ALASKA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2022 ANNUAL REPORT

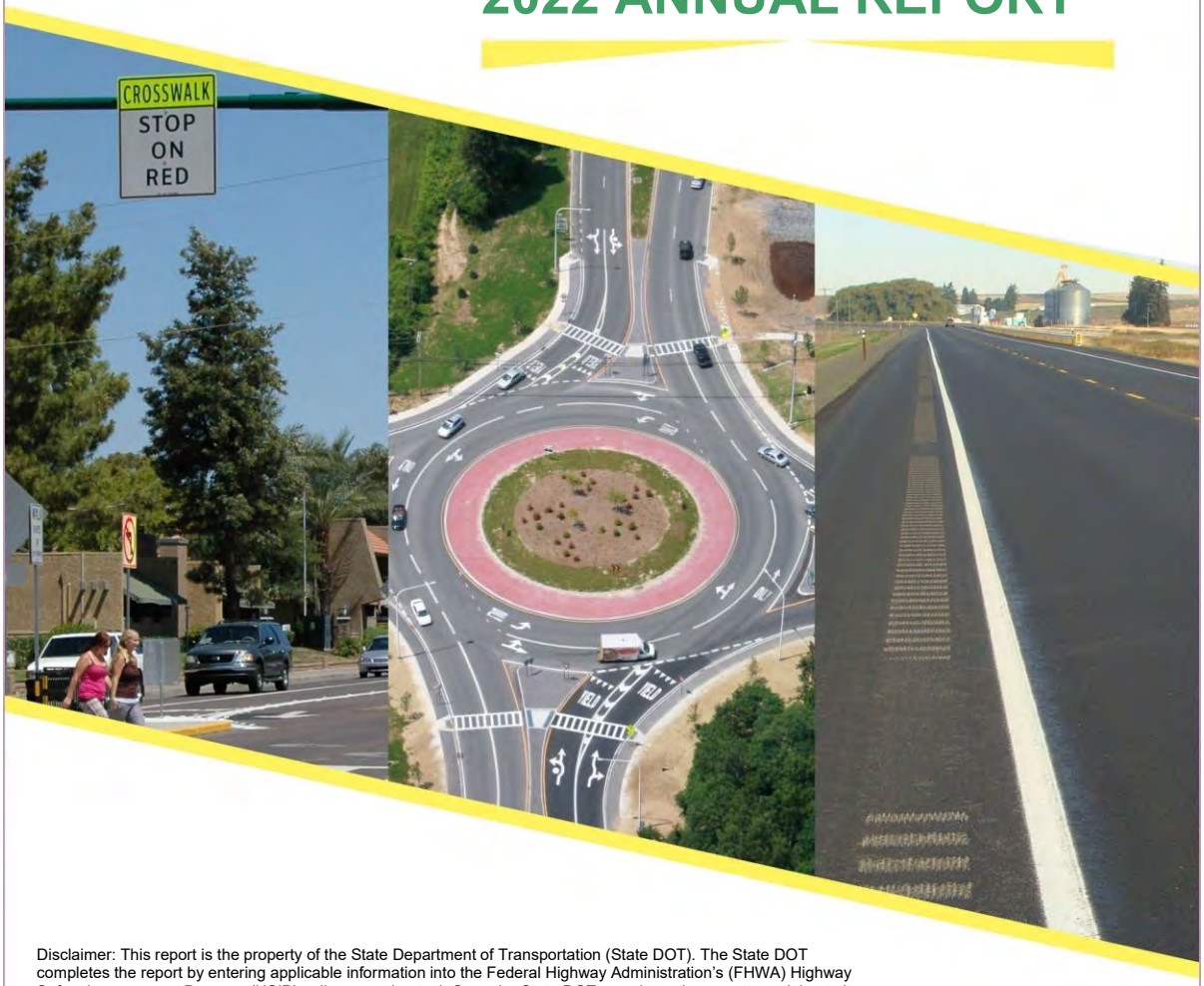

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Photo source: Federal Highway Administration

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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

Under the Alaska Highway Safety Improvement Program (HSIP), the Alaska Department of Transportation & Public Facilities (DOT&PF) identifies high risk intersections and roads, scopes and prioritizes corrective projects, funds the most cost-effective projects, and evaluates actual project and program effectiveness. HSIP dollars are distributed to the most effective projects from a single statewide fund. The purpose of the Alaska HSIP is to “maximize lives saved and major injuries eliminated per dollar spent.” As of FFY 2022, we currently measure our post-construction program benefit-cost ratio at approximately 6.5:1**,** a successful ratio achieved through a program that blends spot and systemic projects throughout the State in urban as well as rural locations.

Regional Traffic and Safety personnel identify, scope, estimate, and rank candidate projects according to benefit-cost ratio (ranked projects) and potential for crash reduction (non-ranked projects). HQ Traffic & Safety reviews proposed new projects, works with the regions to clarify project description and scope, and submits recommended projects to DOT&PF's Chief Engineer for approval. Following approval of new HSIP projects, HQ Traffic and Safety selects the most effective projects and proposes a statewide HSIP funding plan for the coming federal fiscal year for approval by the Chief Engineer and the Director of Program Development.

The HSIP funding plan typically includes a blend of ongoing projects and new projects. Regions design and construct funded projects and generate before-after studies when three years of post-improvement crash data becomes available. HQ Traffic & Safety manages funding for the statewide HSIP, annually updates the HSIP Handbook, maintains program effectiveness data, and produces the annual HSIP report.

As noted in previous HSIP Annual Reports, DOT&PF had not been able to provide timely data on serious injuries for a number of years. This was caused by a combination of difficulties in getting crash reports from the Alaska Division of Motor Vehicles (which continues to experience significant and prolonged delays in data availability) and challenges with processing data once it had been received from the DMV.
DOT&PF has worked diligently to resolve the data processing issues that led to this multi-year backlog. In the 2021 HSIP Annual Report, DOT&PF provided certified serious injury data through 2017 as well as uncertified data for 2018 and 2019. In the past six months, DOT&PF has certified three years of crash reports (2018 - 2020) and has completed data entry on crash reports resulting in injury or death for 2021. However, the serious injury data for 2021 must undergo final QC prior to being certified. Due to the nature of the remaining quality control activities, which includes removal of duplicate reports, any changes in the data would be likely to reduce the number of serious injuries reported.

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 general structure of Alaska's HSIP is described in Sec. 1.3 of the Alaska HSIP Handbook:

Regional Traffic and Safety Engineers in Alaska’s three regions (Northern, Central and Southcoast) screen crash data and consider other information to identify projects. Projects can be either ranked or non-ranked.

Ranked projects are implemented at locations with high crash history and are ranked by analyzing the benefit:cost ratio of specific safety-related improvements using estimated crash reduction factors and improvement costs. Non-ranked projects are implemented at locations with potential for severe crashes identified in SHSP strategies and may be spot or system-wide improvements. System-wide, or systemic, improvement projects are implemented to reduce potential for fatal and serious injuries by mitigating road conditions or characteristics associated with specific crash types. Non-infrastructure projects are limited to those types specifically included in Appendix A (p. A-20 to A-22) of the Alaska HSIP Handbook, a reprinting of 23 U.S.C. Section 148 (a)(4)(B).

Alaska’s three regional Traffic and Safety sections submit proposed projects to the State Traffic and Safety Engineer for review. HQ Traffic & Safety staff review the proposed new projects, work with regions to clarify project descriptions and scope, and submit recommended projects to the Chief Engineer for advancement as safety projects. Following Chief Engineer approval of new HSIP projects, the State Traffic and Safety Engineer proposes a list of new and ongoing projects for funding and coordinates with HQ Project Development to prepare a funding plan for the coming federal fiscal year.

HQ Traffic and Safety personnel manage the federal funds for approved projects. Regional Traffic and Safety personnel work with preconstruction and construction personnel to ensure projects remain consistent with their HSIP scope throughout design and construction. The regions conduct follow-up studies to determine the effectiveness of completed projects. HQ Traffic & Safety summarizes the overall effectiveness of the statewide program in the annual HSIP Report.

Where is HSIP staff located within the State DOT?

Engineering

The HSIP program manager is located with the DOT&PF Statewide Design and Engineering Services division

(Chief Engineer's office). DOT&PF regional HSIP practitioners are located within the regional preconstruction divisions.

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.

Safety projects on all public roads in Alaska are eligible to compete for HSIP funding. The same process is used to prioritize projects on both state and non-state (including local and tribal) roads.

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

- Design
- Districts/Regions
- Governors Highway Safety Office
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

Describe coordination with internal partners.

Design: Regional Traffic and Safety personnel identify, scope, estimate, and rank candidate projects according to benefit:cost ratio (ranked projects) and potential for crash reduction (non-ranked projects).

HQ Traffic and Safety reviews proposed new projects, works with the regions to clarify project description and scope, and submits recommended projects to the DOT&PF Chief Engineer for funding approval.

Planning: HQ Traffic and Safety develops the funding plan in coordination with the Office of Program Development.

Maintenance and Operations: Regional Traffic and Safety consults with M&O staff to determine alternative project nominations where safety problems may exist despite the lack of historic crash data.

Governors Highway Safety Office: GHSO splits penalty transfer funding to address engineering solutions to highway safety.

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

External partners participate in the HSIP planning process through both the SHSP and the Performance Target setting process.

Describe coordination with external partners.

The formal mechanisms in the program for coordination with external partners include both the SHSP development and implementation process and establishment of annual performance measure targets. However, Regional Traffic and Safety Engineers continuously work with external partners, including local and tribal agencies, to identify and develop HSIP project nominations. Their input is valued and considered in the development and delivery of HSIP projects.

Coordination with FHWA is described under the most recent Stewardship and Oversight Agreement.

Program Methodology

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

Yes

Select the programs that are administered under the HSIP.

- HSIP (no subprograms)

Program: HSIP (no subprograms)

Date of Program Methodology:4/18/2022

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• All crashes	• Volume	

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Critical rate

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?

- Competitive application process

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).

Relative Weight in Scoring

Ranking based on B/C:90
Available funding:10
Total Relative Weight:100

What percentage of HSIP funds address systemic improvements?

62

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Clear Zone Improvements
- High friction surface treatment
- Install/Improve Lighting
- Pavement/Shoulder Widening
- Upgrade Guard Rails

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

Does the State HSIP consider connected vehicles and ITS technologies?

No

Not at this time.

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

No

Not at this time. HSIP funding was used to develop Alaska specific calibration factors for some SPFs in the HSM. DOT&PF had envisioned the calibration factors for use at planning level for HSIP nominations, but the calibration factors were much higher than expected, with low confidence for reliable predicted outcomes.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal 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)	$60,949,593	$45,442,011	74.56%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$9,023,200	$15,248,420	168.99%
Penalty Funds (23 U.S.C. 164)	$9,023,200	$15,248,420	168.99%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$2,090,430	$2,507,278	119.94%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$7,004,447	$5,292,360	75.56%
Totals	$88,090,870	$83,738,489	95.06%

Notes to Matt (delete when done):

Obligated funds are from FFY22 HSIP Worksheet 8.17.22 (For HSIP Report) provided by Liz and in the Mat'ls folder. Values are the totals in column H Obligated Amt on FFY22 HSIP PJs tab;*note that this yields penalty numbers that exceed this year's penalty APPNs*, not sure why (possibly deobligated funds being sent out?) but wanted to be consistent with what I'm doing for the other numbers. mfm

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

$18,354,328

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

$24,889,638

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

$1,717,200

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

$1,081,210

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.

Issues related to the COVID pandemic are slowly resolving in Alaska, although we continue to see delays related to DOT&PF or contractor staff contracting the virus. In addition, ongoing shortages of skilled labor - already present prior to the pandemic - are exacerbated both by COVID-related issues and as a result of the increase in competition for that labor related to the expanded infrastructure funding from the BIL/IIJA. DOT&PF also has faced increased stress from response to issues caused by melting permafrost, geography, and impacts from natural hazards (for example, flooding and earthquakes).

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
Steese Expressway/Chena Hot Springs Road Ramp Termini Roundabouts	Intersection traffic control	Modify control – Modern Roundabout	2	Numbers	$370866	$370866	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	8,155	99999	State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
NR Guardrail Inventory and Upgrades	Roadside	Barrier - other	970	Miles	$2253264	$2253264	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Other	99,999	99999	State Highway Agency	Systemic	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
HSIP: Airport Way / Steese Expwy Interchange	Interchange design	Convert at-grade intersection to interchange	1	Numbers	$19513156	$19513156	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	36,265	55	State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
NR Systemic Signal Upgrades	Intersection traffic control	Modify traffic signal – add additional signal heads	8	Intersections	$792000	$792000	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	99,999	99999	Multiple / Varies	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
City of Fairbanks Systemic Signal Upgrades	Intersection traffic control	Modify traffic signal – add additional signal heads	22	Numbers	$1300000	$1300000	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	99,999	99999	Multiple / Varies	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Chena Pump Rd @ Chena Small Tracts Rd Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$400000	$400000	Penalty Funds (23 U.S.C. 164)	Rural	Multiple/Varies	99,999	99999	Multiple / Varies	Spot	Intersections	Implement infrastructure projects to address intersection crashes
George Parks Highway Systemic Passing Lanes Project	Roadway	Roadway widening - add lane(s) along segment	80.2	Miles	$353160	$392400	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	99,999	65	State Highway Agency	Systemic	Lane Departure	Implement infrastructure projects to address passing crashes

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
Anchorage Pedestrian Lighting, Phase 1 (nomination name was Minnesota Dr / Seward Hwy / Tudor Rd / Muldoon Rd Lighting Improvements)	Lighting	Lighting - other	1.16	Miles	$1502929	$1633450	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	99,999	99999	State Highway Agency	Spot	Pedestrians	Implement appropriate engineering strategies to address high-crash locations involving older drivers and pedestrians
Old Glenn Hwy and Knik Goose Bay Rd: Wider Lane Lines	Roadway signs and traffic control	Roadway signs and traffic control - other	23.5	Miles	$2144371	$2144371	Penalty Funds (23 U.S.C. 164)	Rural	Multiple/Varies	99,999	99999	State Highway Agency	Spot	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
Systemic CR One-Way Signing Compliance	Roadway signs and traffic control	Roadway signs and traffic control - other	163	Numbers	$257000	$257000	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	99,999	99999	State Highway Agency	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
CR Guardrail Inventory & Upgrade	Roadside	Barrier - other	654	Miles	$40294987	$44772207	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	99,999	99999	State Highway Agency	Systemic	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
A Street Midtown Couplet - Overhead Signal Indication Upgrades	Intersection traffic control	Modify traffic signal – add additional signal heads	2	Intersections	$1095694	$1217438	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	99,999	99999	State Highway Agency	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Church Rd and Spruce Ave Intersection Flashing Beacon	Intersection traffic control	Intersection flashers –sign-mounted or overhead	1	Locations	$37800	$42000	HSIP (23 U.S.C. 148)	Rural	Major Collector	99,999	99999	Multiple / Varies	Spot	Intersections	Reduce the number of fatal and serious injury intersection crashes
Wasilla-Fishhook Rd and Spruce Ave/Peck St Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Locations	$324900	$361000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	99,999	99999	Multiple / Varies	Spot	Intersections	Reduce the number of fatal and serious injury intersection crashes

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
5th Ave: Concrete St to Karluck St Pedestrian Improvements	Pedestrians and bicyclists	Medians and pedestrian refuge areas	1	Locations	$229500	$255000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	44,270	99999	State Highway Agency	Spot	Pedestrians	Reduce the number of fatal and serious injury pedestrian and bicycle crashes
Palmer-Fishhook Rd and Trunk Rd Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Numbers	$320000	$320000	Penalty Funds (23 U.S.C. 164)	Urban	Multiple/Varies	99,999	55	State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
Anchorage Flashing Yellow Arrow and Signal Head Display Improvements	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	21	Intersections	$1663000	$1663000	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	99,999	99999	State Highway Agency	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Pittman Rd Shoulder Widening and Slope Flattening	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	6.307	Miles	$855000	$950000	HSIP (23 U.S.C. 148)	Rural	Major Collector	940	45	State Highway Agency	Spot	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
KTN Stedman and Deermont Street Intersection Safety Improvements - HSIP	Intersection geometry	Intersection geometry - other	1	Numbers	$651436	$723817	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	99,999	99999	State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
POW - Hollis Highway Guardrail Safety Improvements HSIP	Roadside	Barrier end treatments (crash cushions, terminals)	27	Locations	$96750	$107500	HSIP (23 U.S.C. 148)	Rural	Major Collector	290	50	State Highway Agency	Systemic	Roadway Departure	Reduce the number of fatal and serious injury lane departure crashes.
WRG - Zimpovia Highway Rock Fall Mitigation HSIP	Roadside	Removal of fixed objects (trees, poles, etc.)	2	Miles	$164250	$182500	HSIP (23 U.S.C. 148)	Rural	Minor Collector	427	45	State Highway Agency	Systemic	Roadway Departure	Implement HSIP qualified projects
JNU - Egan-Yandukin Intersection Safety Improvements	Speed management	Speed management - other	1	Intersections	$187389	$208210	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	99,999	99999	State Highway Agency	Spot	Intersections	Implement HSIP qualified projects

2022 Alaska Highway Safety Improvement Program

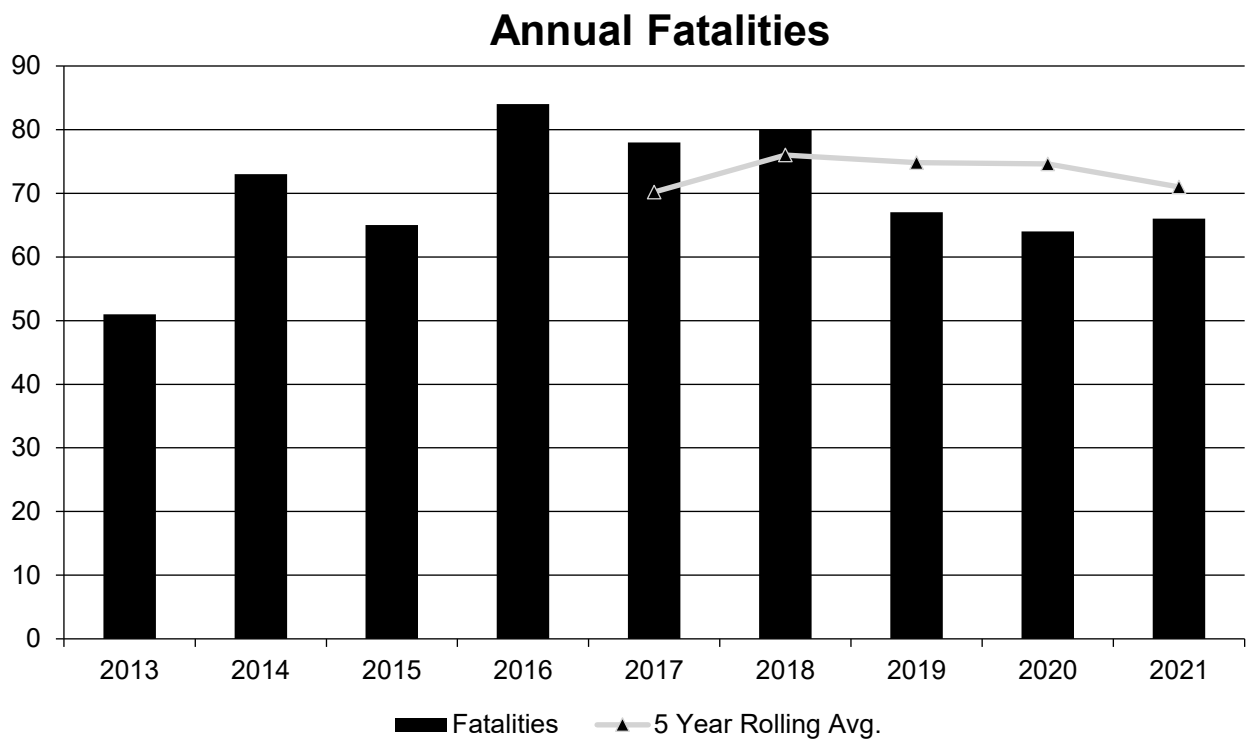
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
SR Regionwide Guardrail Inventory and Upgrade HSIP	Roadside	Roadside - other	113.01	Miles	$600000	$600000	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	99,999	99999	State Highway Agency	Systemic	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
JNU Loop Road - Valley Boulevard Intersection Safety Improvements HSIP	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$500000	$500000	Penalty Funds (23 U.S.C. 164)	Urban	Multiple/Varies	99,999	99999	Multiple / Varies	Spot	Intersections	Implement infrastructure projects to address intersection crashes

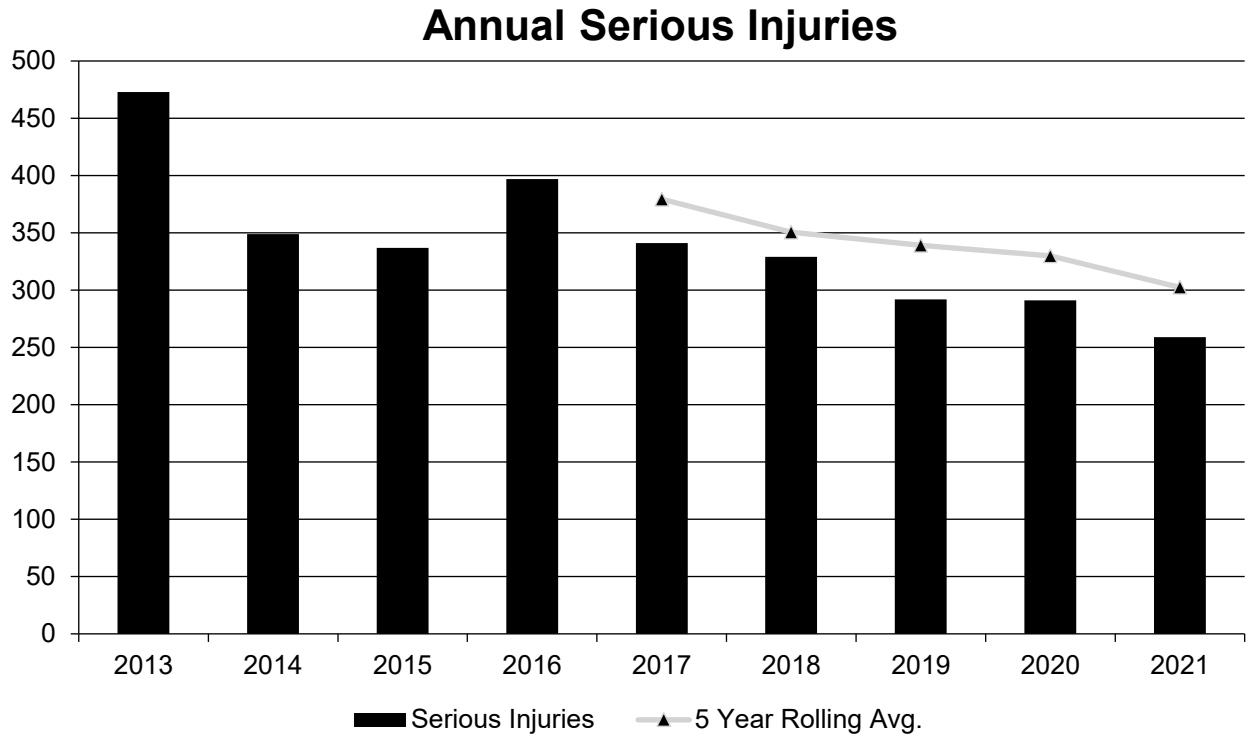
Safety Performance

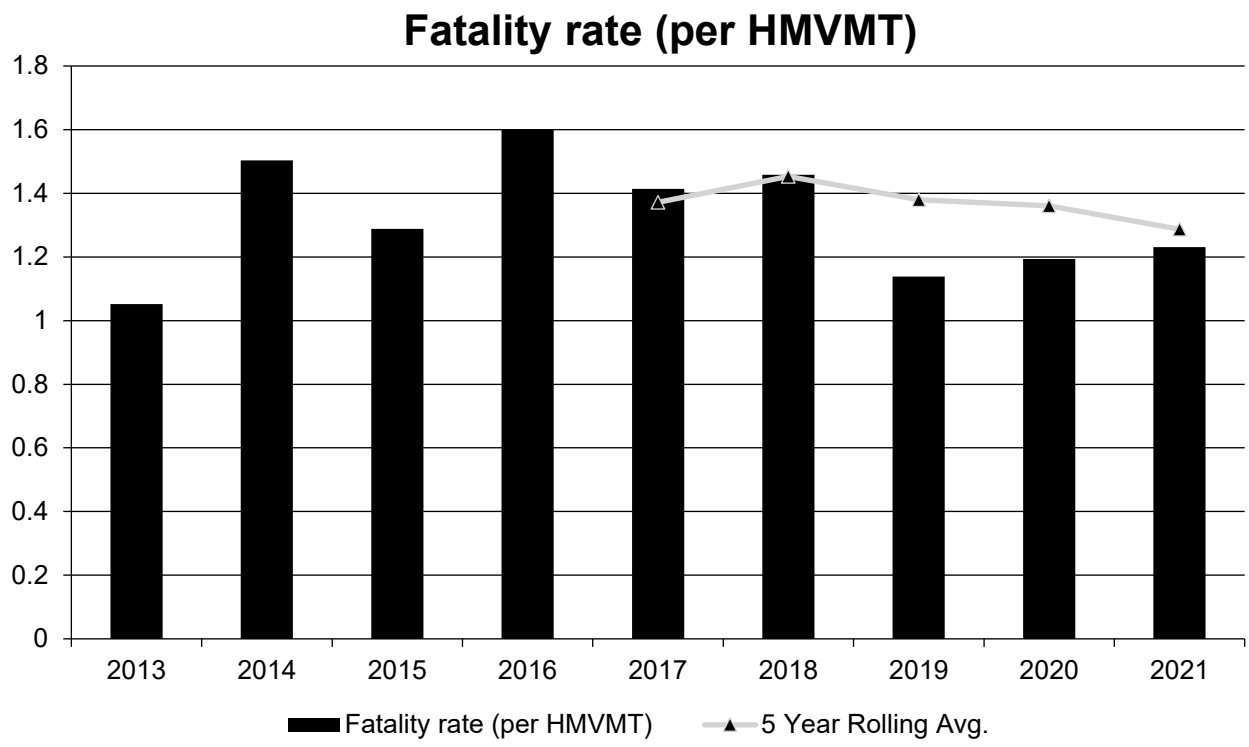
General Highway Safety Trends

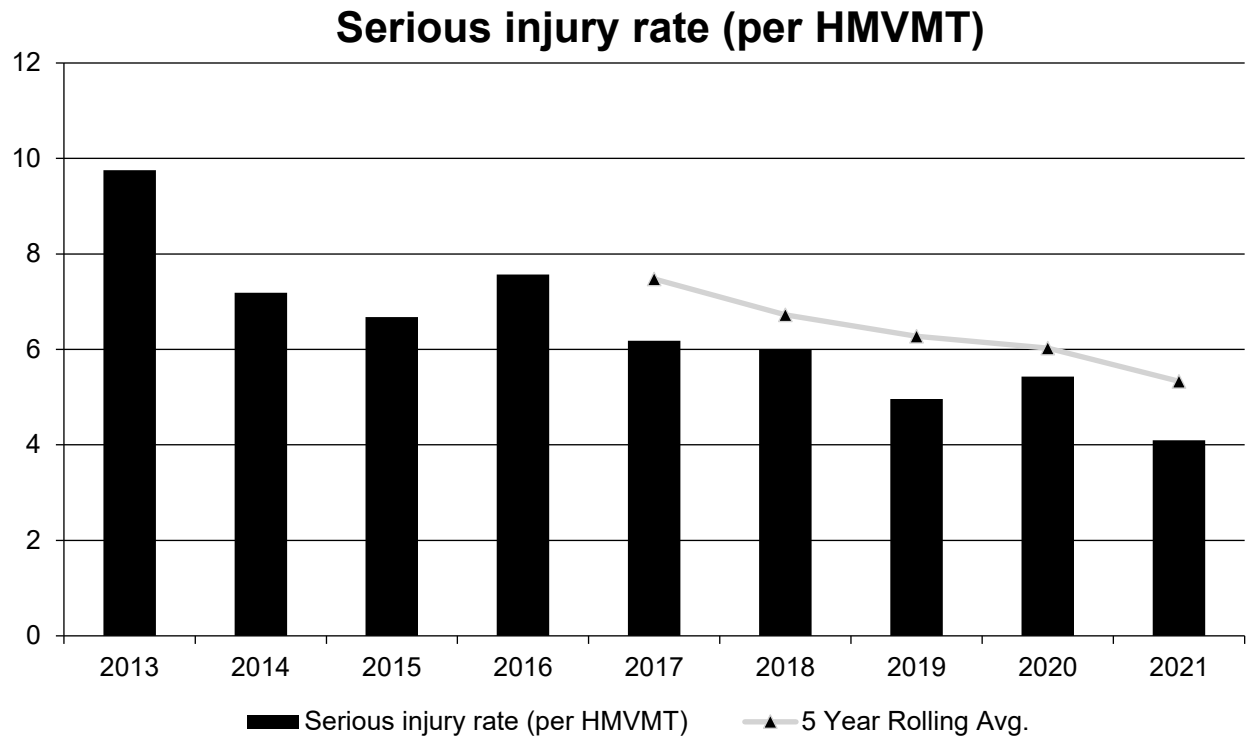
Present data showing the general highway safety trends in the State for the past five years.

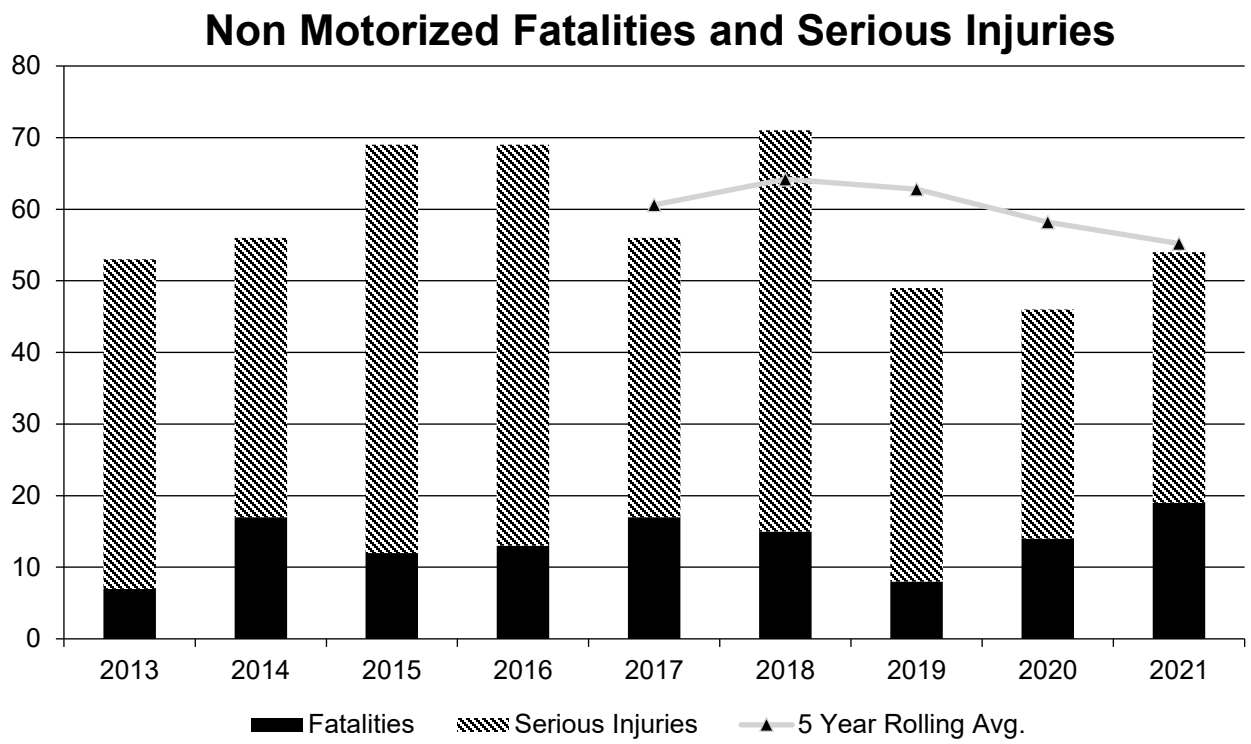
PERFORMANCE MEASURES	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fatalities	51	73	65	84	78	80	67	64	66
Serious Injuries	473	349	337	397	341	329	292	291	259
Fatality rate (per HMVMT)	1.052	1.503	1.288	1.602	1.414	1.458	1.138	1.194	1.231
Serious injury rate (per HMVMT)	9.757	7.187	6.680	7.571	6.180	5.996	4.959	5.429	4.098
Number non-motorized fatalities	7	17	12	13	17	15	8	14	19
Number of non-motorized serious injuries	46	39	57	56	39	56	41	32	35


Annual Fatalities
90
80
70
60
50
40
30
20
10
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
500
450
400
350
300
250
200
150
100
50
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)
12
10
8
6
4
2
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Alaska DOT&PF uses FARS data to determine crash fatalities, and our internal crash database, CARE, to generate serious injury data for HSIP annual reports. AK DOT&PF has updated our data methodology in order to further ensure that year-to-year results are comparable. In the past, we have conducted searches in CARE manually, which provides some opportunity for researcher judgment to vary over time. Starting in 2022, we have developed standard filters for serious injury data research in order to ensure that the same search parameters are used annually.

No changes have been made to the research methodology applied to fatality data. 2021 fatality data is provisional, as FARS has not yet closed 2021.

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	15.6	46.2	1.9	5.6
Rural Principal Arterial (RPA) - Other	0	0	0	0

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)
Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	6.2	19	2.12	6.63
Rural Minor Arterial	2.6	8.4	2.19	7.01
Rural Minor Collector	5	18.8	2.6	8.85
Rural Major Collector	4.4	20.8	1.55	7.27
Rural Local Road or Street	5.4	11.6	0.77	1.73
Urban Principal Arterial (UPA) - Interstate	7.6	28.2	0.99	3.62
Urban Principal Arterial (UPA) - Other Freeways and Expressways	0	0	0	0
Urban Principal Arterial (UPA) - Other	13.4	66	1.47	7.24
Urban Minor Arterial	6.6	35.6	1.29	7.05
Urban Minor Collector	1.4	4.8	1.21	4.25
Urban Major Collector	1.6	16.8	0.67	7.12
Urban Local Road or Street	1	13.6	0.15	2.06
Missing Function Class	0.2	10.2	0	0.96
Other	0.2	3.8	0	0

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	60.2	233.2	1.2	4.7
County Highway Agency	6.8	48.6	0.51	3.48
Town or Township Highway Agency	0.2	0	0	0
City or Municipal Highway Agency	3.4	12	0.85	2.5
State Park, Forest, or Reservation Agency	0	0	0	0
Local Park, Forest or Reservation Agency	0	0	0	0
Other State Agency	0	0	0	0
Other Local Agency	0.4	0	5.27	0
Private (Other than Railroad)	0	0.2	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	0.2	0	0
Indian Tribe Nation	0	0.2	0	0.09
Other/Unknown	0.2	8	0.16	3.77
FEDERAL	0		0	0
Federal				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2023 Targets *

Number of Fatalities:70.0

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

Alaska followed the process described in FHWA-SA-16-101 to establish targets based on trend analysis, the influence of external factors, and the consideration of select scenarios. This target is representative of an aspirational view of annual fatality numbers possibly decreasing in light of COVID-19 factors, even considering the external upward pressures for this performance measure in light of the most likely scenarios. Alaska's SHSP was updated in 2018 and continues to reflect the State's vision of Toward Zero Deaths. Reporting on this target annually will keep the TZD vision firmly planted in Alaska's traffic safety efforts and will assist Alaska in consideration of program improvements to reinforce the SHSP TZD vision. Our FFY 2023 target for fatalities (70) is slightly higher than the SHSP 2022 goal (67), but we have been decreasing our target values in recent years striving toward the SHSP goal. Since the beginning of Alaska's target setting we've rounded our K and SI targets to the next highest multiple of 5.

Number of Serious Injuries:325.0

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

Alaska followed the process described in FHWA-SA-16-101 to establish targets based on trend analysis, the influence of external factors, and the consideration of select scenarios. This target is representative of an aspirational view of annual serious injury numbers continuing to decline even considering the external upward pressures for this performance measure in light of the most likely scenarios. Alaska's SHSP was updated in 2018 and continues to reflect the State's vision of Toward Zero Deaths. Reporting on this target annually will keep the TZD vision firmly planted in Alaska's traffic safety efforts and will assist Alaska in consideration of program improvements to reinforce the SHSP TZD vision. Alaska's FFY 2023 Serious Injury target (325) is below the SHSP 2022 goal (331).

Fatality Rate:1.300

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

Alaska followed the process described in FHWA-SA-16-101 to establish targets based on trend analysis, the influence of external factors, and the consideration of select scenarios. This target is representative of an aspirational view of annual fatality numbers leveling off even considering the external upward pressures for this performance measure in light of the most likely scenarios. It is possible, however, that traffic volumes will decrease more than expected, resulting in a higher fatality rate than expected. Alaska's SHSP was updated in 2018 and continues to reflect the State's vision of Toward Zero Deaths. Reporting on this target annually will keep the TZD vision firmly planted in Alaska's traffic safety efforts and will assist Alaska in consideration of program improvements to reinforce the SHSP TZD vision.

Serious Injury Rate:5.900

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

Alaska followed the process described in FHWA-SA-16-101 to establish targets based on trend analysis, the influence of external factors, and the consideration of select scenarios. This target is representative of an aspirational view of annual serious injury numbers continuing to decline even considering the external upward pressures for this performance measure in light of the most likely scenarios. It is possible, however, that traffic volumes will decrease more than expected, resulting in a higher serious injury rate than expected. Alaska's SHSP was updated in 2018 and continues to reflect the State's vision of Toward Zero Deaths. Reporting on this target annually will keep the TZD vision firmly planted in Alaska's traffic safety efforts and will assist Alaska in consideration of program improvements to reinforce the SHSP TZD vision.

Total Number of Non-Motorized Fatalities and Serious Injuries:58.0

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

Alaska followed the process described in FHWA-SA-16-101 to establish targets based on trend analysis, the influence of external factors, and the consideration of select scenarios. This target is aspirational, and focused on Alaska's vision of zero deaths, but also considered in light of the current upward trend and external upward pressures for this performance measure in light of the most likely scenarios. Alaska's SHSP was updated in 2018 and continues to reflect the State's vision of Toward Zero Deaths. While there is no specific goal in our current SHSP for this performance measure, reporting on this target annually will keep the TZD vision firmly planted in Alaska's traffic safety efforts and will assist Alaska in consideration of program improvements to reinforce the SHSP TZD vision.

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

Both the Fairbanks Metropolitan Area Transportation System (FMATS) Executive Director and Anchorage Metropolitan Area Transportation Solutions (AMATS) Coordinator were included in meetings during the development of initial target recommendations that were delivered to DOT&PF management for review and edits.

The Alaska Highway Safety Office (AHSO) was involved in establishing targets throughout the entire process. An AHSO data analyst attended every meeting and was instrumental in the analysis of data trends and external factors. The Governor's highway safety representative was a signatory to the memo signed by the Governor establishing the State's targets.

Does the State want to report additional optional targets?

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	75.0	71.0
Number of Serious Injuries	330.0	302.4
Fatality Rate	1.400	1.287
Serious Injury Rate	6.000	5.332
Non-Motorized Fatalities and Serious Injuries	60.0	55.2

Alaska DOT&PF has met all 2021 Safety Performance Targets. Two important factors related to Alaska's attainment of 2021 Safety Performance Targets merit clarification: serious injury data availability and changes in data reporting protocols.

Serious Injury Data. As noted in previous HSIP Annual Reports, while DOT&PF has provided fatality data on time every year, the Department has not been able to provide timely data on serious injuries for a number of years. This was caused by a combination of difficulties in getting crash reports from the Alaska Division of Motor Vehicles (which continues to experience significant and prolonged delays in data availability) and challenges with aspects of in-house data processing once crash reports had been received from the DMV.

Although the Department has limited options for influencing DMV processes, DOT&PF has worked diligently to resolve the internal issues that contributed to this multi-year backlog. In the 2021 HSIP Annual Report, DOT&PF provided certified serious injury data through 2017 as well as uncertified data for 2018 and 2019. In the past six months, DOT&PF has certified three years of crash reports (2018 - 2020) and has completed data entry on crash reports resulting in injury or death for 2021. Note that the serious injury data for 2021 must undergo final QC prior to being certified. Due to the nature of the remaining quality control activities, which includes removal of duplicate reports, any changes in the data seem likely to reduce the number of serious injuries reported.

Data Reporting Protocols. Historically, DOT&PF has assembled serious injury data for HSIP Annual Reports by combining database queries with manual searches of crash records. Between fall 2021 and summer 2022, HQ Traffic and Safety staff worked with our database provider, the University of Alabama, to establish built-in filters tailored to HSIP reporting definitions.

The historical search protocol required professional judgment, which by its nature changes with personnel, and Alaska HSIP felt that the advantages of an automated system outweighed those of a system that relied on manual record review, even if that was only a part of the process. The new protocol means that data can be compared more confidently from year to year, because the search queries were built on the same assumptions.

All responses in this report have been updated so that historic serious injury numbers are calculated based on the same filters as more recent ones. This change has resulted in minor differences, but a comparison of 5 years of serious injury data under the two different protocols shows an over 95% similarity rate.

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	11	11	9	10	9	8	16
Number of Older Driver and Pedestrian Serious Injuries	19	27	29	27	26	14	25

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio

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

The overall benefit / cost ratio of Alaska's HSIP program is 6.5:1 over the last 5 years of completed projects with at least 3 years of post construction crash data available.

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

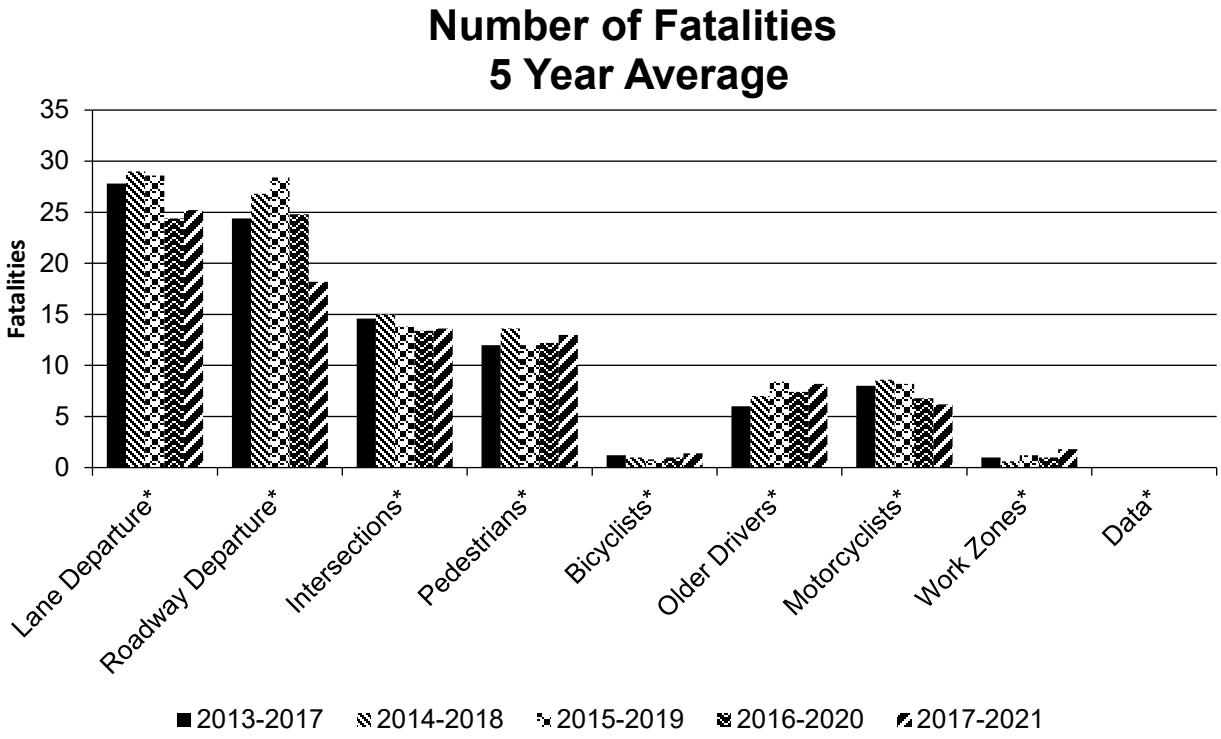
- HSIP Obligations

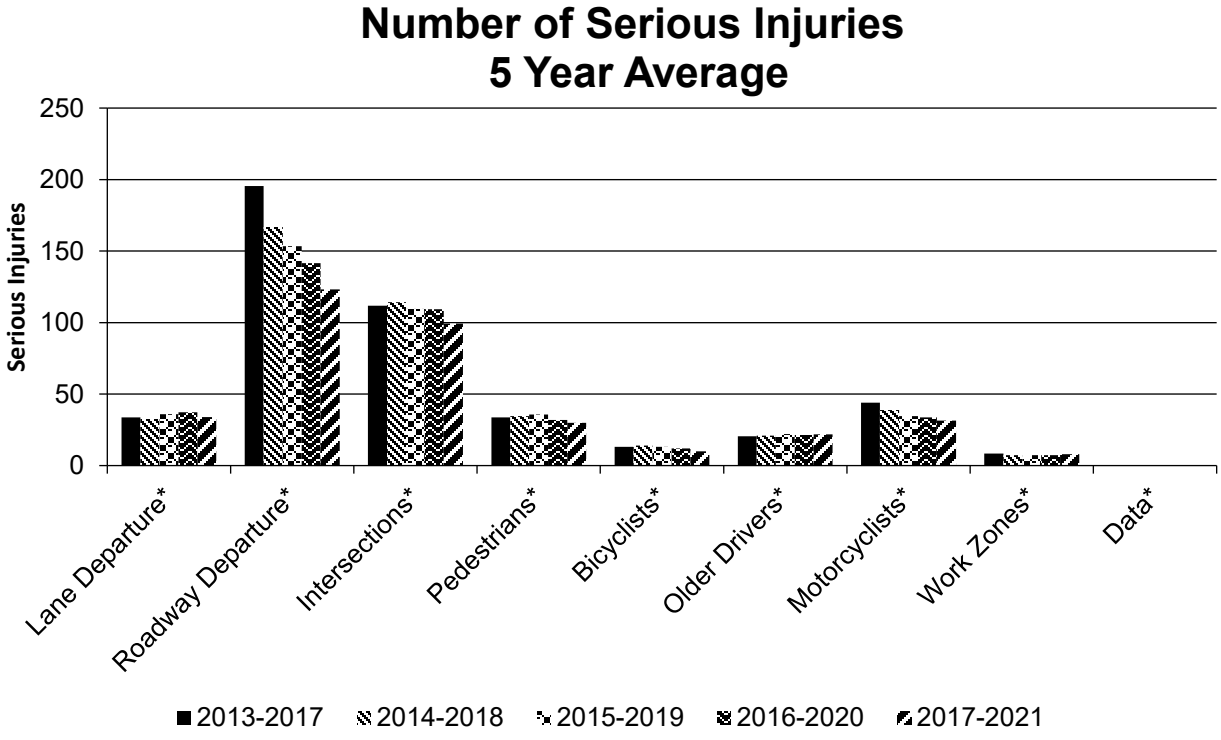
Effectiveness of Groupings or Similar Types of Improvements

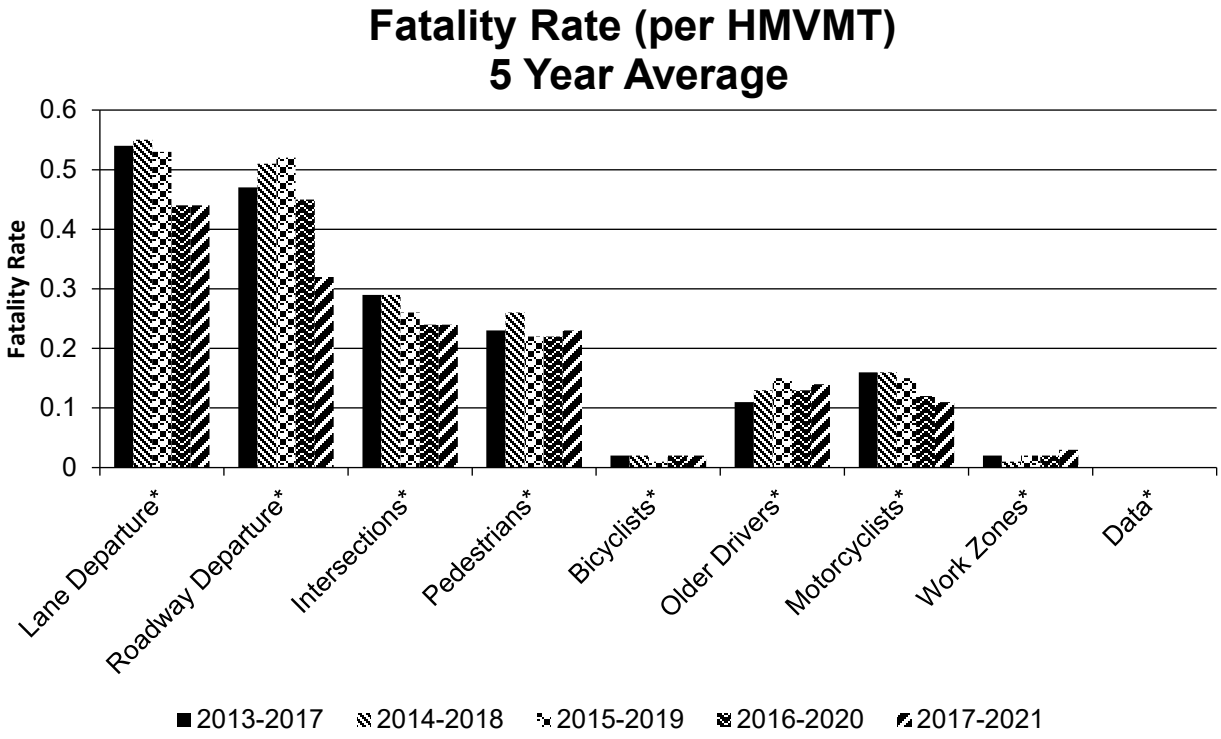
Present and describe trends in SHSP emphasis area performance measures.

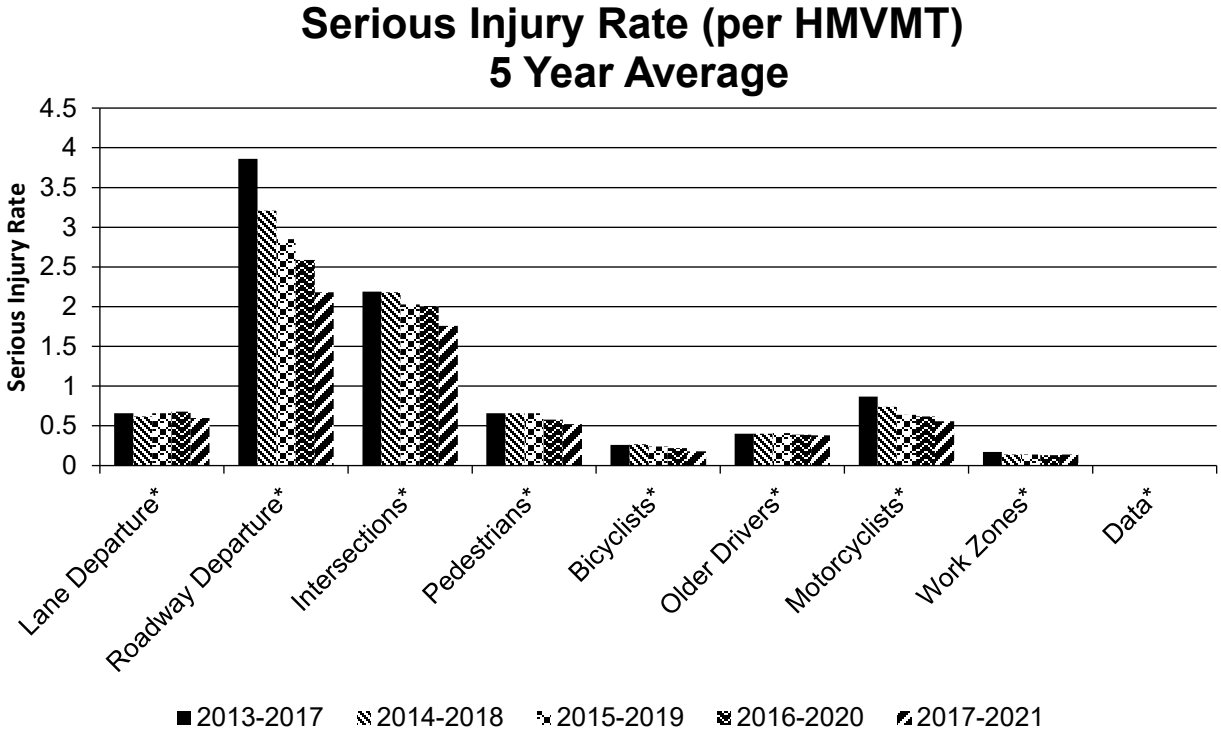
Year 2021

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*		25.2	34	0.44	0.6
Roadway Departure*		18.2	123.2	0.32	2.18
Intersections*		13.6	99.2	0.24	1.76
Pedestrians*		13	29.8	0.23	0.52
Bicyclists*		1.4	10	0.02	0.18
Older Drivers*		8.2	21.8	0.14	0.38
Motorcyclists*		6.2	31.4	0.11	0.56
Work Zones*		1.8	8	0.03	0.14
Data*		0	0	0	0


Number of Fatalities
5 Year Average
Fatalities
35
30
25
20
15
10
5
0
Lane Departure*
Roadway Departure*
Intersections*
Pedestrians*
Bicyclists*
Older Drivers*
Motorcyclists*
Work Zones*
Data*
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021


Number of Serious Injuries
5 Year Average
Serious Injuries
250
200
150
100
50
0
Lane Departure*
Roadway Departure*
Intersections*
Pedestrians*
Bicyclists*
Older Drivers*
Motorcyclists*
Work Zones*
Data*
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021





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

No

While DOT&PF has not established any new CRFs or conducted any formal research into their development, the HSIP program did conduct a proof-of-concept regression analysis of whether Improvement Types other than Pedestrian and Bicycle projects were providing "excess" safety benefits to Vulnerable Road Users. The purpose of the Implicit Safety Benefit Proof-of-Concept Study was to establish whether evidence exists that HSIP Improvement Categories not coded as Pedestrian or Bicycle provide unexpected safety benefits for Vulnerable Road Users (VRUs). Because the proof-of concept identified positive correlations, our intention is to attempt to quantify the strength of any safety effects through a study funded by the Alaska Department of Transportation and Public Facilities (DOT&PF) Research program.

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)
16SR1 JNU Glacier Highway Safety Improvements	Rural Minor Arterial	Roadside	Barrier- metal			1.00		1.00				2.00		10.51:1
16SR2 KTN N. Tongass Hwy. Delineation	Rural Minor Collector	Roadway delineation	Delineators post-mounted or on barrier	15.00	3.00			2.00	1.00	6.00	4.00	23.00	8.00	-4.11:1
06NR03 College/ Margaret/Antoinette Intersection	Urban Local Road or Street	Intersection geometry	Add/modify auxiliary lanes	24.00				2.00		16.00		42.00		1.24:1
08NN08 College Rd Right Turn Pockets	Urban Minor Arterial	Intersection geometry	Add/modify auxiliary lanes	15.00	2.00					6.00		21.00	2.00	2.91:1
13NN04 Northern Region Pedestrian Improvements	varies	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)	7.00	3.00	1.00		2.00		26.00	6.00	36.00	9.00	84.99:1
13NN08 Parks Highway Passing Lanes All 5 Locations MP 197.5-295.5	Rural Principal Arterial (RPA) - Other	Roadway	Roadway widening - add lane(s) along segment	28.00	14.00	1.00		4.00	1.00	15.00	6.00	48.00	21.00	0.29:1
13NR01 Parks highway 215-219 Enhanced Curve Delination Fluorecent Yellow Signs	Rural Principal Arterial (RPA) - Other	Roadway signs and traffic control	Curve-related warning signs and flashers	10.00	3.00	2.00				3.00	1.00	15.00	4.00	17.65:1
13NR02 Steese Hwy MP 18-20 Enhanced Curve Delination	Rural Minor Arterial	Roadway signs and traffic control	Curve-related warning signs and flashers	3.00		1.00					1.00	4.00	1.00	6.58:1
13NR04 Richardson Highway MP 291-295 Enhanced Curve Delination	Rural Principal Arterial (RPA) - Other	Roadway signs and traffic control	Curve-related warning signs and flashers	7.00	5.00					6.00		13.00	5.00	19.59:1
14NN01 Parks Hwy Rest Area 5% Sensitivity Analysis	Rural Principal Arterial (RPA) - Other	Miscellaneous	Miscellaneous - other	33.00	5.00	2.00		7.00	4.00	24.00	10.00	66.00	19.00	3.26:1

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)
14NN02 Parks MP 321 Dynamic Speed Sign - 100% Sensitivity Analysis	Rural Principal Arterial (RPA) - Other	Speed management	Dynamic Speed Feedback Signs	3.00				1.00		1.00		5.00		25.4:1
14NR03 Alaska Hwy Curve delination and Pass/ No-Pass Upgrades	Rural Principal Arterial (RPA) - Other	Roadway signs and traffic control	Curve-related warning signs and flashers	20.00	2.00	3.00		2.00	3.00	11.00	3.00	36.00	8.00	6.06:1
14NR04 Richardson highway edgline Rumble Strips	Rural Minor Arterial	Roadway	Rumble strips – edge or shoulder	6.00	16.00	1.00		6.00		16.00	3.00	29.00	19.00	23.07:1
14NR05 CHSR Safety Improvements	varies	Roadway signs and traffic control	Curve-related warning signs and flashers	23.00	6.00	2.00	1.00	3.00		14.00	1.00	42.00	8.00	28.01:1
14NR06 Fairbanks Area Signing and Striping	varies	Roadway signs and traffic control	Curve-related warning signs and flashers	52.00	9.00	4.00	2.00	5.00	5.00	43.00	11.00	104.00	27.00	-7.31:1
14NR07 Parks Hwy Signing and Striping	Rural Principal Arterial (RPA) - Other	Roadway signs and traffic control	Curve-related warning signs and flashers	72.00	15.00	2.00	1.00	11.00	3.00	31.00	9.00	116.00	28.00	65.52:1
14NR09 Copper River Highway Signing and Striping	Rural Major Collector	Roadway signs and traffic control	Curve-related warning signs and flashers	1.00	3.00					5.00	1.00	6.00	4.00	19.48:1
01CR10 36th Avenue: Arctic Boulevard to C Street 5 Lane Conversion	Urban Principal Arterial (UPA) - Other	Roadway delineation	Roadway delineation - other	12.00						5.00		17.00		0.93:1
08CR04 16th Avenue @ A Street Channelization Improvements	Urban Principal Arterial (UPA) - Other	Intersection geometry	Splitter island – install on one or more approaches	11.00	2.00			3.00		10.00	4.00	24.00	6.00	10.84:1
12CR03 DeArmoun Road & Elmore Road Intersection Improvements	Urban Minor Arterial	Intersection traffic control	Intersection flashers –sign-mounted or overhead	7.00						1.00	2.00	8.00	2.00	-1.35:1
12CR05 Turpin St @ Boundary/Frontage Access rd. Intersection Improvements	Urban Major Collector	Intersection traffic control	Intersection flashers –sign-mounted or overhead	5.00	5.00					2.00	7.00	7.00	12.00	-22.7:1

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)
13CR02 Muldoon Road Channelization Improvements, 11th Court to Boundary Ave	Urban Principal Arterial (UPA) - Other	Access management	Median crossover - relocate/close crossover	38.00				4.00		25.00		67.00		7.27:1
13CR03 Parks Highway and Petersville Road intersection Improvements	Rural Principal Arterial (RPA) - Other	Intersection traffic control	Intersection flashers –sign-mounted or overhead					2.00		1.00		3.00		11.96:1
13CR04 Sterling Highway and North Fork road (Anchor Point) Intersection Improvements	Rural Principal Arterial (RPA) - Other	Intersection traffic control	Intersection flashers –sign-mounted or overhead	4.00	2.00			2.00			1.00	6.00	3.00	2.55:1
13CR05 Pioneer Avenue and Main Street (Homer) Intersection Improvements	Urban Minor Arterial	Intersection traffic control	Modify control – two-way stop to all-way stop	2.00						1.00	1.00	3.00	1.00	-0.21:1
13CR06 O'Malley Rd and Elmore Rd Intersection Improvements	Urban Minor Arterial	Intersection traffic control	Intersection flashers –sign-mounted or overhead	4.00						2.00	1.00	6.00	1.00	-6.82:1
13CR07 Bogard Road @ Seldon Road Intersection Improvements	Urban Minor Arterial	Intersection traffic control	Intersection flashers –sign-mounted or overhead	2.00	1.00				1.00	2.00		4.00	2.00	-24.96:1
13CR08 Glenn Highway Continuous Lighting, MP 27-31	Rural Principal Arterial (RPA) - Other	Lighting	Continuous roadway lighting	43.00	17.00	1.00		1.00		16.00	6.00	61.00	23.00	0.92:1
14CR03 Seward Passing Lanes 99-100	Rural Principal Arterial (RPA) - Other	Roadway	Roadway widening - add lane(s) along segment	5.00	4.00			1.00		6.00	1.00	12.00	5.00	1.14:1
14CR05 CR Flashing Yellow Arrow Project	varies	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	81.00	31.00			3.00	2.00	37.00	22.00	121.00	55.00	1.6:1

Compliance Assessment

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

01/21/2019

What are the years being covered by the current SHSP?

From: 2018 To: 2022

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

2023

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	100	100	100
	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	75		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]										
	Functional Class (19) [19]	100	100					100	100	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
	Median Type (54) [55]	60	60								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	80		
	Average Annual Daily Traffic (79) [81]	100	100					100	100		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100					100	100	100	100
INTERSECTION	Unique Junction Identifier (120) [110]										
	Location Identifier for Road 1 Crossing Point (122) [112]										
	Location Identifier for Road 2 Crossing Point (123) [113]										
	Intersection/Junction Geometry (126) [116]			30	30						
	Intersection/Junction Traffic Control (131) [131]										
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	100						
	Unique Approach Identifier (139) [129]										
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]										
	Location Identifier for Roadway at					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
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]										
	Roadway Type at End Ramp Terminal (199) [189]										
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					100	100				
	Year of Ramp AADT (192) [182]					100	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		**92.22**	**92.22**	**28.75**	**28.75**	**63.64**	**63.64**	**100.00**	**95.00**	**100.00**	**100.00**

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]
The AKDOT team did not add or modify the percent complete values on any of the FDEs. The vast majority of the incomplete FDEs are associated with intersections or interchanges/ramps. Esri, our GIS software provider, has changed the way that they model intersections in their LRS-based GIS product, Roads and Highways (R&H). Esri's change will require us to redesign how we manage intersections and interchanges/ramps.

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.

1. Work with the Department's Safety staff to prioritize the modeling of the FDEs 2. Contract with Esri to model the FDEs to: o Develop a practical and useful route segment definition o Identify and address overlapping data needs, such as MIRE and the Highway Performance Monitoring System (HPMS) o Align the intersection and interchange/ramp features with Esri's new R&H intersections o Support overlapping data needs

Optional Attachments

Program Structure:

L_8-31-22 HSIP Ann Report Cover.pdf
hsip_handbook 2022.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.