec18).pdf

HSIP Appendix A(Rev Dec18).pdf

2015 HSIP Manual (RevDec18).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.