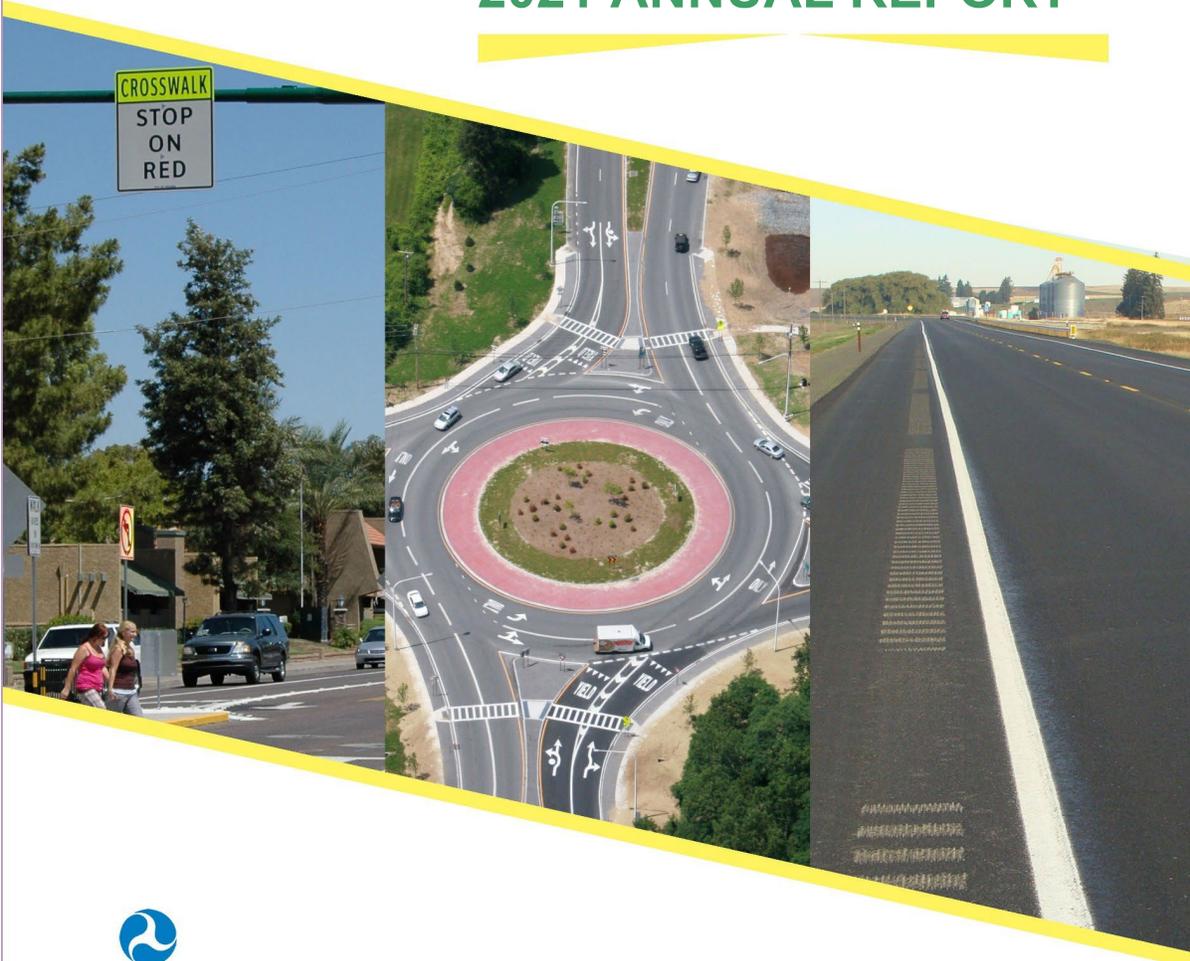




ALASKA

HIGHWAY SAFETY IMPROVEMENT PROGRAM 2021 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

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Disclaimer

Protection of Data from Discovery Admission into Evidence

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

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.23 U.S.C. 409 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

Executive Summary

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.” We currently measure our post-construction program benefit-cost ratio at approximately 6.76:1, 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 on-going 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.

Important Note on Performance Measures calculated by Online Reporting Tool: Alaska DOT&PF has been unable to provide timely data about serious injuries on a regular basis, and as a result, has been in an HSIP Implementation Plan since 2020. When we submitted in June of this year, the plan included completion of data validation for 2018, followed by 2019 data entry and validation, then the same for 2020.

DOT&PF has changed the order of this work to take advantage of the fact that crashes with the potential for injuries or fatalities are reported on a different form than self-reported crashes, which are limited to crashes with minor property damage. As a result, this Annual Report includes data for serious injuries through 2019.

Overall, in the past 18 months, DOT&PF has completed data entry on two years of crash reports (2017 - 2018) and is within 1% of completing data entry on crash reports resulting in injury or death for 2019. We estimate that data entry for the 2019 and 2020 crashes with the potential for injury and fatality will be completed in fall 2021. With FHWA permission, DOT&PF is prepared to provide updated serious injury data for 2019 and 2020 on or around January 1, 2022.

Alaska has completed all quality control (QC) activities for 2017 data; however, the serious injury data for 2018 and 2019 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.

We anticipate that data entry on all crashes will be complete in the summer of 2022.

DOT&PF intends to become current (data within 6 months) at the end of 2022.

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-11) of the Alaska HSIP handbook, a reprinting of 23 U.S.C. Section 148 (a)(4)(B).

Alaska's three regional traffic & 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).

State Traffic & 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: Funding plan developed in coordination with the Office of Program Development.

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

Governors Highway Safety Office: Split 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 & 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:4/2/2021

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

- All crashes

Exposure

- Volume

Roadway

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?

17

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Clear Zone Improvements
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Other-Guardrail Inventory
- Other-Roundabout installation
- 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

2021 Alaska Highway Safety Improvement Program

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 and may not result in 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)	\$13,531,839	\$12,835,256	94.85%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$0	\$0	0%
Penalty Funds (23 U.S.C. 154)	\$8,940,500	\$11,609,636	129.85%
Penalty Funds (23 U.S.C. 164)	\$8,940,500	\$11,609,636	129.85%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$1,279,980	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$0	\$0	0%
State and Local Funds	\$1,645,758	\$1,384,124	84.1%
Totals	\$34,338,577	\$37,438,652	109.03%

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

\$2,020,790

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

\$1,774,555

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

\$1,435,000

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

\$1,572,500

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?

\$47,944,311

DOT&PF added \$48.22 million in funds from other programs to the HSIP program in FFY 2019 in anticipation of unusually large highway safety funding projects. However, over the ensuing two years, a series of project delays, bundling efficiencies, and additional factors has resulted in smaller immediate needs than expected. As a result, HSIP funding balances exceed current program requirements, while other programs have grown such that the state must transfer funding to meet other surface transportation goals.

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

Alaska DOT&PF believe the flexibility lost under the FAST Act by removing eligibility for non-infrastructure projects is an impediment not only to obligation of HSIP funds but to the purpose of the HSIP program listed in 23 USC 148(b)(2) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

It would be impossible to overstate the effects of the COVID-19 pandemic on project progress. With the nearly universal shutdown of public life and functions just as the 2020 construction season was gearing up, numerous projects struggled to get off the ground and, once started, to maintain viable staffing under the dynamic conditions they faced. DOT&PF Program Managers and Construction and Design staff spent considerably more time working with contractors and adjusting their projects to meet the challenges presented.

This resulted in a lag in project progress and, ultimately, several projects were either unable to obligate or unable to obligate the full amount called for in the FFY21 Funding Plan.

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
College Road Median Extension	Access management	Median crossover - relocate/close crossover	0.2	Miles	\$20938.5	\$23265	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	15,036	35	State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
Richardson Hwy MP 351 Interchange	Interchange design	Convert at-grade intersection to interchange	1	Numbers	\$738000.24	\$738000.24	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Other	16,858	55	State Highway Agency	Spot	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	\$270000	\$300000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		Multiple/Varies	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Fairbanks Area Signal Upgrades (combines 10NR01, 13NN05, 14NR01, 14NR02)	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	57	Numbers	\$993333.9	\$994705	Penalty Funds (23 U.S.C. 164)	Urban	Multiple/Varies	0		State Highway Agency	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Steese Expressway/Chena Hot Springs Road Ramp Termini Roundabouts	Intersection traffic control	Modify control – Modern Roundabout	2	Numbers	\$713241	\$713241	Penalty Funds (23 U.S.C. 154)	Urban	Principal Arterial-Other	8,155		State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
NR Guardrail Inventory and Upgrades	Roadside	Barrier - other	970	Miles	\$93107	\$93107	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Other	0		State Highway Agency	Systemic	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
Fairbanks Area Concrete Barrier Upgrade (HSIP)	Roadside	Barrier – concrete	35	Miles	\$150075	\$166750	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	Implement infrastructure projects to address run-off-road crashes

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Old Steese @ Fox Shoulder Widening	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	2	Miles	\$307879.43	\$307879.43	Penalty Funds (23 U.S.C. 154)	Rural	Major Collector	1,446		State Highway Agency	Spot	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
NR Systemic Signal Upgrades	Intersection traffic control	Modify traffic signal – add additional signal heads	8	Intersections	\$360000	\$400000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		Multiple / Varies	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Seward Highway Passing Lanes, MP 37-52	Roadway	Install / remove / modify passing zone	3.7	Miles	\$2115434.106	\$2350482.34	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,429	60	State Highway Agency	Spot	Lane Departure	Implement infrastructure projects to address head-on crashes
Palmer-Fishhook Rd and Trunk Rd Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Numbers	\$477000	\$530000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	55	State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
HSIP Minnesota Drive-O'Malley Bridge Trainsman Handrail and Fence Upgrades (nominated under O'Malley Bridge Trainsman Handrail and Fence Upgrades)	Railroad grade crossings	Railroad grade crossings - other	1	Locations	\$14130	\$15700	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	25,823		State Highway Agency	Spot	Roadways	Implement HSIP qualified projects
5th Ave: Concrete St to Karluck St Pedestrian Improvements	Pedestrians and bicyclists	Medians and pedestrian refuge areas	1	Locations	\$495000	\$550000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	44,270		State Highway Agency	Spot	Pedestrians	Reduce the number of fatal and serious injury pedestrian and bicycle crashes
Wasilla-Fishhook Rd and Spruce Ave/Peck St Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Locations	\$360000	\$400000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0		Multiple / Varies	Spot	Intersections	Reduce the number of fatal and serious injury

2021 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
															intersection crashes
Church Rd and Spruce Ave Intersection Flashing Beacon	Intersection traffic control	Intersection flashers – sign-mounted or overhead	1	Locations	\$90000	\$100000	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		Multiple / Varies	Spot	Intersections	Reduce the number of fatal and serious injury intersection crashes
CR Guardrail Inventory & Upgrade	Roadside	Barrier - other	654	Miles	\$1440000	\$1510000	HSIP (23 U.S.C. 148)	Multiple/Variations	Multiple/Varies	0	0	State Highway Agency	Systemic	Roadway Departure	Implement infrastructure projects to address run-off-road crashes
Birchwood Spur and Fairview RR Crossing Improvements	Railroad grade crossings	Railroad grade crossings - other	16	Locations	\$1188000	\$1320000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0		Multiple / Varies	Spot	Intersections	Reduce the number of fatal and serious injury intersection crashes
Systemic CR One-Way Signing Compliance	Roadway signs and traffic control	Roadway signs and traffic control - other	163	Numbers	\$52000	\$52000	Penalty Funds (23 U.S.C. 154)	Multiple/Variations	Multiple/Varies	0		State Highway Agency	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
Anchorage Pedestrian Improvements	Lighting	Lighting - other	1.16	Miles	\$1611280.73	\$1790311.93	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0	0	State Highway Agency	Spot	Pedestrians	Implement appropriate engineering strategies to address high-crash locations involving older drivers and pedestrians
Sterling Highway & Main Street (Homer) Intersection Improvements	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$47137.5	\$52375	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	11,405		State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
George Parks Highway Systemic Passing Lanes Project	Roadway	Roadway widening - add lane(s) along segment	80.2	Miles	\$1447635.11	\$1447635.11	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Other	0	65	State Highway Agency	Systemic	Lane Departure	Implement infrastructure projects to address passing crashes
Tudor Rd at C St and Dimond Blvd at C St - Right Turn Channelization	Intersection geometry	Splitter island – install on one or more approaches	2	Intersections	\$11870000	\$11880000	Penalty Funds (23 U.S.C. 154)	Urban	Principal Arterial-Other	0		State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
Minnesota Dr Weaving Lane	Interchange design	Acceleration / deceleration / merge lane	1	Miles	\$52375	\$52375	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	48,285	60	State Highway Agency	Spot	Roadways	See "Supporting Text" for relevant strategy
Bogard Rd at Engstrom Rd / Green Forest Dr Intersection Improvements	Intersection traffic control	Modify control – Modern Roundabout	2	Intersections	\$360000	\$400000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
HSIP: Arctic Blvd RR Signal Relocation	Railroad grade crossings	Active grade crossing equipment installation/upgrade	1	Locations	\$97200	\$108000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		Multiple / Varies	Spot	Intersections	Implement infrastructure projects to address intersection crashes
A Street Midtown Couplet - Overhead Signal Indication Upgrades	Intersection traffic control	Modify traffic signal – add additional signal heads	2	Intersections	\$2447167.5	\$2643075	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		State Highway Agency	Spot	Intersections	Implement infrastructure projects to address intersection crashes
Akakeek Street and Ridgecrest Drive (in Bethel) Intersection Improvements	Intersection geometry	Intersection geometry - other	1	Intersections	\$3500	\$3500	Penalty Funds (23 U.S.C. 154)	Rural	Major Collector	5,169	30	City or Municipal Highway Agency	Spot	Roadways	Implement infrastructure projects to address intersection crashes
KTN Stedman and Deemont Street Intersection Safety Improvements - HSIP	Intersection geometry	Intersection geometry - other	1	Numbers	\$213799.5	\$233197	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Spot	Intersections	Implement infrastructure projects to address

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															intersection crashes
SR Regionwide Traffic Signal System Upgrades	Intersection traffic control	Modify traffic signal – modernization/replacement	22	Numbers	\$109954.49	\$122171.66	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Intersections	Implement infrastructure projects to address intersection crashes
WRG - Zimovia Highway Rock Fall Mitigation HSIP	Roadside	Roadside - other	2	Miles	\$164250	\$182500	HSIP (23 U.S.C. 148)	Rural	Minor Collector	427	45	State Highway Agency	Spot	Roadways	Implement HSIP qualified projects
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.
JNU - Egan-Yandukin Intersection Safety Improvements	Speed management	Speed management - other	1	Intersections	\$216000	\$240000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Spot	Intersections	Implement HSIP qualified projects
SIT Halibut Point Road and Peterson Avenue Intersection Safety Improvements	Lighting	Intersection lighting	1	Intersections	\$80658	\$89620	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		Multiple/Varies	Spot	Intersections	Implement infrastructure projects to address intersection crashes
HSIP/SMS Central Region FFY 2020-2021	Miscellaneous	Miscellaneous - other	1	Numbers	\$175500	\$195000	HSIP (23 U.S.C. 148)	N/A	N/A	0		N/A		Roadways	N/A
NOR REG SMS/HSIP FFY2021-2023	Miscellaneous	Miscellaneous - other	1	Numbers	\$1044000	\$1080000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0		N/A		Roadways	N/A
SR FFY 20-21 HSIP/SMS	Miscellaneous	Miscellaneous - other	1	Numbers	\$50000	\$50000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0		N/A		Roadways	N/A
SR FFY 22-23 HSIP/SMS	Miscellaneous	Miscellaneous - other	1	Numbers	\$247500	\$247500	HSIP (23 U.S.C. 148)	N/A	N/A	0		N/A		Roadways	N/A

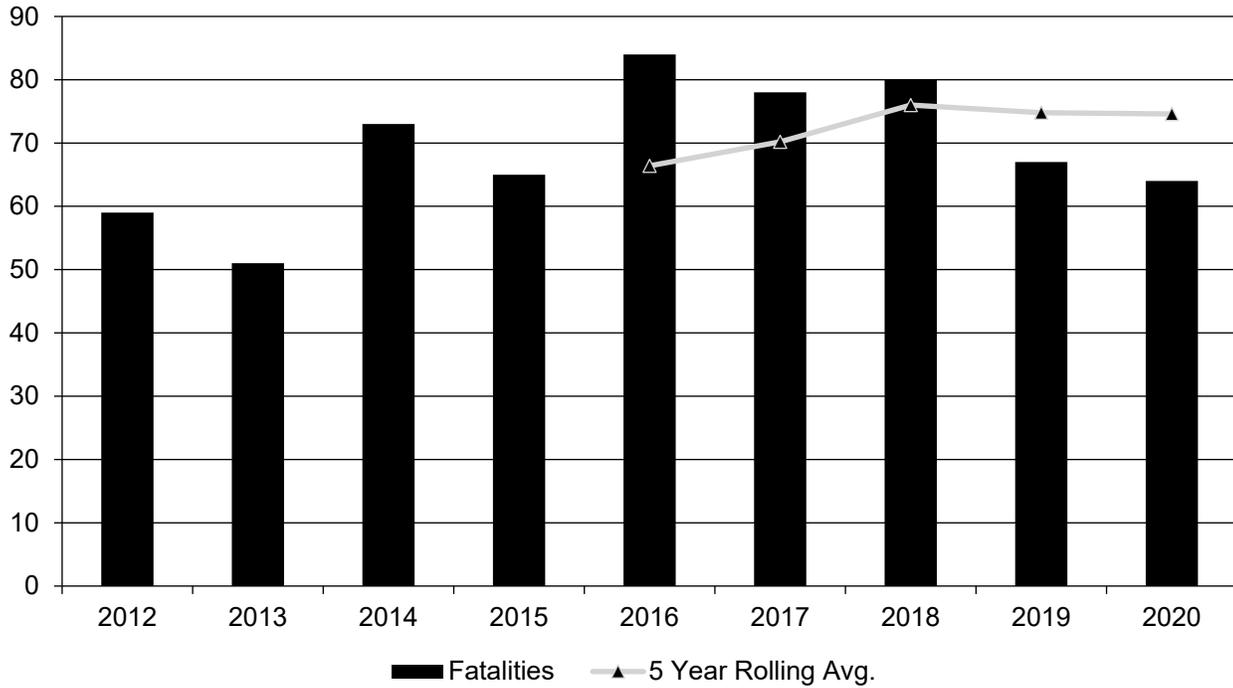
Safety Performance

General Highway Safety Trends

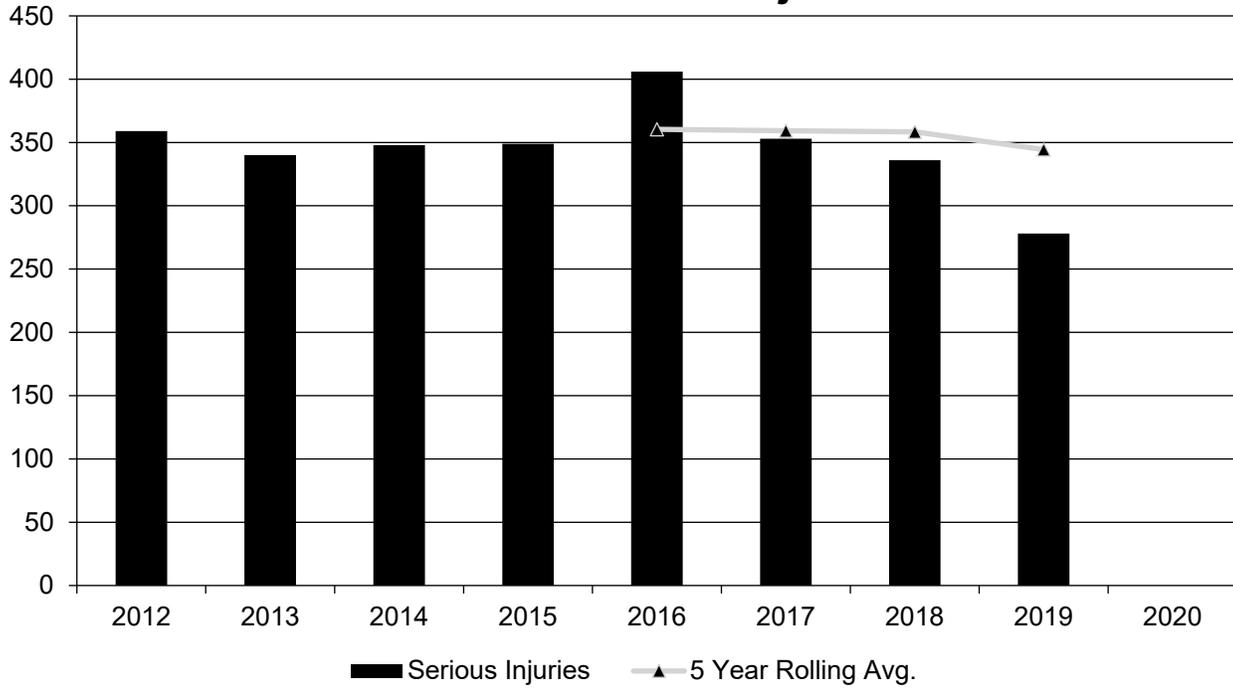
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatalities	59	51	73	65	84	78	80	67	64
Serious Injuries	359	340	348	349	406	353	336	278	0
Fatality rate (per HMVMT)	1.235	1.052	1.503	1.288	1.602	1.414	1.458	1.138	1.206
Serious injury rate (per HMVMT)	7.512	7.013	7.166	6.918	7.742	6.397	6.124	4.721	0.000
Number non-motorized fatalities	10	7	16	12	13	17	15	8	14
Number of non-motorized serious injuries	11	46	38	57	60	38	54	39	0

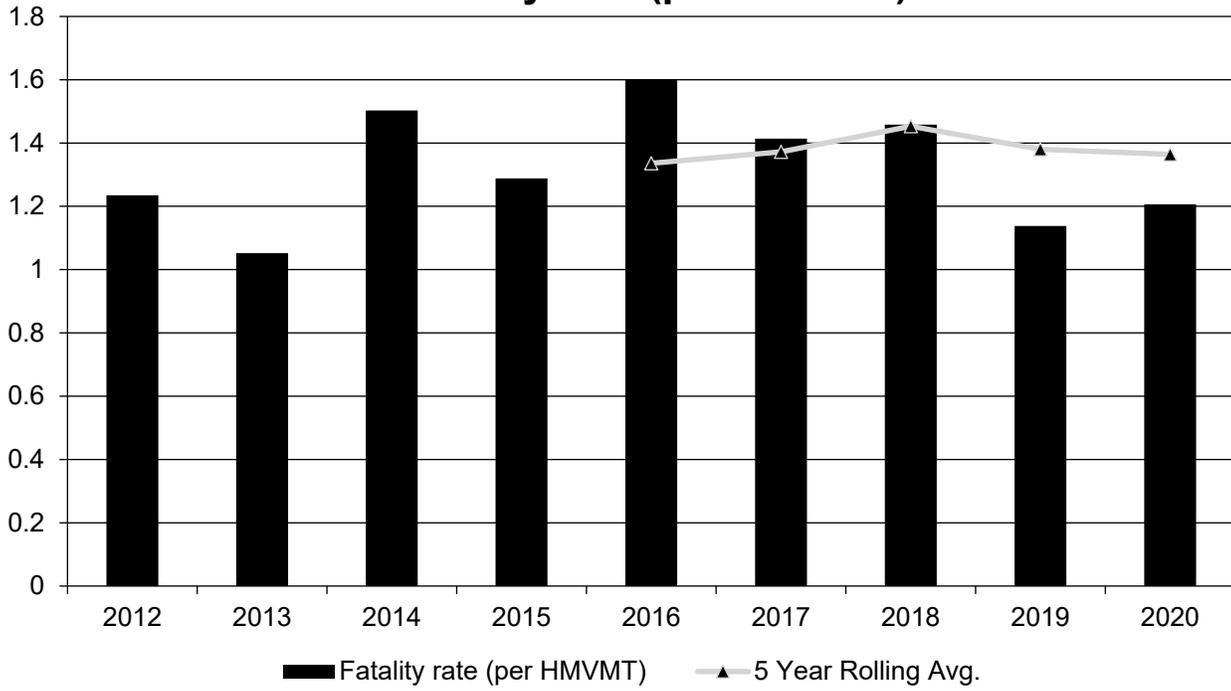
Annual Fatalities



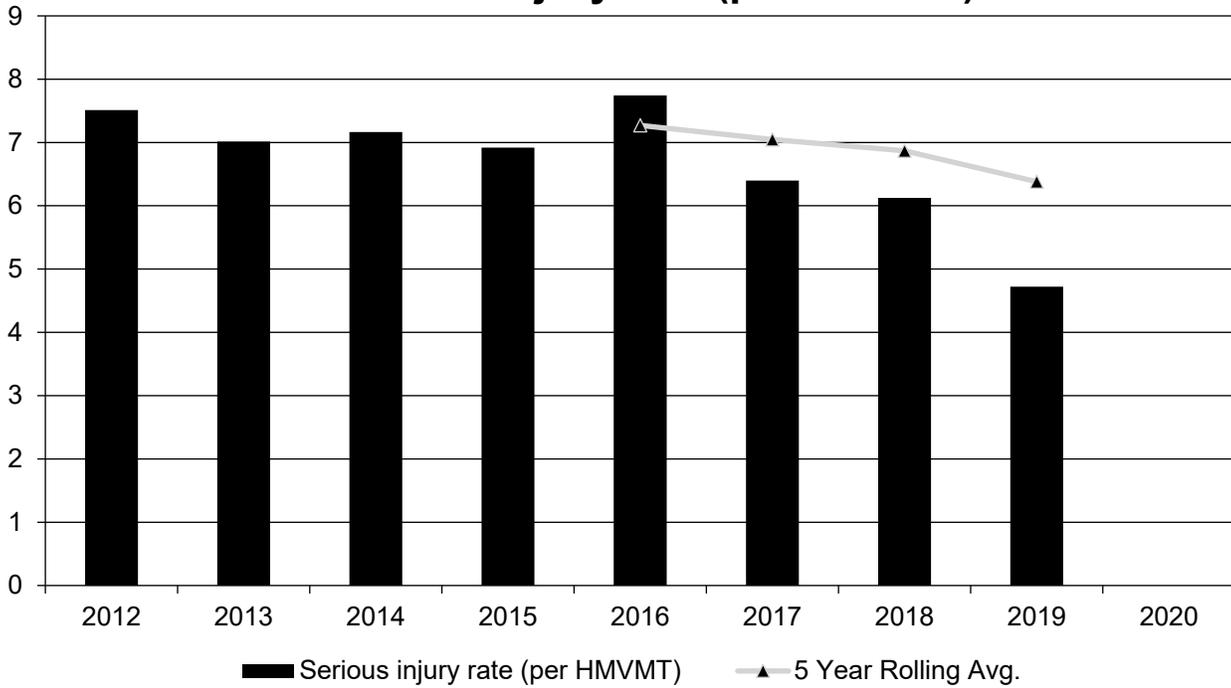
Annual Serious Injuries



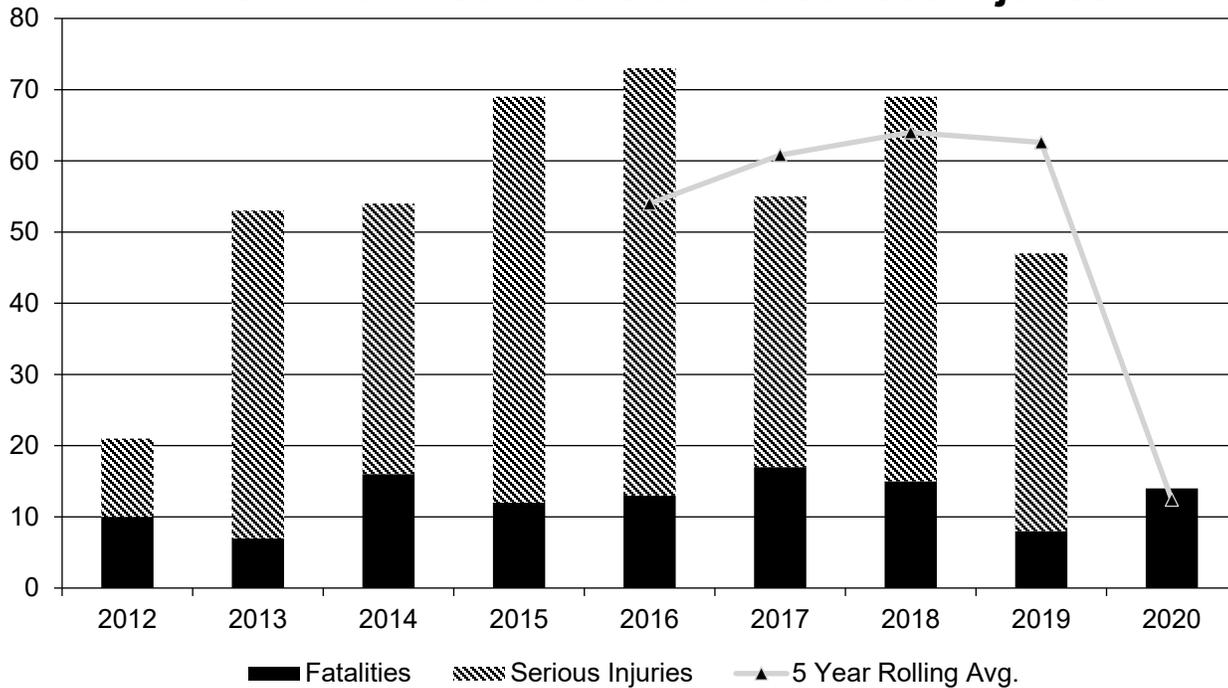
Fatality rate (per HMVMT)



Serious injury rate (per HMVMT)



Non Motorized Fatalities and Serious Injuries



Important Note on Performance Measures calculated by Online Reporting Tool: DOT&PF has made significant progress in the previous year to improve and stabilize our data reporting and analysis infrastructure and eliminate the serious injury data entry backlog. In the past 18 months, DOT&PF has completed data entry on two years of crash report data entry (2017 - 2018) and is within 1% of completing data entry on crash reports resulting in injury or death for 2019. We estimate that data entry for the 2019 crashes resulting in injury and fatality will be completed in fall 2021.

Alaska has completed all quality control (QC) activities for 2017 data; however, the serious injury data for 2018 and 2019 must undergo final QC prior to being certified. Due to the nature of the quality control that has not been completed, which includes removal of duplicate reports, any changes in the data would be likely to reduce the number of serious injuries reported.

We anticipate that 2020 data entry on crashes resulting in injury or death will be complete by the spring of 2022. With FHWA permission, DOT&PF is prepared to provide updated serious injury data for 2019 and 2020 on or around January 1, 2022. DOT&PF intends to become current (within 6 months) at the end of 2022.

Describe fatality data source.

FARS

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

Year 2020

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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	16.6		2	
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	5		1.67	
Rural Minor Arterial	4		3.26	
Rural Minor Collector	5.2		2.93	
Rural Major Collector	6.4		2.19	
Rural Local Road or Street	5.6		0.96	
Urban Principal Arterial (UPA) - Interstate	8		1.06	
Urban Principal Arterial (UPA) - Other Freeways and Expressways				
Urban Principal Arterial (UPA) - Other	12.8		1.41	
Urban Minor Arterial	6.8		1.31	
Urban Minor Collector	1.2		1.03	
Urban Major Collector	1.4		0.59	
Urban Local Road or Street	1.2		0.26	
Other	0.2		0	
Missing Function Class	0.2		0	

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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	61.4	186.4	0	0
County Highway Agency		38.8	0	0
Town or Township Highway Agency	0.4	0	0	0
City or Municipal Highway Agency	4.6	12.4	0	0
State Park, Forest, or Reservation Agency	0	0.2	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	0
Private (Other than Railroad)	0	0	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	0	0
Other/Unknown	0.2	36.4	0	0
BOROUGH	1.6	0	0	0
FEDERAL	0.2	0	0	0

Important Note on Performance Measures calculated by Online Reporting Tool: DOT&PF has made significant progress in the previous year to improve and stabilize our data reporting and analysis infrastructure and eliminate the serious injury data entry backlog. In the past 18 months, DOT&PF has completed data entry on two years of crash report data entry (2017 - 2018) and is within 1% of completing data entry on crash reports resulting in injury or death for 2019. We estimate that data entry for the 2019 crashes resulting in injury and fatality will be completed in fall 2021.

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Alaska has completed all quality control (QC) activities for 2017 data; however, the serious injury data for 2018 and 2019 must undergo final QC prior to being certified. Due to the nature of the quality control that has not been completed, which includes removal of duplicate reports, any changes in the data would be likely to reduce the number of serious injuries reported.

We anticipate that 2020 data entry on crashes resulting in injury or death will be complete by the spring of 2022. With FHWA permission, DOT&PF is prepared to provide updated serious injury data for 2019 and 2020 on or around January 1, 2022. DOT&PF intends to become current (within 6 months) at the end of 2022.

Mileage data by roadway ownership has not been available long enough to calculate a 5-year average. Data is therefore provided for the quantity of fatalities and serious injuries, but not the rates.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2022 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 2022 target for fatalities (70) is slightly higher than the SHSP 2022 goal (67), but we have been decreasing our target values the last three 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 2022 Serious Injury target (is below the SHSP 2022 goal (331).

Fatality Rate:1.300

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

2021 Alaska Highway Safety Improvement Program

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.

Our 2022 target for fatalities (70) is slightly higher than the SHSP 2022 goal (67), but we have been decreasing our target values the last three 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.

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.

Alaska's 2022 Serious Injury target (is below the SHSP 2022 goal (331).

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

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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 2020 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	80.0	74.6
Number of Serious Injuries	400.0	
Fatality Rate	1.500	1.364
Serious Injury Rate	7.500	
Non-Motorized Fatalities and Serious Injuries	70.0	13.4

Important Note on Performance Measures calculated by Online Reporting Tool: The Non-Motorized Fatalities and Serious Injuries "Actuals" number provided above is incorrect because Alaska DOT&PF is unable to provide data about serious injuries for 2020.

As a result of this ongoing lag in serious injury data, DOT&PF has been in an HSIP Implementation Plan since 2020. When we submitted in June of this year, the plan included completion of data validation for 2018, followed by 2019 data entry and validation, then the same for 2020. DOT&PF has changed the order of this work to take advantage of the fact that crashes with the potential for injuries or fatalities are reported on a different form than self-reported crashes, which are limited to crashes with minor property damage. As a result, this Annual Report includes data for serious injuries through 2019.

Overall, in the past 18 months, DOT&PF has completed data entry on two years of crash reports (2017 - 2018) and is within 1% of completing data entry on crash reports resulting in injury or death for 2019. We estimate that data entry for the 2019 and 2020 crashes with the potential for injury and fatality will be completed in fall 2021. With FHWA permission, DOT&PF is prepared to provide updated serious injury data for 2019 and 2020 on or around January 1, 2022.

Alaska has completed all quality control (QC) activities for 2017 data; however, the serious injury data for 2018 and 2019 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.

We anticipate that data entry on all crashes will be complete in the summer of 2022. DOT&PF intends to become current (data within 6 months) at the end of 2022.

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	2014	2015	2016	2017	2018	2019	2020
Number of Older Driver and Pedestrian Fatalities	3	11	11	9	10	9	8
Number of Older Driver and Pedestrian Serious Injuries	18	22	26	29	27	23	0

Important Note on Performance Measures calculated by Online Reporting Tool: The Number of Older Driver and Pedestrian Serious Injuries listed above for 2020 is incorrect because Alaska DOT&PF has been unable to provide data about serious injuries, and ORT does not permit entry of an N/A.

As a result of this ongoing issue, DOT&PF has been in an HSIP Implementation Plan since 2020. When we submitted in June of this year, the plan included completion of data validation for 2018, followed by 2019 data entry and validation, then the same for 2020. DOT&PF has changed the order of this work to take advantage of the fact that crashes with the potential for injuries or fatalities are reported on a different form than self-reported crashes, which are limited to crashes with minor property damage. As a result, this Annual Report includes data for serious injuries through 2019.

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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 6.76:1 over the last 5 years of completed projects with at least 3 years of post construction crash data available. The B/C ratio includes five projects which may be considered outliers due to their high B/C ratios and excluding them would result in a 5 yr program B/C of 2.81:1.

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.

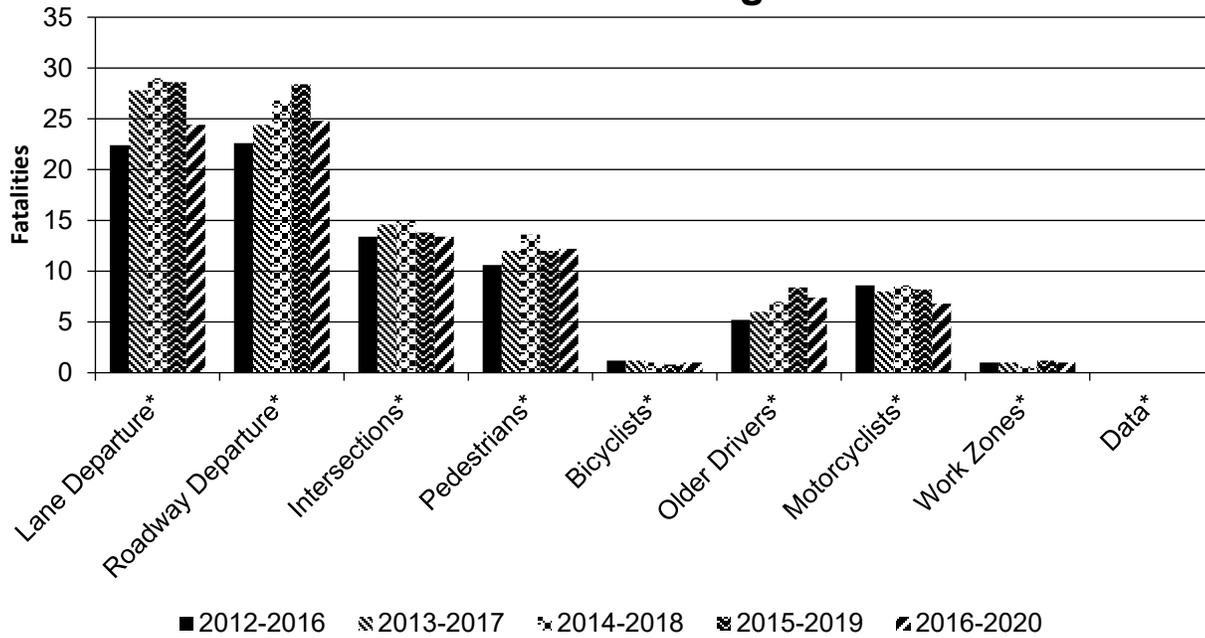
Year 2020

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Lane Departure*	Defined as vehicles crashing after leaving their lane but not leaving the roadway.	24.4		0.45				
Roadway Departure*	Defined as vehicles crashing after leaving the roadway.	24.8		0.45				
Intersections*	Intersections	13.4		0.25				
Pedestrians*	Vehicle/pedestrian	12.2		0.23				
Bicyclists*	Vehicle/bicycle	1		0.02				
Older Drivers*	All	7.4		0.13				

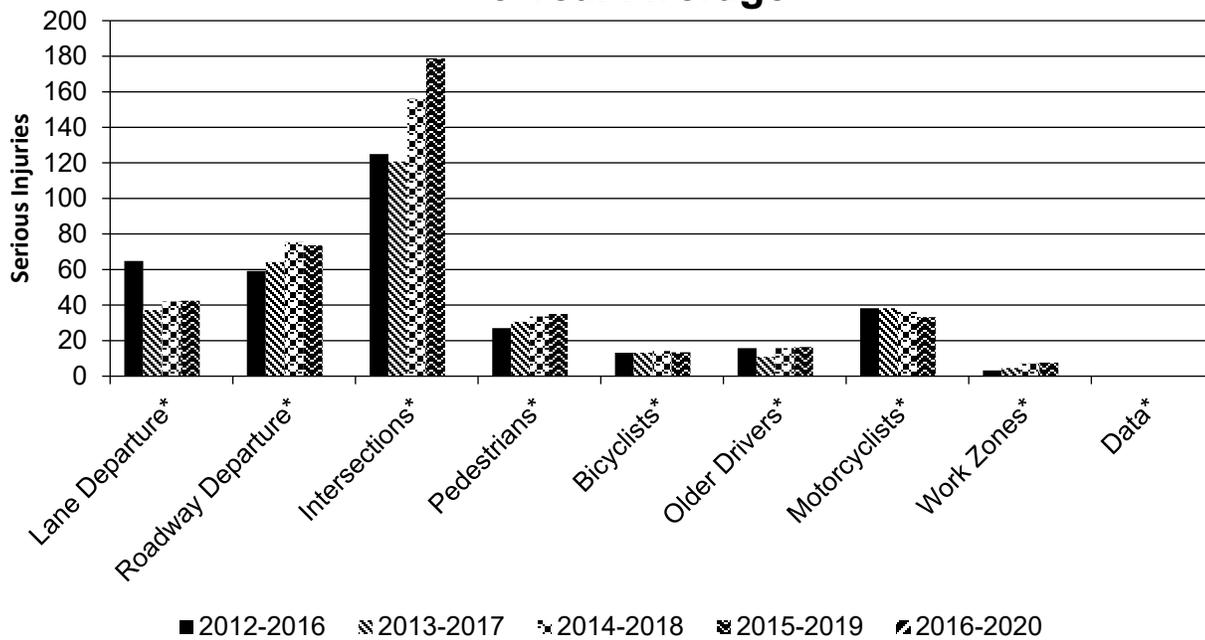
2021 Alaska Highway Safety Improvement Program

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Motorcyclists*	All	6.8		0.12				
Work Zones*	All	1		0.02				
Data*	All	0	0	0	0	0	0	0

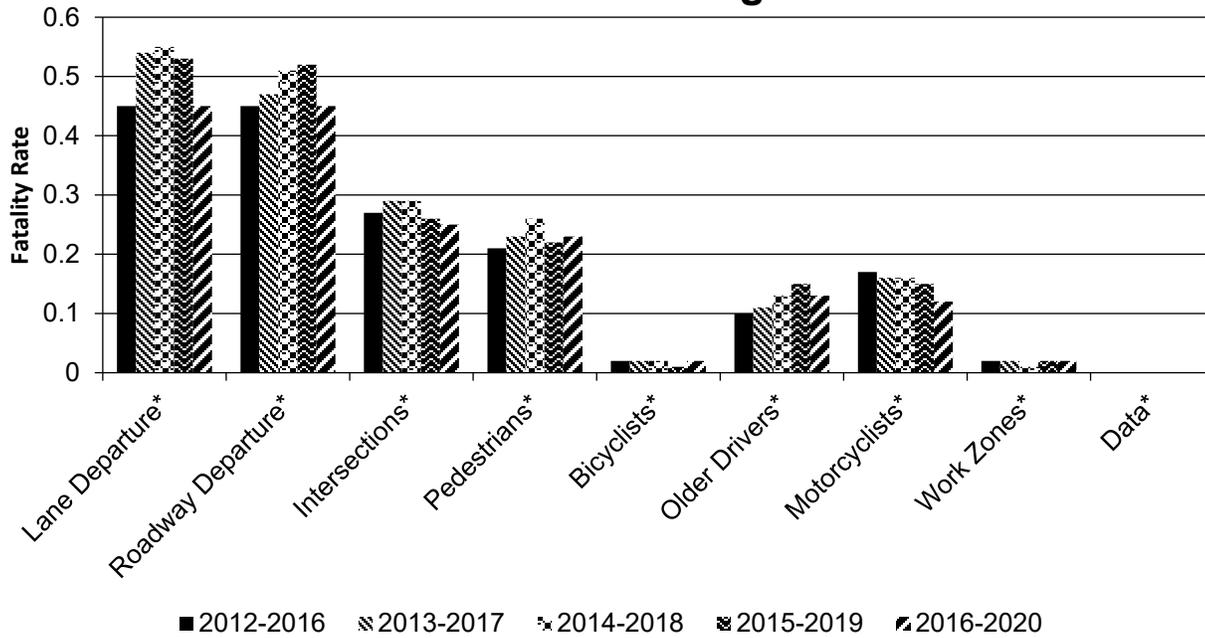
Number of Fatalities 5 Year Average



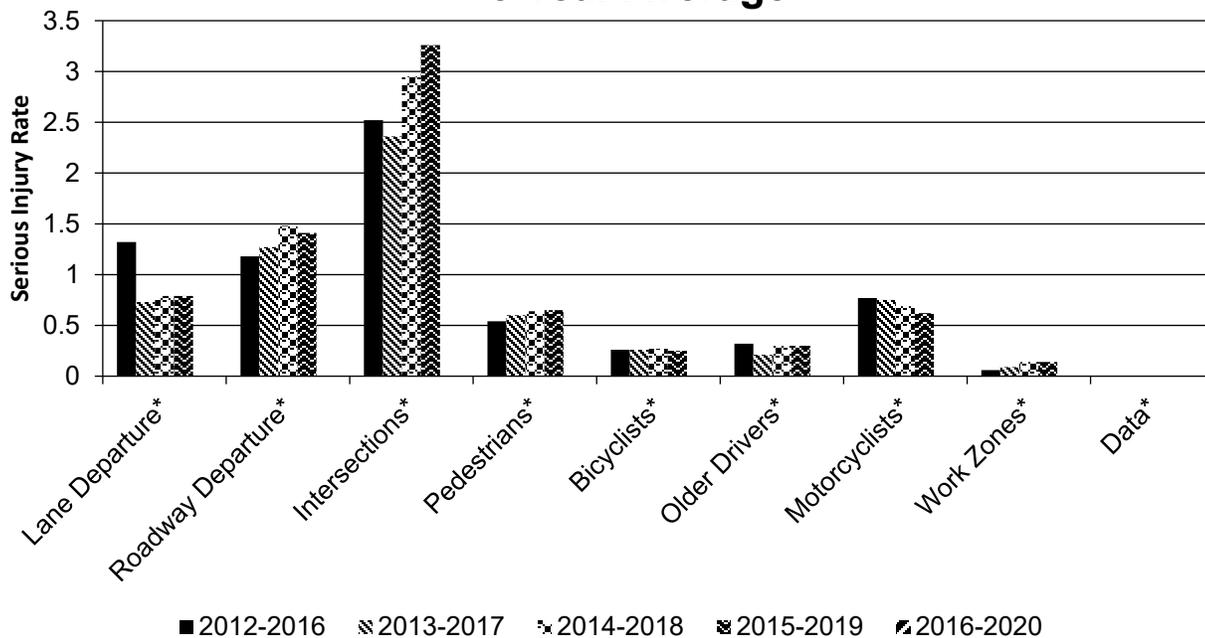
Number of Serious Injuries 5 Year Average



Fatality Rate (per HMVMT) 5 Year Average



Serious Injury Rate (per HMVMT) 5 Year Average



Alaska's 2018-2022 SHSP set goals for 5 year averages in fatalities (67 in 2022) and serious injuries (331 in 2022) for all crash types combined. We are on track to meet the SHSP goal on fatalities given the most recent 2 years of annual fatalities (67 and 64), even with our current 5 year average (74.8). It is impossible to evaluate progress on serious injuries given the state's current data entry backlog, as described below.

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Important Note on Performance Measures calculated by Online Reporting Tool: DOT&PF has made significant progress in the previous year to improve and stabilize our data reporting and analysis infrastructure and eliminate the serious injury data entry backlog. In the past 18 months, DOT&PF has completed data entry on two years of crash report data entry (2017 - 2018) and is within 1% of completing data entry on crash reports resulting in injury or death for 2019. We estimate that data entry for the 2019 crashes resulting in injury and fatality will be completed in fall 2021.

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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)
09CR01 Seward Highway Milepost 88 Safety Improvements	Rural Principal Arterial (RPA) - Other	Roadside	Roadside - other	4.00	1.00	2.00		2.00		1.00		9.00	1.00	10.44:1
09CR04 Northern Lights Boulevard @ UAA Drive Channelization Improvements	Urban Principal Arterial (UPA) - Other	Intersection geometry	Add/modify auxiliary lanes	28.00	8.00					16.00	5.00	44.00	13.00	1.48:1
10CR04 Seward Highway: Turnagain Pass to Potter Slow Vehicle Turnouts (SVT) & Passing Lanes	Rural Principal Arterial (RPA) - Other	Intersection geometry	Add/modify auxiliary lanes	17.00	4.00	3.00		3.00	2.00	14.00	2.00	37.00	8.00	1.54:1
11CR01 Central Region Traffic Signal Modifications, 2011	Multiple/Varies	Intersection traffic control	Modify control – other	20.00	2.00			1.00	1.00	10.00	2.00	31.00	5.00	0.97:1
11CR02 Sterling Highway: Soldotna to Homer Hill Slow Vehicle Turnouts (SVT)	Rural Principal Arterial (RPA) - Other	Intersection geometry	Add/modify auxiliary lanes	46.00	17.00	4.00		9.00	4.00	19.00	9.00	78.00	30.00	1.92:1
11CR04 Minnesota Drive Moose-Vehicle Crash Mitigation: Old Seward Highway to International Airport Road	Urban Principal Arterial (UPA) - Other	Miscellaneous	Animal-related	34.00	10.00		1.00	1.00		5.00	2.00	40.00	13.00	-2.3:1

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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)
12CR02 Huffman Rd @ Elmore Rd Intersection Improvements	Urban Minor Arterial	Intersection traffic control	Intersection flashers –sign- mounted or overhead	18.00	6.00			4.00		12.00	12.00	34.00	18.00	9.29:1
12CR04 Rabbit Creek Rd @ Goldenview Dr Intersection Improvements	Urban Minor Arterial	Intersection traffic control	Intersection flashers –sign- mounted or overhead	8.00						3.00	1.00	11.00	1.00	6.88:1
13CR11 Naknek/King Salmon Alaska Peninsula Highway Shoulder and Safety Edge	Rural Major Collector	Shoulder treatments	Shoulder treatments - other	4.00	5.00	1.00			1.00	3.00	4.00	8.00	10.00	-2.26:1
09SR01 Stephen Richards Safety and Capacity Improv.	Urban Major Collector	Intersection geometry	Intersection geometry - other	1.00	2.00			3.00		5.00	1.00	9.00	3.00	4.39:1
13SN01 POW Criag- Klawock_Hollis Highway Guardrail Improvement (- 100% CRF)	Rural Major Collector	Roadside	Barrier - other	1.00	1.00			1.00		4.00	2.00	6.00	3.00	1.69:1
13SN02 SEA Areawide Avalanche Gates (-100% CRF)	Multiple/Varies	Roadway signs and traffic control	Roadway signs and traffic control - other					1.00				1.00		4.77:1
15SN01 JNU Thane Rd. Guardrail (- 100% CRF)	Urban Major Collector	Roadside	Barrier- metal						1.00				1.00	-31.97
11NR01 Spot Intersection Improvements (All Combined)	Multiple/Varies	Intersection traffic control	Intersection signing – add enhanced regulatory sign (double-up and/or oversize)	7.00	3.00	1.00				5.00		13.00	3.00	3.97:1

2021 Alaska Highway Safety Improvement Program

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)
11NR02 Johansen Expressway Curve Delineation	Urban Principal Arterial (UPA) - Other	Roadway delineation	Delineators post-mounted or on barrier	8.00	2.00			1.00		4.00		13.00	2.00	4.16:1
13NR03 Parks Highway MP 305-356 Centerline Rumbles	Rural Principal Arterial (RPA) - Other	Roadway	Rumble strips – center	1.00	11.00			1.00	2.00	1.00	3.00	3.00	16.00	1.23:1
13NR06 Richardson Highway MP 276-341 Centerline Rumbles	Rural Principal Arterial (RPA) - Other	Roadway	Rumble strips – center	5.00		2.00		1.00		1.00	1.00	9.00	1.00	9.38:1

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?

2022

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	

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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]

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.

DOT&PF has allocated staff and other resources to advance toward meeting the requirement to have MIRE fundamental data element access in the following ways:

- Action 1 – Use the results from the MIRE FDE Webinar to focus our MIRE FDE activities over the next reporting period. The report clearly grouped the status of our MIRE FDE elements into 3 categories: those that are directly available as layers in our current system (such as functional class), those that may be derived from existing layers in our current system (such as Roadway Type at the Beginning Ramp Terminal), and those that do not exist in our current system or can't be derived from available layers (such as Interchange Type).
- Action 2 – Collaborate with our GIS provider, Esri, to modify our Roads and Highways data model to fully and efficiently address the MIRE FDE requirements. This may seem simple at first glance but the issue is complicated by the fact the HPMS, MIRE, and state reporting needs are often similar but not identical. An efficient solution will address these overlapping needs in a single solution where possible to eliminate duplication of effort.

Optional Attachments

Program Structure:

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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.