ARIZONA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2022 ANNUAL REPORT

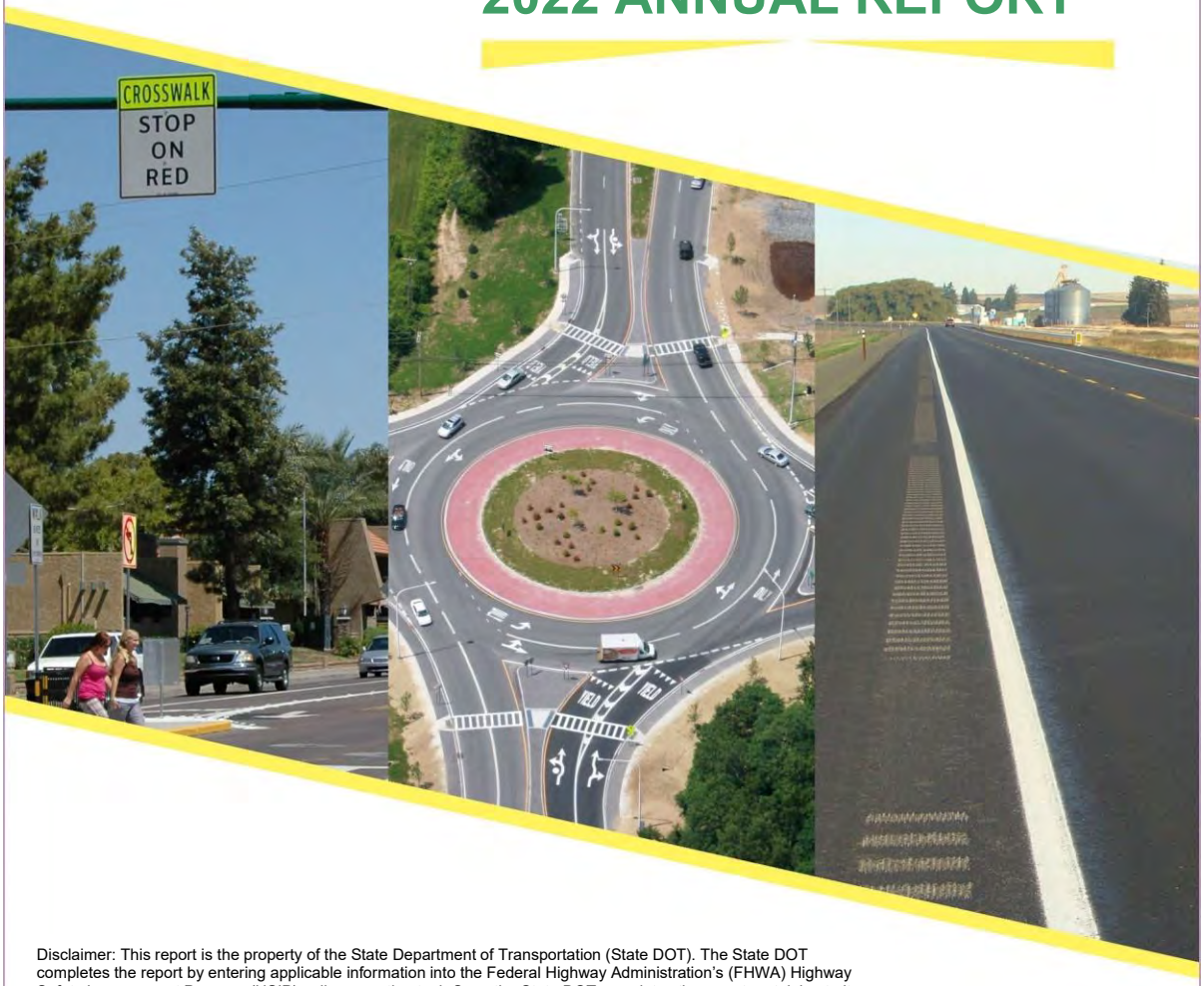

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Photo source: Federal Highway Administration

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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. 407 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 Strategic Traffic Safety Plan (STSP) has been updated in October 2019 meeting requirements for SHSPs in the Infrastructure Investment and Jobs Act (IIJA) and FHWA guidance. The SHSP implementation phase began in early 2020. ADOT recognizes the importance of the implementation phase in continuing the collaboration, cooperation, and sharing of knowledge and resources by all safety stakeholders to make safety our top priority.

Arizona HSIP call for projects for State Fiscal Year 2025 and State Fiscal Year 2026 was announced in February 28, 2022 for all public roads. A total of 68 applications were received and are under review. The amount of applications that were received represent twice the amount of HSIP funds available through obligation authority. Local and State agencies are actively applying for HSIP funds.

This annual report continues to reflect Arizona 2014 SHSP emphasis areas and performance measures as projects were programmed under the 2014 SHSP.

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 every other year for funding for two years. Agencies interested in applying must complete and submit a draft HSIP application and all required documents during 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). HSIP applications and cost estimates are submitted to the ADOT Project Management Group, the ADOT Local Public Agency Group, State Traffic Safety Engineer, Districts and Regional Traffic Engineers for review and comments. All documents are 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 draft comments are consolidated and returned to the submitting agency for review and incorporation into the final submittal to ADOT. The final applications are again reviewed and the approved HSIP eligible projects are then ranked by the HSIP Program Manager based on the B/C ratio. The HSIP Program Manager then presents the list to the Director, TSMO for final ranking and approval. A Safety Review Committee comprised of FHWA, ADOT staff, COG/MPO's, Inter Tribal Council and locals, reviews and approves the proposed list. Once the prioritized HSIP eligible list for the year is approved, the HSIP Program Manager issues the approved HSIP eligibility letters and enters the State projects in the ADOT Five Year Transportation Facilities Construction Program. COGs/MPOs add local projects in their TIPs.

Where is HSIP staff located within the State DOT?

Other-TSM&O

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, project cost increase, 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 Regional Strategic Transportation Safety 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. 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 COGs/MPOs Safety Committee meetings, workshops, and advisory groups. ADOT TSS requires 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). Local agencies are trained and encouraged to identify potential "hot spots" utilizing data from the ADOT Arizona Crash Information System (ACIS) database. 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

Describe other aspects of HSIP Administration on which the State would like to elaborate.

AASHTO Safety Analyst has reached the end of its technology lifecycle. In the past few years ADOT has been working on the Safety Analyst implementation, ADOT has worked on improving the quantity and quality of the roadway, traffic volume and crash data that are the inputs for the data driven analysis for better results.

ADOT is currently working on finding the AASHTOWare Safety Analyst replacement tool for data driven safety analysis at ADOT and for our governmental and non-governmental safety partners.

Program Methodology

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

Yes

2022 HSIP Manual
2022 HSIP Appl
HSIP Appendix A (Rev Jun22)
HSIP Appendix_B
HSIP Appendix_C

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

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

What percentage of HSIP funds address systemic improvements?

9.6

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

- Clear Zone Improvements
- 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, 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 guidance and methodology.. Arizona has also supported an emphasis on predictive modeling over the last few years. The Arizona Crash Information System (ACIS) is used to identify hot spots and 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

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$40,208,400	$48,447,798	120.49%
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	$720,006	$0	0%
Totals	$40,928,406	$48,447,798	118.37%

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

$8,305,909

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

$6,961,139

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

$411,674

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

$411,674

RSA Program, AzTraCS (mobile electronic crash reporting system) Yearly Fees & Local Transportation Safety Plan

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
F014601C: Aztec Road - S. Bullhead City Parkway - Raised Median	Access management	Change in access - close or restrict existing access	3.5	Miles	$124537	$132065	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	12,424	55	State Highway Agency	Spot	Lane Departure	
F019001C: SR87; SR 187 TO GIBLERT RD - Traffic Signals	Intersection traffic control	Modify control – new traffic signal	3	Intersections	$134146	$134146	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	6,552	65	State Highway Agency	Spot	Intersections	
F020801D: SR-347 AND OLD MARICOPA RD INTERSECTION	Intersection traffic control	Modify control – new traffic signal	1	Intersections	$10373	$10373	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	32,674	55	State Highway Agency	Spot	Intersections	
F024301C: US 160 MP 322.6 TO MP 324.5 - Lighting	Lighting	Continuous roadway lighting	1.83	Miles	$150225	$150225	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,787	65	State Highway Agency	Spot	Pedestrians	
F027101D: MAG REGION VARIOUS INTERSECTION LOCATION - Offsets	Intersection geometry	Intersection geometry - other	4	Intersections	$400477	$424684	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0	0	City or Municipal Highway Agency	Spot	Intersections	
F028001C: SR-68; Verde Rd to Bacobi Rd - Raised Median	Access management	Change in access - close or restrict existing access	3.02	Miles	$1896911	$2011570	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	14,266	50	State Highway Agency	Spot	Lane Departure	
F028101U: I-40, Transwestern Rd. - I-17 TI - VSL	Advanced technology and ITS	Advanced technology and ITS - other	24	Miles	$96227	$96227	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	26,688	75	State Highway Agency	Spot	Roadway Departure	
F028401C: WRONG WAY DO NOT ENTER SIGNS - PHASE 1	Roadway signs and traffic control	Roadway signs (including post) - new or updated	770	Signs	$1303634	$1303634	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	
F028701C: WRONG WAY DO NOT ENTER SIGNS - PHASE III	Roadway signs and traffic control	Roadway signs (including post) - new or updated	260	Signs	$911420	$911420	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	
F033801D: US 60 & CR 3148- Vernon - Signing	Intersection traffic control	Intersection signing – add enhanced regulatory sign (double-up and/or oversize)	8	Signs	$181999	$181999	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,486	65	State Highway Agency	Spot	Intersections	
F033901D: SR 264 / IR 4 Intersection Improvements	Pedestrians and bicyclists	Install sidewalk	0.24	Miles	$338846	$338846	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,937	55	State Highway Agency	Spot	Pedestrians	

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
F035001D: I-10; Bowie - New Mexico State Line - Tree Thinning	Roadside	Removal of fixed objects (trees, poles, etc.)	22	Miles	$157464	$166982	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	13,525	75	State Highway Agency	Systemic	Roadway Departure	
F035201D: US 60 N CHERRY AVE TO RADANOVICH BLVD - Lighting	Lighting	Continuous roadway lighting	1.8	Miles	$193315	$193315	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	45,796	45	State Highway Agency	Spot	Pedestrians	
F035301D: US-60; MP 301 - SR-260 - Tree Removal	Roadside	Removal of fixed objects (trees, poles, etc.)	33.6	Miles	$177850	$188600	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,232	65	State Highway Agency	Systemic	Roadway Departure	
F035701D: SR-287 - Hacienda to SR-87 - Rumble Strips	Roadway	Rumble strips – edge or shoulder	8	Miles	$222548	$222548	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,550	55	State Highway Agency	Spot	Lane Departure	
F036101D: US-60X Apache Trail Sossaman - Meridian - Sidewalk	Pedestrians and bicyclists	Install sidewalk	5	Miles	$293452	$311190	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	18,904	45	State Highway Agency	Spot	Pedestrians	
F037301D: SR-87 - Kenworthy Rd & SR-287 at Christensen Rd - Turn Lanes	Intersection geometry	Add/modify auxiliary lanes	2	Intersections	$222312	$235750	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	11,368	55	State Highway Agency	Spot	Intersections	
F037701X: Statewide Road Safety Assessment (RSA) FY21	Miscellaneous	Road safety audits	60	RSA	$311237	$330050	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	All Emphasis Areas	
F038001D: US93; South Fork Santa Maria River - SR 71, South of Wikieup - Rumble Strips	Roadway	Rumble strips – edge or shoulder	20.8	Miles	$93000	$93000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	8,994	65	State Highway Agency	Spot	Lane Departure	
F039401D: MULE PASS TUNNEL, BISBEE - Lighting	Lighting	Continuous roadway lighting	0.83	Miles	$462000	$462000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	5,220	45	State Highway Agency	Spot	Pedestrians	
F042101D: SR87 SR179 SR260 - Tree Removal	Roadside	Removal of fixed objects (trees, poles, etc.)	53.5	Miles	$373485	$396060	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,130	65	State Highway Agency	Systemic	Roadway Departure	
F043201D: WRONG WAY DO NOT ENTER SIGNS - PHASE IV	Roadway signs and traffic control	Roadway signs (including post) - new or updated	199	Signs	$130000	$130000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	
F043301D: WRONG WAY DO	Roadway signs and traffic control	Roadway signs (including post) - new or updated	201	Signs	$154000	$154000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	

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
NOT ENTER SIGNS - PHASE V															
F043401D: WRONG WAY DO NOT ENTER SIGNS - PHASE VI	Roadway signs and traffic control	Roadway signs (including post) - new or updated	192	Signs	$135000	$135000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	
F043501D: WRONG WAY DO NOT ENTER SIGNS - PHASE VII	Roadway signs and traffic control	Roadway signs (including post) - new or updated	1	Signs	$117000	$117000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Older Drivers	
H824501D: RIM RD - GIBSON RD, SEGMENT I - Sholders	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	21.58	Miles	$22260395	$23605933	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	7,507	65	State Highway Agency	Spot	Roadway Departure	
H850801C: SR87; Pine Creek Canyon Dr to SR260 - Shoulder Widening	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	9.87	Miles	$5759216	$6107335	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,130	60	State Highway Agency	Spot	Roadway Departure	
H865801C: US 93; ELEVENTH ST - WINDY POINT ROAD - Shoulder Widening	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	9.92	Miles	$1183020	$1254528	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	26,600	65	State Highway Agency	Spot	Roadway Departure	
H865901C: US93, WINDY POINT ROAD - MINERAL PARK ROAD - Shoulder Widening	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	10.48	Miles	$81983	$86939	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	24,313	65	State Highway Agency	Spot	Roadway Departure	
SR77; H891901C: RIVER RD - CALLE CONCORDIA - Lighting	Lighting	Continuous roadway lighting	5.28	Miles	$1945770	$1945770	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	63,892	50	State Highway Agency	Spot	Pedestrians	
M714301X: STATEWIDE AZTRaCS YEARLY LICENSE FEE	Miscellaneous	Data collection	1	License	$75586	$80155	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Statewide Crash Data Collection	Data	
PSHSP00P: SEAGO 2016 WP HSIP FUNDS	Miscellaneous	Local road safety plans	1	STSP	$1385	$1469	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	COG	STSP	Data	
SH53601R: 75TH AVENUE AND PEORIA (CITY OF PEORIA) - Intersection Improvements	Intersection traffic control	Modify traffic signal – add additional signal heads	1	Intersections	$215459	$215459	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	20,773	40	City or Municipal Highway Agency	Spot	Intersections	

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
T016801C: JK BLVD; CASA GRANDE AVE - MILLIGAN AVE - Rumble Strips	Roadway	Rumble strips – edge or shoulder	14.74	Miles	$46233	$46233	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	9,291	45	City or Municipal Highway Agency	Spot	Roadway Departure	
T020001C: Phoenix,CITYWIDE: 6 INTERSECTIONS - LT Offsets	Intersection geometry	Intersection geometry - other	6	Intersections	$906394	$961181	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	27,631	45	City or Municipal Highway Agency	Systemic	Intersections	
T020101C: 43RD AVENUE; 3 INTERSECTIONS - Signals	Intersection traffic control	Modify traffic signal – modernization/replacement	3	Intersections	$802303	$802303	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	40,479	45	City or Municipal Highway Agency	Spot	Intersections	
T020201C: PEDESTRIAN HYBRID BEACON @ ACOMA BLVD & PIMA DR NORT	Pedestrians and bicyclists	Pedestrian hybrid beacon	1	Locations	$38200	$38200	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	14,800	35	City or Municipal Highway Agency	Spot	Pedestrians	
T020401C: SKYLINE AND SUNRISE - Turn Lane	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	$299874	$318000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	6,633	35	City or Municipal Highway Agency	Spot	Intersections	
T024901X: 13 LOCATIONS IN PINAL COUNTY (LED STOP SIGNS)	Intersection traffic control	Intersection signing –other	52	Signs	$138573	$138573	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	5,000	50	County Highway Agency	Spot	Intersections	
T025801C: Tucson: PEDESTRIAN HAWK CROSSINGS - PACKAGE 1	Pedestrians and bicyclists	Pedestrian hybrid beacon	2	Locations	$627000	$627000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,600	35	City or Municipal Highway Agency	Spot	Pedestrians	
T025901C: Tucson: PEDESTRIAN HAWK CROSSINGS - PACKAGE 2	Pedestrians and bicyclists	Pedestrian hybrid beacon	3	Locations	$593957	$593957	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	23,000	35	City or Municipal Highway Agency	Spot	Pedestrians	
T026403D: IR 34 AND IR 42 EXTENSION - Signing/Striping	Roadway delineation	Longitudinal pavement markings – new	9.17	Miles	$200000	$200000	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	982	60	Indian Tribe Nation	Systemic	Roadway Departure	
T026601D: Cooledge - SKOUSEN RD / ELEVEN MILE CORNER; SR87 -	Roadway	Rumble strips – edge or shoulder	9.06	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,267	50	City or Municipal Highway Agency	Spot	Lane Departure	

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
BATTAGLIA RD - Rumble Strips															
T027101D: Mohave Co; STOCKTON HILL RD - KNG CITY LIMITS MP 6.75-21.75 - Rumble Strips	Roadway	Rumble strips – edge or shoulder	15	Miles	$170000	$170000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,175	45	County Highway Agency	Spot	Roadway Departure	
T027501D: Pinal Co - KINGS RANCH RD AT SUNRISE SKY DR - RRFB	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)	1	Locations	$185000	$185000	HSIP (23 U.S.C. 148)	Urban	Major Collector	10,100	35	County Highway Agency	Spot	Pedestrians	
T027703D: COTTONWOOD LN & KADOTA AVE - PHB	Pedestrians and bicyclists	Pedestrian hybrid beacon	1	Locations	$180000	$180000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	16,846	45	City or Municipal Highway Agency	Spot	Pedestrians	
T027803D: Bullhead Pkwy and Silver Creek Rd - Lighting	Lighting	Continuous roadway lighting	5.08	Miles	$361000	$361000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	9,800	50	City or Municipal Highway Agency	Spot	Roadway Departure	
T028003D: Kingman SPOT IMPVS - CALMING FEATURES AND SPEED FEEDBACK SIGNS	Speed management	Dynamic Speed Feedback Signs	12	Locations	$198030	$198030	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	22,247	35	City or Municipal Highway Agency	Spot	Lane Departure	
T028403D: Yavapai Co - CORNVILLE RD, RUMBLE STRIPS AND SHOULDER WIDENING	Roadway	Rumble strips – edge or shoulder	4.92	Miles	$533549	$565800	HSIP (23 U.S.C. 148)	Rural	Major Collector	9,971	50	County Highway Agency	Spot	Roadway Departure	
T029103D: Santa Cruz Co - PENDLETON DRIVE DIP AT SONOITA CREEK WASH	Roadway	Roadway - other	1	Locations	$227648	$241408	HSIP (23 U.S.C. 148)	Urban	Major Collector	2,770	30	County Highway Agency	Spot	Roadway Departure	
T030503D: GOLF COURSE RD - COTTONWOOD WASH RD - Shoulders	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	3.95	Miles	$200710	$212842	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,334	50	County Highway Agency	Spot	Roadway Departure	
T031303D: Graham Co - White Mtn Rd	Lighting	Continuous roadway lighting	2.24	Miles	$300000	$300000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	80	35	Indian Tribe Nation	Spot	Pedestrians	

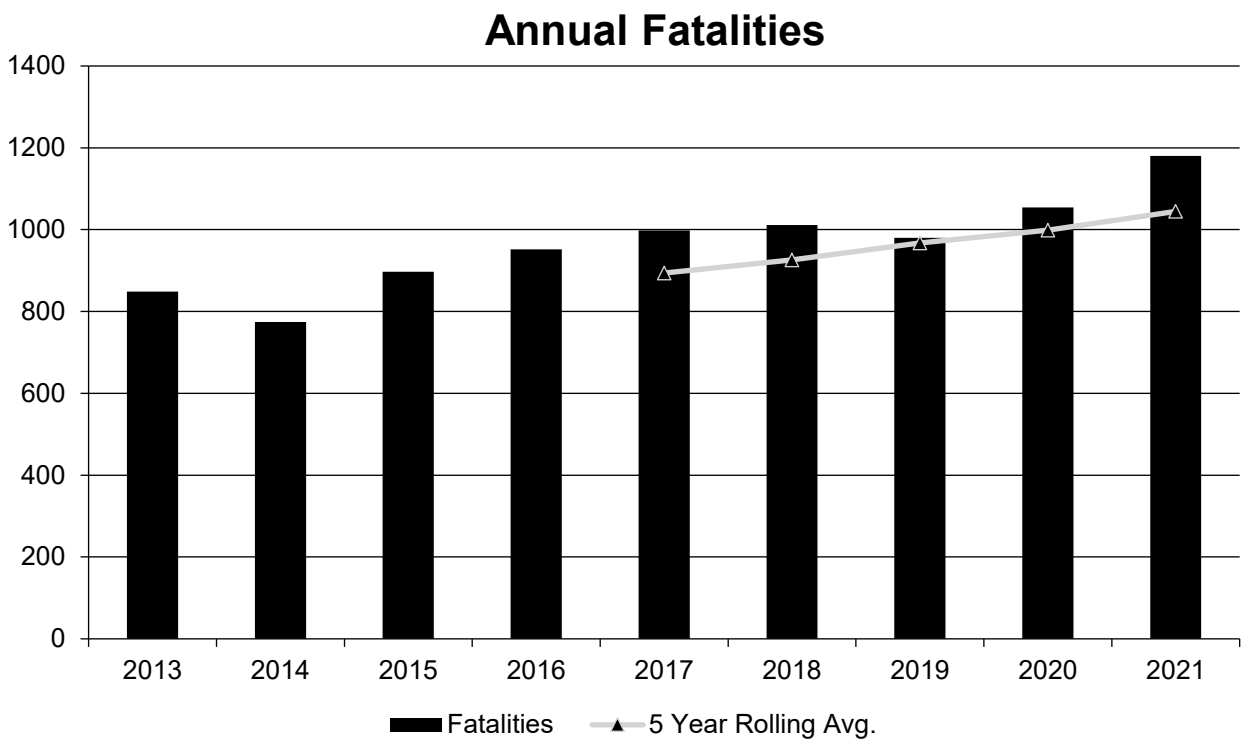
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
and Airport Rd - Lighting															

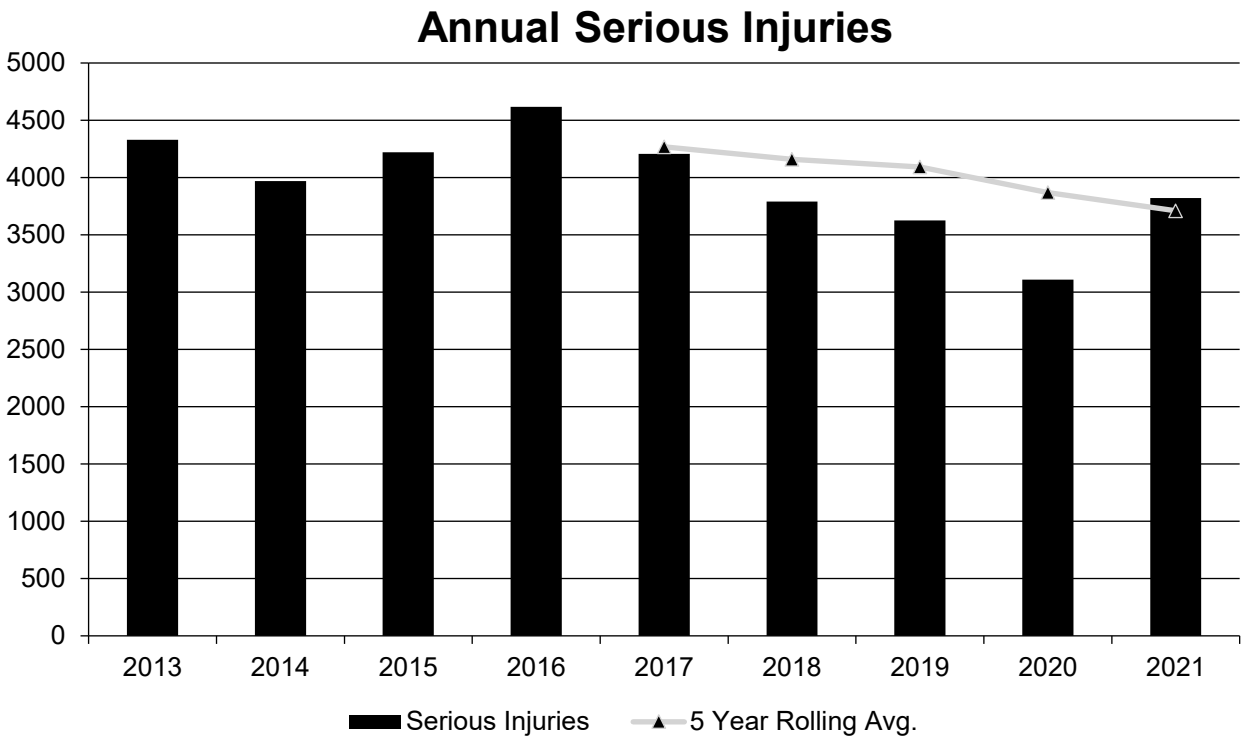
Safety Performance

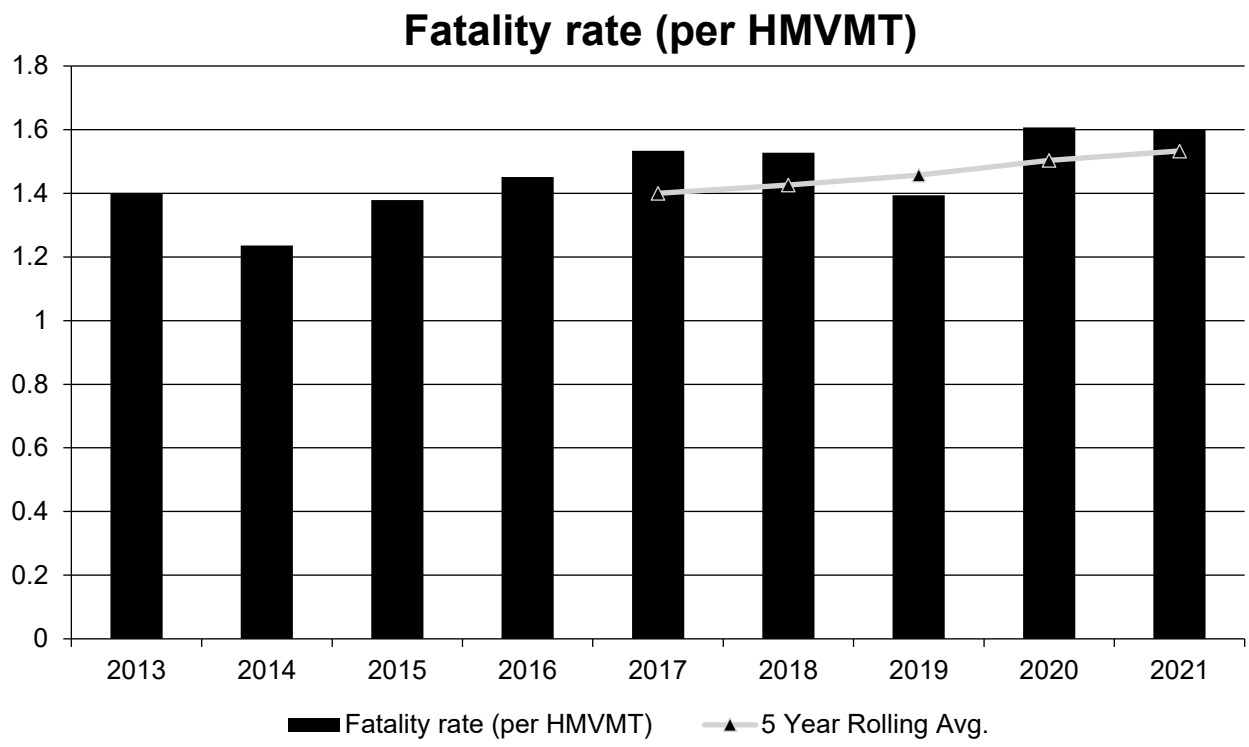
General Highway Safety Trends

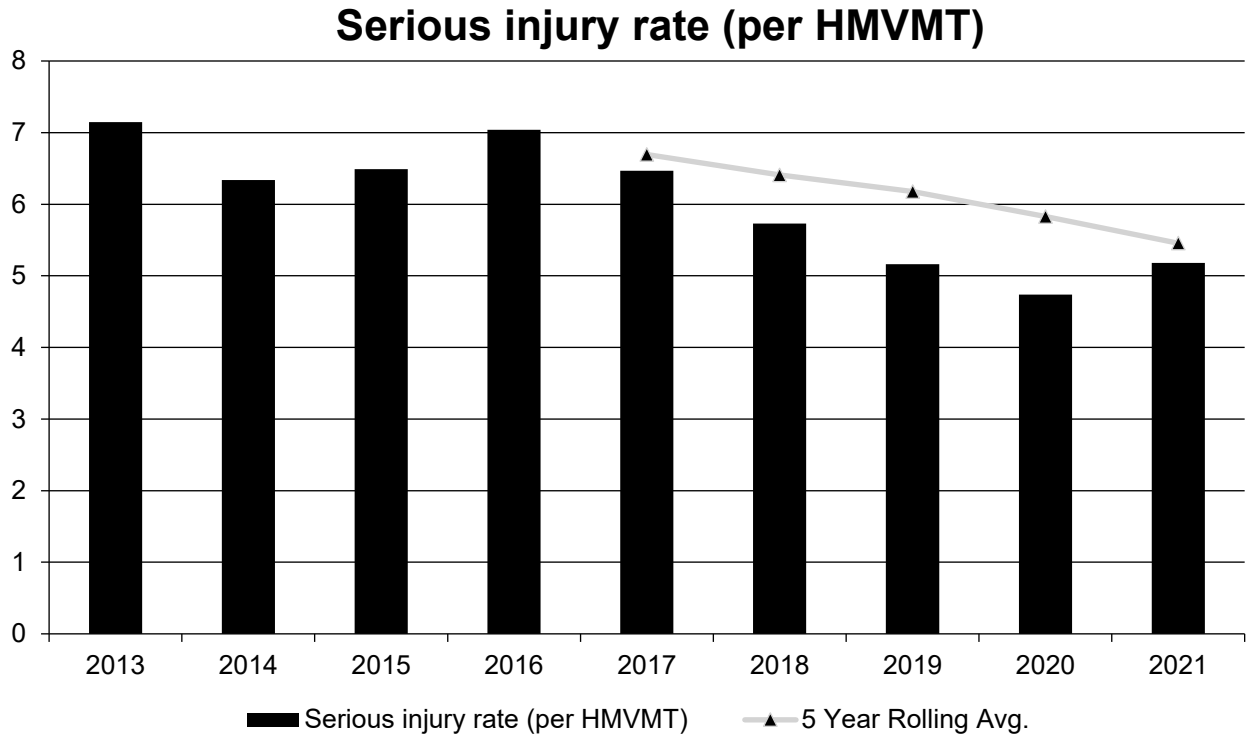
Present data showing the general highway safety trends in the State for the past five years.

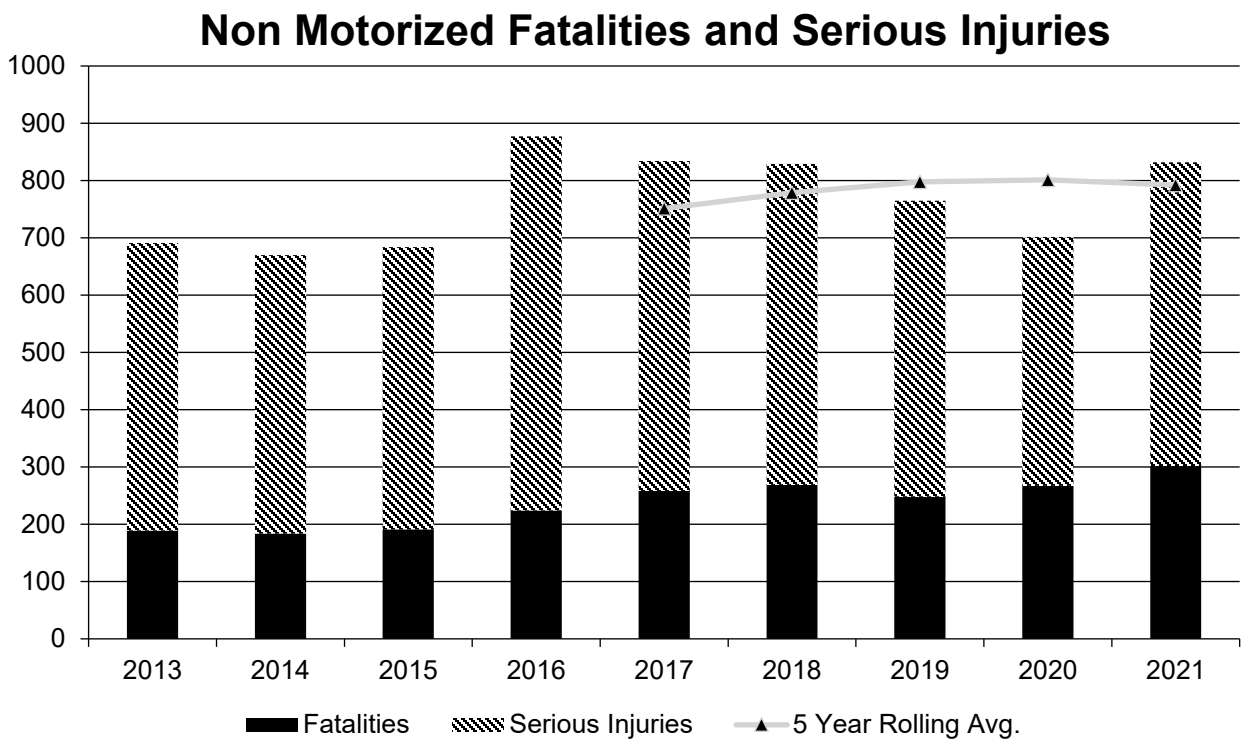
PERFORMANCE MEASURES	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fatalities	849	774	897	952	998	1,011	980	1,054	1,180
Serious Injuries	4,329	3,968	4,220	4,617	4,207	3,790	3,627	3,108	3,820
Fatality rate (per HMVMT)	1.401	1.236	1.379	1.451	1.534	1.528	1.394	1.607	1.600
Serious injury rate (per HMVMT)	7.145	6.336	6.488	7.037	6.465	5.730	5.161	4.738	5.180
Number non-motorized fatalities	189	184	191	224	258	269	248	267	302
Number of non-motorized serious injuries	502	486	493	653	576	560	517	434	530


Annual Fatalities
1400
1200
1000
800
600
400
200
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
8
7
6
5
4
3
2
1
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Describe fatality data source.

FARS

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

Year 2021

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	84.4	206.6	0.13	0.3
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0.6	0.2	0	0
Rural Principal Arterial (RPA) - Other	78.8	196	0.12	0.29
Rural Minor Arterial	60.8	108.2	0.09	0.16
Rural Minor Collector	10.6	30.6	0.02	0.04
Rural Major Collector	63	131.8	0.09	0.19

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 Local Road or Street	6.6	22	0.01	0.03
Urban Principal Arterial (UPA) - Interstate	50.2	160.4	0.07	0.24
Urban Principal Arterial (UPA) - Other Freeways and Expressways	45.2	168.6	0.06	0.25
Urban Principal Arterial (UPA) - Other	123.8	528.6	0.18	0.78
Urban Minor Arterial	266.4	1,195.2	0.39	1.77
Urban Minor Collector		38.2		0.05
Urban Major Collector	40.2	194	0.06	0.29
Urban Local Road or Street	9.6	39.6	0.01	0.06

Year 2021

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	412.6	1,135.6	0.6	1.67
County Highway Agency	97.2	360.8	0.14	0.53
Town or Township Highway Agency	18.8	85.2	0.03	0.12
City or Municipal Highway Agency	401.8	1,942.6	0.59	2.87
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)	1.2	7.2	0	0.01
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	0.4	0	0
Indian Tribe Nation	7	4.6	0.01	0.01

Provide additional discussion related to general highway safety trends.

In Arizona the total number of crashes in 2021 is 121,345, this represent a 22.45 percent increase from the years 2020. 1180 people died in motor vehicle traffic crashes in Arizona in 2021, the largest number of fatalities since 2008. This represents an increase of about 11.95 percent as compared to the 1054 fatalities reported in 2020. The 2021 Arizona Motor Vehicle Crash Facts shows vehicle miles traveled (VMT) in 2021 increased by about a 12.48 percent from the year 2020. The fatality rate for 2021 was 1.60 fatalities per 100 million VMT, down from 1.61 fatalities per 100 million VMT in 2020. Number of fatalities in 2008 was 938 and the fatality rate for 2008 was 1.52 fatalities per 100 million VMT. ADOT will continue to analyze the various data to identify the contributing factors for the increase.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2023 Targets *

Number of Fatalities:1200.0

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

The 2023 Arizona Safety Projections (Targets) was established on June 13, 2022 at that time the Statewide VMT and crash data for 2021 were preliminary and subject to change. Crash data for 2021 was completed on August 22, 2022. The 2021 Fatalities increased by 11.95 % from the 2020 Fatalities. The targets were established based on the review of a rolling average of five years, as well as the most recent three years results. 2022 and 2023 numbers and rates are based on 2019,2020 and 2021 annual trends.The 2021 annual number of fatalities that was used in the establishment of the projection (target) was 1208 but the final number as of August is 1180. The final number may have given a lower 2023 projections (target) for number of fatalities.

Number of Serious Injuries:3659.4

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

The 2023 Arizona Safety Projections (Targets) was established on June 13, 2022 at that time the Statewide VMT and crash data for 2021 were preliminary and subject to change. Crash data for 2021 was completed on August 22, 2022. The 2021 Serious Injuries increased by 22.9 % from the 2020 Serious Injuries.The targets were established based on the review of a rolling average of five years, as well as the most recent three years results. 2022 and 2023 numbers and rates are based on 2019,2020 and 2021 annual trends. The 2021 annual number of serious injuries that was used in the establishment of the projection (target) was 3778 but the final number as of August is 3819. The final number may have given a higher 2023 projections (target) number of serious injuries.

Fatality Rate:1.655

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

The 2023 Arizona Safety Projections (Targets) was established on June 13, 2022 at that time the Statewide VMT and crash data for 2021 were preliminary and subject to change. Crash data for 2021 was completed on August 22, 2022. The 2021 Millions of vehicle miles traveled (VMT) increased by 12.48 % from the year 2020.The targets were established based on the review of a rolling average of five years, as well as the most recent three years results. 2022 and 2023 numbers and rates are based on 2019,2020 and 2021 annual trends. Statewide VMT for 2022 and 2023 are projected based on 5 Years Ave change (2015-2019), 1.6% increase per year. The 2021 annual number of fatalities that was used in the establishment of the projection (target) was 1208 but the final number as of August is 1180.The final number may have given a lower 2023 projections (target) for rate of fatalities.

Serious Injury Rate:5.039

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

The 2023 Arizona Safety Projections (Targets) was established on June 13, 2022 at that time the Statewide VMT and crash data for 2021 were preliminary and subject to change. Crash data for 2021 was completed on August 22, 2022. The 2021 Millions of vehicle miles traveled (VMT) increased by 12.48 % from the year 2020.The targets were established based on the review of a rolling average of five years, as well as the most recent three years results. 2022 and 2023 numbers and rates are based on 2019,2020 and 2021 annual trends. Statewide VMT for 2022 and 2023 are projected based on 5 Years Ave change (2015-2019), 1.6% increase per year. The 2021 annual number of serious injuries that was used in the establishment of the projection (target) was 3778 but the final number as of August is 3819. The final number may have given a higher 2023 projections (target) rate of serious injuries.

Total Number of Non-Motorized Fatalities and Serious Injuries:793.6

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

The 2023 Arizona Safety Projections (Targets) was established on June 13, 2022 at that time the Statewide VMT and crash data for 2021 were preliminary and subject to change. Crash data for 2021 was completed on August 22, 2022. The total number of Non-Motorized Fatalities and Serious Injuries for 2021 increased by 18.68% from 2020.The targets were established based on the review of a rolling average of five years, as well as the most recent three years results. 2022 and 2023 numbers and rates are based on 2019,2020 and 2021 annual trends. Statewide VMT for 2022 and 2023 are projected based on 5 Years Ave change (2015-2019), 1.6% increase per year. The 2021 annual number of non motorized fatalities and serious injuries that was used in the establishment of the projection (target) was 811 but the final number as of August is 832.The final number may have given a higher 2023 projections (target) for non motorized fatalities and serious injuries.

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

Individual meetings were 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 was given the opportunity 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 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 2021 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	985.1	1044.6
Number of Serious Injuries	3661.6	3710.4
Fatality Rate	1.431	1.533

Serious Injury Rate	5.353	5.455
Non-Motorized Fatalities and Serious Injuries	781.9	792.2

The Arizona 2021 Safety Performance Projections (Targets) were established in June 2020, Crash data was not complete and VMT was not final. The 2021 Safety Performance Projections (Targets) was created using the following analysis and assumptions:

1. Crash trend review of the five year crash trend (2016-2020), two years crash trend (2018-2019) and crash data for the first quarter of the year 2020, the annual number of fatalities of 2020 and 2021 was anticipated to will be 962 and 972, but the final annual numbers of fatalities for 2020 and 2021 were 1054 and 1180. This increase in the number of fatalities caused the actual 2021 outcomes to be higher than the 2021 projections (targets) and higher than the baseline (2015-2019)

2. Statewide VMT was expected to continue increasing by 1.6% per year. The VMT for calendar year 2021 increased 12.48 % from the VMT in 2020 calendar year.

3. The annual number of serious injuries 2021 projected to be 3316. The actual annual number for 2021 currently is 3819. This increase in the number of serious injuries caused the actual 2021 outcomes to be higher than the 2021 projections (targets) but lower than the baseline (2015-2019)

4. The annual numbers of non-motorized fatalities and serious injuries projected to be 757. The actual annual number for 2021 is 832. This increase in the number of non-motorized fatalities and serious injuries caused the actual 2021 outcomes to be higher than the 2021 projections (targets) but lower than the baseline (2015-2019)

To add to all the reasons above, the total number of crashes in Arizona in 2021 calendar year increased 22.45 % from the calendar year 2020.

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	2015	2016	2017	2018	2019	2020	2021
Number of Older Driver and Pedestrian Fatalities	126	121	131	170	169	151	151
Number of Older Driver and Pedestrian Serious Injuries	421	424	373	386	362	293	312

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 total number of crashes in 2021 is 121,345, this represent a 22.45 percent increase from the years 2020. 1180 people died in motor vehicle traffic crashes in Arizona in 2021.This represents an increase of about 11.95 percent as compared to the 1054 fatalities reported in 2020. The 2021 Arizona Motor Vehicle Crash Facts shows vehicle miles traveled (VMT) in 2021 increased by about a 12.48 percent from the year 2020. The fatality rate for 2021 was 1.60 fatalities per 100 million VMT, down from 1.61 fatalities per 100 million VMT in 2020. ADOT will continue to analyze the various data to identify the contributing factors for the increase. Under the Plan Do Check Act (PDCA) program at ADOT, ADOT began an analysis in looking at it to increase the number of programmed projects and obligations.

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

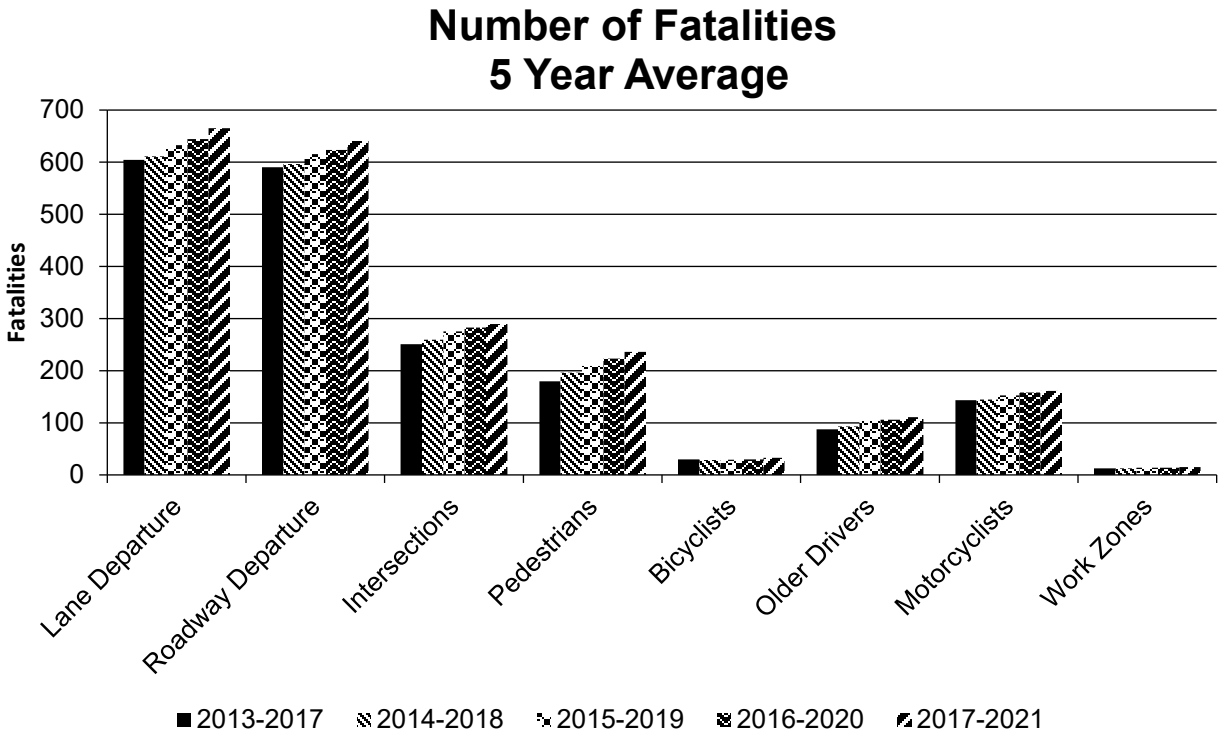
Effectiveness of Groupings or Similar Types of Improvements

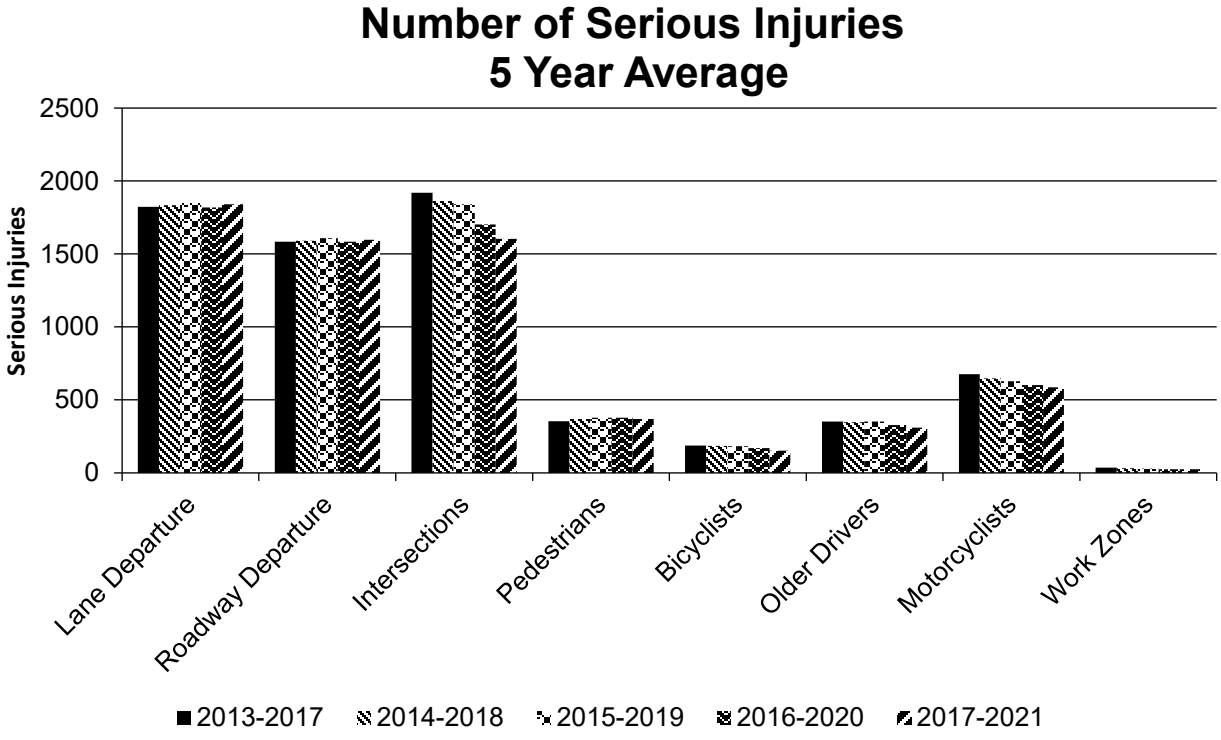
Present and describe trends in SHSP emphasis area performance measures.

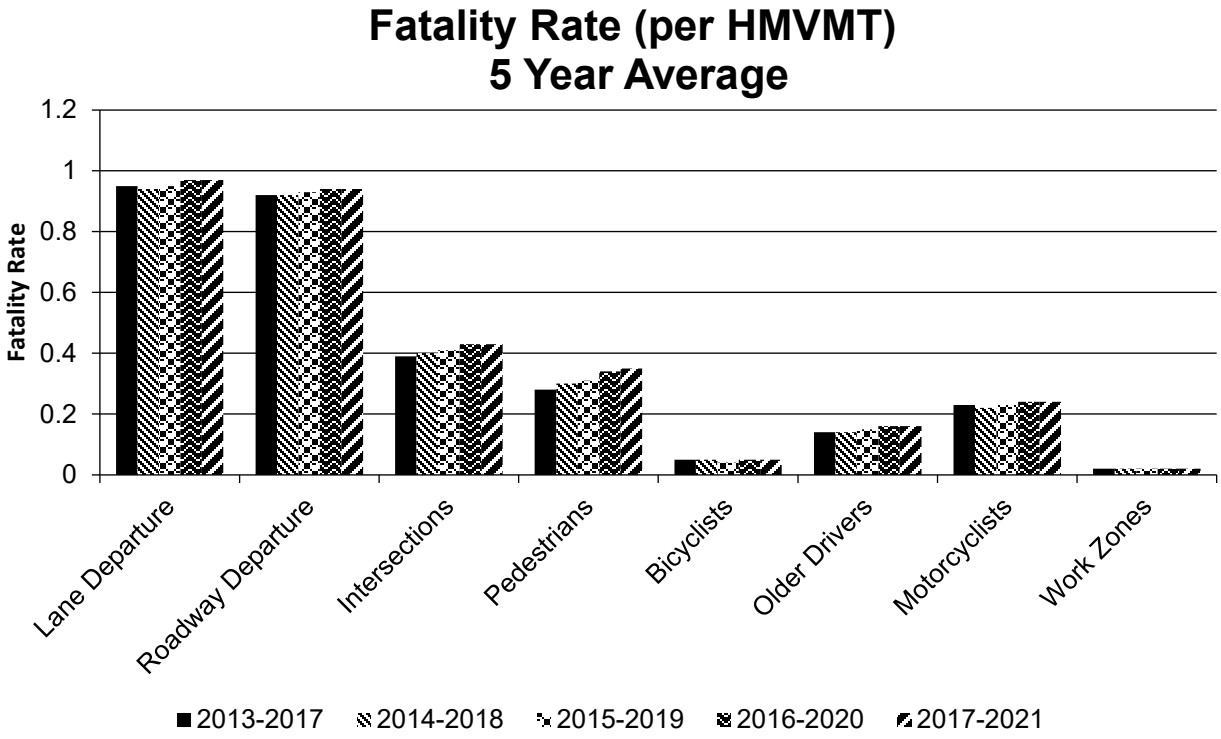
Year 2021

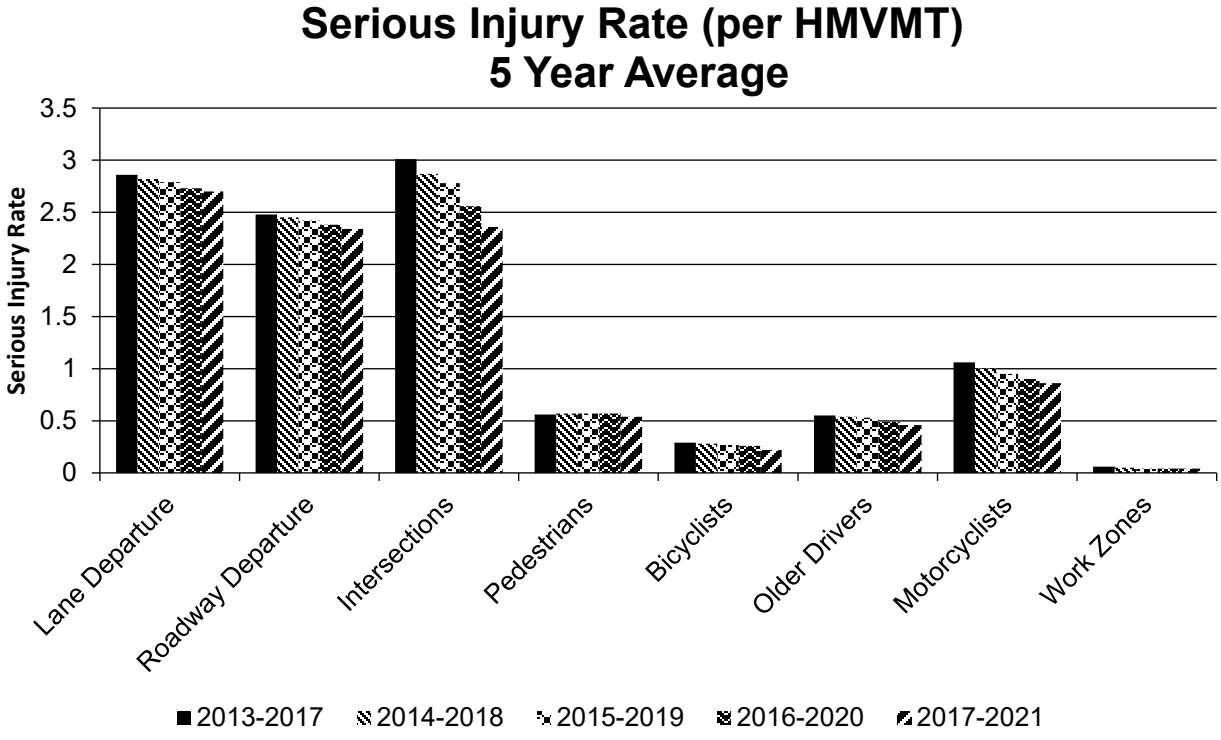
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure		665	1,840.4	0.97	2.7
Roadway Departure		640.8	1,597.2	0.94	2.34
Intersections		289.4	1,603.4	0.43	2.36
Pedestrians		236.2	370	0.35	0.54
Bicyclists		32.6	153.4	0.05	0.22
Older Drivers		111	309.6	0.16	0.46

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)
Motorcyclists		161.2	586	0.24	0.86
Work Zones		14.8	24.4	0.02	0.04


Number of Fatalities
5 Year Average
Fatalities
700
600
500
400
300
200
100
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021


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
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021


Fatality Rate (per HMVMT)
5 Year Average
Fatality Rate
1.2
1
0.8
0.6
0.4
0.2
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021


Serious Injury Rate (per HMVMT)
5 Year Average
Serious Injury Rate
3.5
3
2.5
2
1.5
1
0.5
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021

Project Effectiveness

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

Under the ADOT Road Safety Assessment Program, the RSA team tracks monthly Crash reductions on locations where RSAs implemented. The annual crash reduction for 2021 was reported to be 28%.

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]	1	0.9					1	0.9	1	0.9
	Route Number (8) [8]	1	0.9								
	Route/Street Name (9) [9]	1	0.9								
	Federal Aid/Route Type (21) [21]	1	1								
	Rural/Urban Designation (20) [20]	1	1					1	1		
	Surface Type (23) [24]	1	0.5					1	0.5		
	Begin Point Segment Descriptor (10) [10]	1	0.9					1	0.9	1	0.9
	End Point Segment Descriptor (11) [11]	1	0.9					1	0.9	1	0.9
	Segment Length (13) [13]	1	1								
	Direction of Inventory (18) [18]	1	0.5								
	Functional Class (19) [19]	1	1					1	1	1	1
	Median Type (54) [55]	1	0.5								

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]	1	0.6								
	One/Two Way Operations (91) [93]	1	0.8								
	Number of Through Lanes (31) [32]	1	0.5					1	0.5		
	Average Annual Daily Traffic (79) [81]	1	0.2					1	0.2		
	AADT Year (80) [82]	1	0.2								
	Type of Governmental Ownership (4) [4]	1	0.75					1	0.75	1	0.75
INTERSECTION	Unique Junction Identifier (120) [110]			1	1						
	Location Identifier for Road 1 Crossing Point (122) [112]			1	0.5						
	Location Identifier for Road 2 Crossing Point (123) [113]			1	0.5						
	Intersection/Junction Geometry (126) [116]			0.6	0.6						
	Intersection/Junction Traffic Control (131) [131]			0.6	0.6						
	AADT for Each Intersecting Road (79) [81]			1	0.2						
	AADT Year (80) [82]			1	0.2						
	Unique Approach Identifier (139) [129]			0.75	0.5						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					1	1				
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					1	0.9				

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]					1	0.9				
	Ramp Length (187) [177]					1	0.9				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					1	0.5				
	Roadway Type at End Ramp Terminal (199) [189]					1	0.5				
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					1	0.2				
	Year of Ramp AADT (192) [182]					1	0.2				
	Functional Class (19) [19]					1	1				
	Type of Governmental Ownership (4) [4]					1	0.75				
Totals (Average Percent Complete):		**1.00**	**0.73**	**0.87**	**0.51**	**0.91**	**0.62**	**1.00**	**0.74**	**1.00**	**0.89**

*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.

Due to the high level of completion of MIRE data and the short time period that a task force is typically associated with, the MIRE task force committee that was proposed in the previous report is no longer appropriate. ADOT proposes the following steps to support meeting the requirement to have complete access to the MIRE fundamental data elements on all public roadways by September 30, 2026 as well as to serve the GIS data governance needs of ADOT at large. Each of the following steps describe necessary actions and completion dates to meet this goal

Step 1. Establish a GIS Data Standing Committee comprising representatives from FHWA, GOHS, 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. Other teams may join as needed.

ADOT has formed a preliminary GIS Data Standing Committee consisting of nine members, three from each division stated above, plus representatives from FHWA and GOHS.

Each division of the GIS Data Standing Committee will work closely to ensure the following steps are completed timely and accurately.

Step 2. Establish a charter for the GIS Data Standing Committee. The charter will establish specific goals and timelines for the committee, among which will be to establish roles and responsibilities for GIS data, as well as create a pathway for communicating across teams about GIS data. The charter will be established by July 2022. ADOT parties involved: MPD/ITG/TSMO.

Step 3. Quarterly meetings will be conducted to work towards goals established in the charter. Representatives from FHWA, GOHS and teams outside of the MPD, ITG, and TSMO will join as needed.

Optional Attachments

Program Structure:

HSIP Manual Appendix_C.pdf
2022 HSIP Manual.pdf
2022 HSIP_Appl.xlsx
HSIP Appendix_A (Rev Jun22).pdf
HSIP Manual Appendix_B.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.