

# Alaska Department of Transportation & Public Facilities

## DOT&PF Year in Review

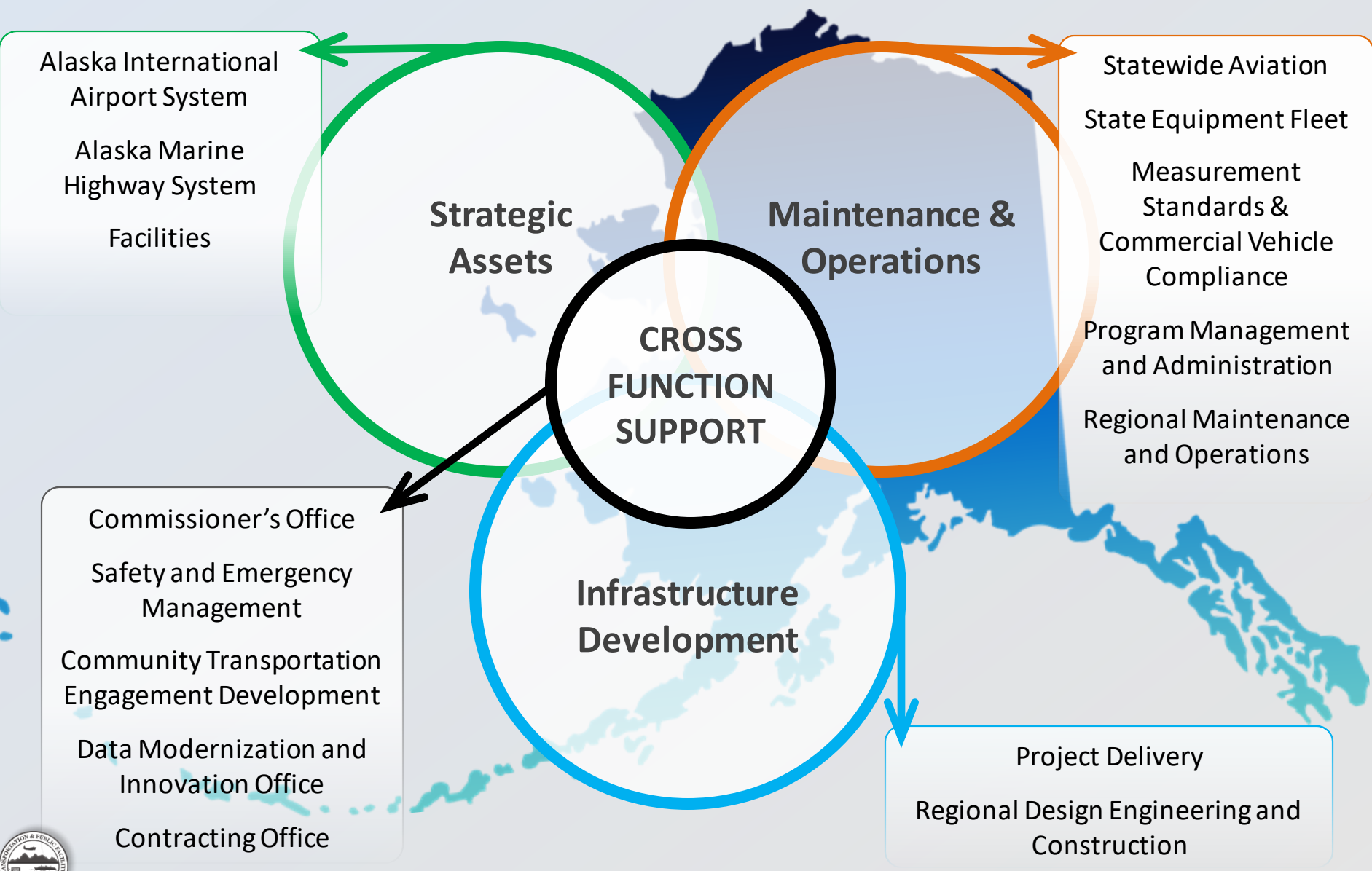
House Transportation

Ryan Anderson, P.E. , Commissioner

January 25, 2024



# By Land, By Air, By Sea – It Takes a Team



# DOT & PF Front Lines

## Highways and Aviation (H&A)

FY24 Authorized: \$173.5M

FY23 Actuals: \$171.3M

Position Counts: 509 PFT

## Statewide Equipment Fleet (SEF)

FY24 Authorized: \$38.3M

FY23 Actuals: \$35.6M

Position Counts: 156 PFT

## Measurement Standards and Commercial Vehicle Compliance (MSCVC)

FY24 Authorized: \$7.7M

FY23 Actuals: \$6.1M

Position Counts: 61



# Front Lines Workforce

## H&A

- Critical Job Class Vacancies: Equipment Operators
- 621 Equipment Operators (seasonal + permanent), 180 or 28.9% vacancy rate statewide
  - 75% Southfork
  - 67% Dalton Camp
  - 60% Northway
- 14 Maintenance Districts
- 80 Staffed DOT&PF Maintenance Camps
- 235 Airports: Over 20 have Part 139 Certification



## MSCVC

- Critical Job Class Vacancies: Compliance Inspectors
- 34 CVC's, 11 or 32% Vacancy rate statewide
  - 8 of 16 filled in Anchorage
  - 9 Weigh Stations

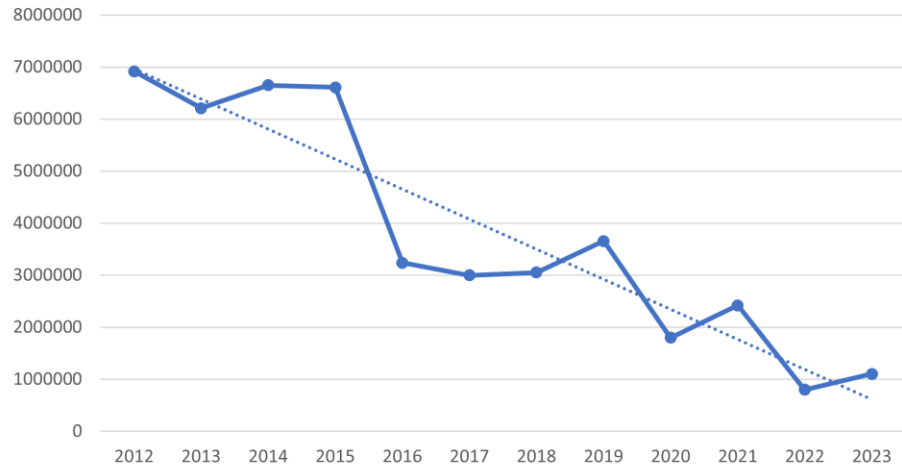
## SEF

- Critical Job Class Vacancies: Mechanics
- 31 or 22% mechanic vacancies statewide
  - 50% in Denali, Nome, Ketchikan
  - 67% in Valdez, Bethel
  - 100 in Tazlina
- Co-located with Maintenance Camps in Districts



# Focus on Safety

DOT WC Losses By Year



## 2023 Worker Compensation Claims

- 2023 H&A: 109 claims - \$545.3K
  - losses - 22 loss time injuries
- 2023 AMHS: 186 claims - \$415.4K
  - losses - 27 loss time injuries

DOT&PF provides  
180+ safety training  
throughout the year.

## Provided first aid/first responder training in 2023

- Northern Region: 99
- Central Region: 131
- Southcoast Region: 27



# Front Lines Challenges



## September 2022

- Typhoon Merbok Emergency Repairs

## January 2023

- Seward Highway: Ice Fall diversion
- Tok Cutoff Road closed: avalanche

## May 2023

- Funny River Road MP 8 washout
- Taylor Highway Emergency Flooding Repairs
- Eagle Mission Road Emergency Flooding Repairs
- Richardson Hwy MP 330 Emergency Flooding Repairs
- Nome Kougarok Road Emergency Flooding Repairs
- Russian Mission Airport Emergency Flooding Repairs
- Stevens Village Aprt Rd Emergency Flooding Repairs
- Glenn Hwy MP 186-188 Emergency Flooding
- Dalton Highway MP 404 Emergency Repairs

## June 2023

- Dalton Highway MP 404 Emergency Repairs continue
- Chitina O'Brien Creek Emergency Flooding Repairs
- Dalton Highway Koyukuk River #1 Bridge Emergency Repairs
- Elliott Highway MP 85.9 closure: failed culvert & erosion repair

## July 2023

- Seward Hwy: partnered w/agencies to free sheep caught in rockfall mesh

## August 2023

- Mendenhall River Emergency Flooding Repairs

## September 2023

- Glacier Highway Rockfall

## November 2023

- Wrangell: Zimovia Highway Landslide
- Southcentral widespread snowstorm/rain/wind

## December 2023

- Richardson Highway at Thompson Pass and MP 182-200 closed: avalanche
- Valdez/Glenallen: Richardson Hwy closed from milepost 12 to 65: numerous avalanches
- Klondike Hwy closed: heavy snowfall, inoperable plows
- Seward Highway Mileposts MP 36-40 closed: Avalanche
- Haines Highway closed: Rockfall



# Front Lines Challenges

## Bridge Strikes 2023

- Parks/Chena Ridge Northbound
- Dimond Blvd Overcrossing (OC) (Minnesota)
- Hillcrest OC
- Gerstle River
- Minnesota/Raspberry
- Peters Creek Undercrossing
- Manley Slough

## Repeated Hits Since 2012

- Artillery Road OC
- Hillcrest OC
- Cushman Street OC
- Eklutna OC
- Peters Creek

### VERTICAL CLEARANCE

Minimum vertical clearances for the entire roadway width, should be provided according to the following table.

### RECOMMENDED VERTICAL CLEARANCE\*

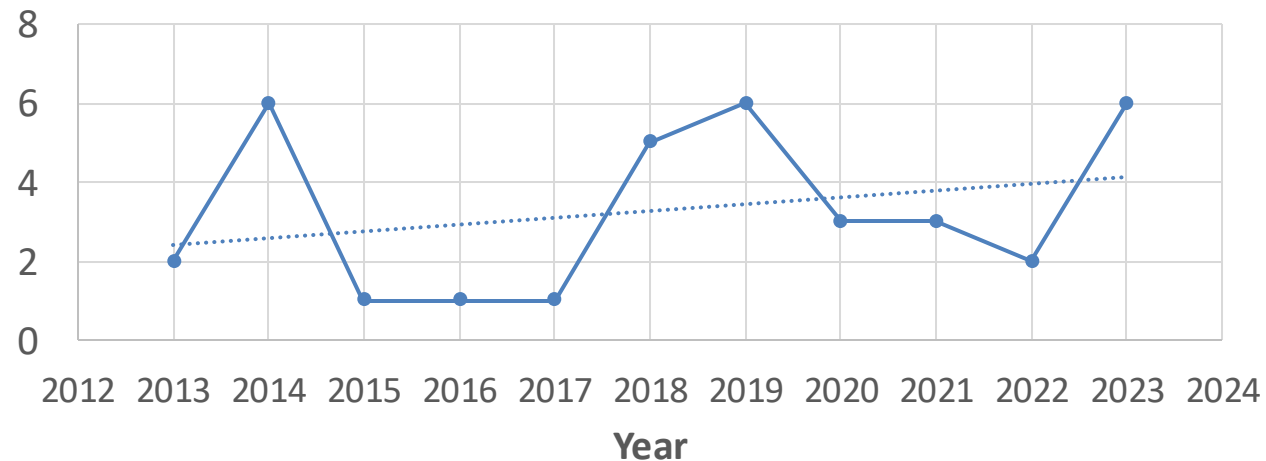
OVERPASSING FACILITY UNDERPASSING FACILITY	STATE HIGHWAY		LOCAL ROADS OR STREETS	RAIL-ROAD	PEDESTRIAN STRUCTURES	SIGN BRIDGES	BOTTOM SIGNAL HOUSING	OVERHEAD UTILITIES
	INTER-CHANGE	GRADE SEPARATION						
LOCAL ROADS OR STREETS	16 ft - 6 in.	16 ft - 6 in. **			17 ft - 6 in.	18 ft - 6 in.	17 ft - 6 in.	20 ft - 6 in.
STATE HIGHWAY	16 ft - 6 in. **							
RAILROAD	23 ft							27 ft - 6 in.
PEDESTRIAN FACILITY	8 ft - 6 in.							

\* Clearance values shown include a 6 in. allowance for future resurfacing of the roadway.

\*\* From the Port of Anchorage to the North Slope the clearance of roadways underpassing railroads shall be 18 ft.

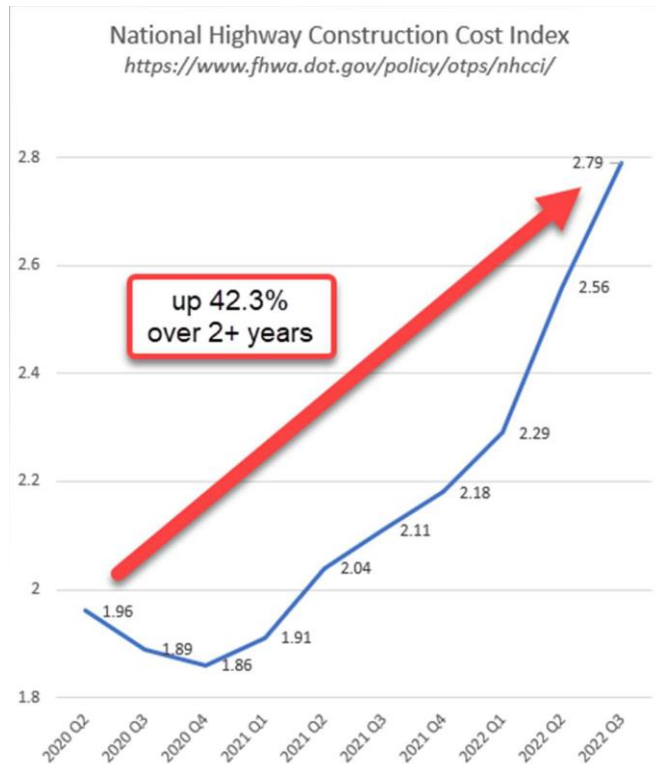
Table 1130-1  
Vertical Clearance

## Number of Reported Bridge Strikes



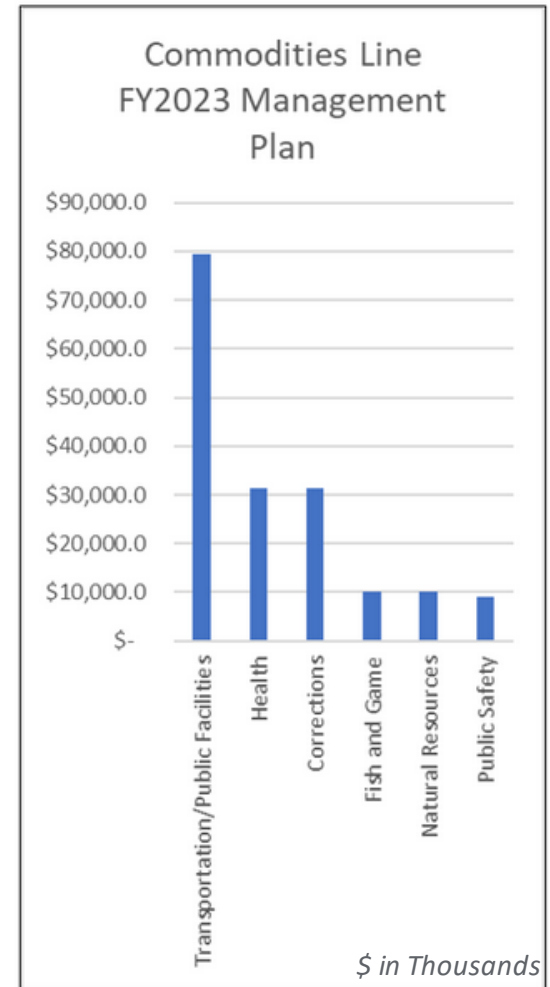
# Front Lines Challenges

## Inflation & Estimating



NHCCI COMPONENTS

- Grading and Excavation
- Bridge
- Asphalt
- Concrete Pavement
- Concrete-Miscellaneous
- Concrete-Culverts
- Base Stone
- Drainage-Pipe
- Drainage-Inlets/Catch Basins
- Underdrain
- Traffic Control
- Guard Rail
- Fencing
- Signs-Permanent
- Striping/Pavement Marking
- Signalization
- Lighting
- Roadway Lighting/Electrical
- Grassing
- Erosion Control
- Retaining Wall
- Miscellaneous Stone/Riprap
- Clearing
- Painting Structures
- Buildings/ Miscellaneous Structures
- Utility-Water
- Utility-Gas
- Utility-Sewer
- Equipment/Labor



\*NHCCI = National Highway Construction Cost Index

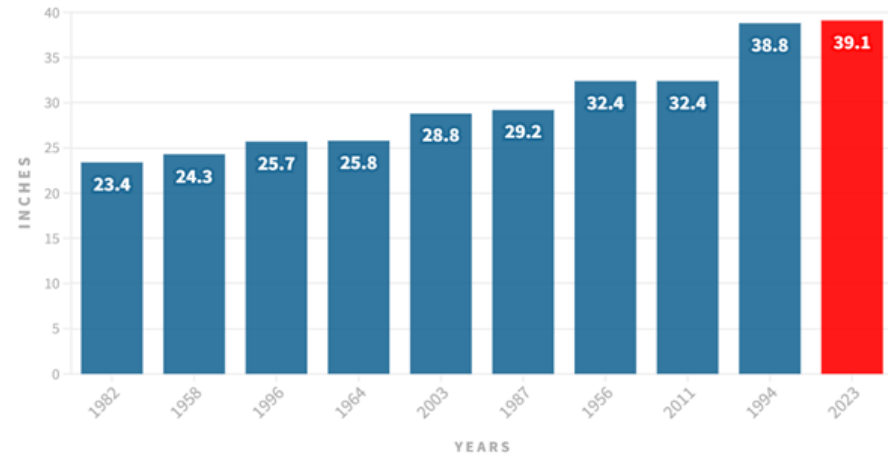
# Front Line Focus

## Snow and Ice Removal

- Road Priorities/Non-Motorized Priorities
  - New Tools and changes
- Contracting
  - Emergency Contracts – Storm Events
  - Term Contracts
    - Fairbanks Area Priority 3 & 4 Roads
    - Anchorage Area Priority 3 & 4 Roads/Sidewalks and Paths
      - Southwest & Southeast Anchorage Roads
      - Northeast Anchorage/Eagle River/Chugiak
      - Sidewalks/Paths Anchorage/Eagle River/Birchwood
- Liquid versus Solid Chemical Deicers
  - Kenai Petition & Public Meeting
  - Chemical use varies across the State based on climate

### Snowiest Novembers for Anchorage

Amounts shown in inches, 2023 total through Friday morning



Source: NOAA Data • KEVIN POWELL / Anchorage Daily News  
Note: Records for the Anchorage airport weather station date back to 1953



# Front Line Focus

## Abandoned Vehicle Removal

- \$100K budgeted in FY24 (for a second year)
- DOT&PF has expended ~\$64K in 6 months to remove statewide: 74 vehicles, an RV, and a mobile home (along Glenn Hwy)



Jakalof Bay in Seldovia was a remote removal of 13 vehicles, one an RV, for access such as emergency responders (DOT&PF/DNR)

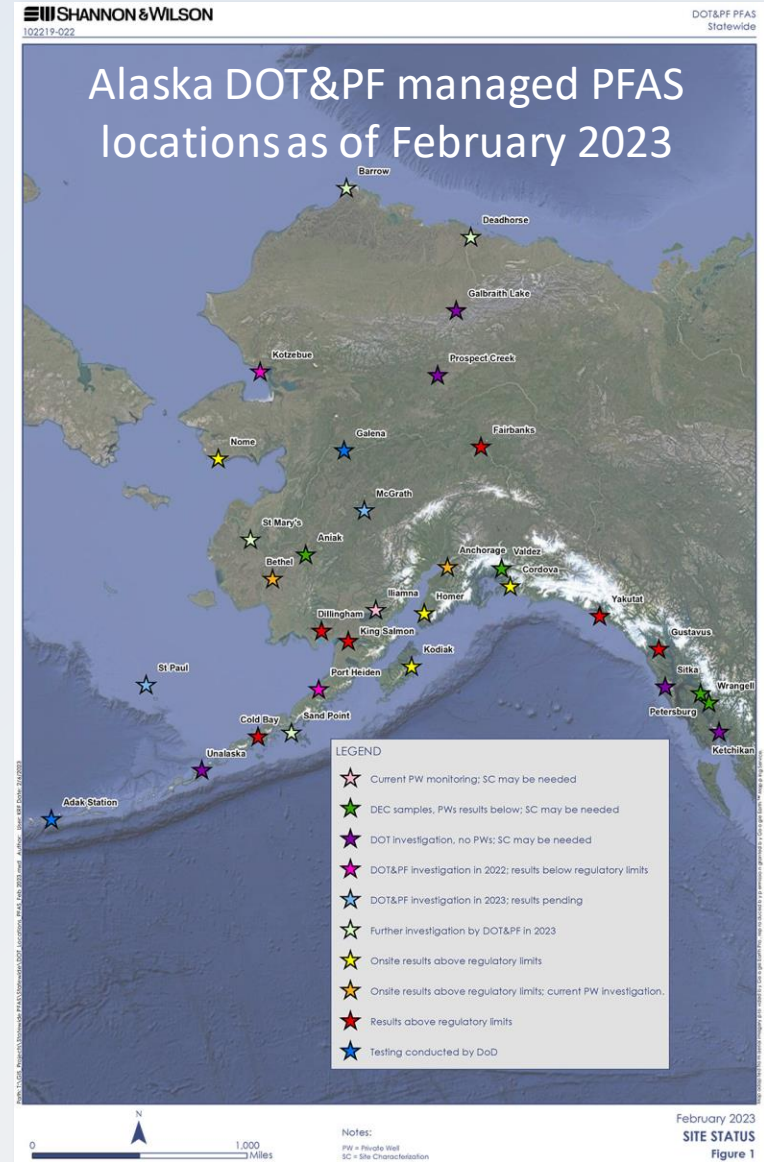
Abandoned Vehicle Removal Appropriation Tracking Sheet (FY24)

		Total FY24 Allocation	\$20,000.00
Northern Region - Removal Location	Removal Estimate	Removal Actual (paid)	Running Allocation Balance
Hillcrest Dr @ CHSR	300	310	\$19,690.00
Sheep Crk - Black Sheep Lane	275	298	\$19,392.00
Parks Hwy MP 269.8 (7)	4,900.00	4,900.00	\$14,492.00
Richardson Hwy MP 329.5	600	575	\$13,917.00
Farmers Loop (7)	2,000.00	2,000.00	\$11,917.00
Parks Hwy MP 187.4	750	750	\$11,167.00
Parks Hwy MP 174.1	750	750	\$10,417.00
			\$10,417.00
		Remaining FY24 Allocation	\$10,417.00
		Total FY24 Allocation	\$20,000.00
Central Region - Removal Location	Removal Estimate	Removal Actual (paid)	Running Allocation Balance
Old Seward Road, Bear Creek (7)		5,250.00	\$14,750.00
Salmon Creek Road, Seward (2)		1,500.00	\$13,250.00
Sterling Highway (2)		1,100.00	\$12,150.00
Beach Access Road, Ninilchik (1)		750.00	\$11,400.00
Funny River Road Mile 12.7, Soldotna (1)		350.00	\$11,050.00
Seward Highway (2)		1,500.00	\$9,550.00
Sterling Highway, Anchor Point (1)		750.00	\$8,800.00
Hollywood Rd (2)		500.00	\$8,300.00
Buffalo Mine Road (1)		250.00	\$8,050.00
Church Road (1)		250.00	\$7,800.00
Glenn Highway (3)		1,275.00	\$6,525.00
Knik River Road Access (2)		500.00	\$6,025.00
Old Glenn Highway (1)		250.00	\$5,775.00
Parks Highway (6)		1,950.00	\$3,825.00
Pittman Road (1)		250.00	\$3,575.00
Schrock Road (1)		250.00	\$3,325.00
Trunk Road (1)		250.00	\$3,075.00
Pittman Road (1)		250.00	\$2,825.00
Deshka Landing Road (1)		425.00	\$2,400.00
Long Lake Road (1)		425.00	\$1,975.00
Sterling Highway MP 87.3 (1)		350.00	\$1,625.00
Sterling Highway MP 77.7 (1)		350.00	\$1,275.00
Parks HWY (2)		400.00	\$875.00
Parks HWY mile 97.2 (1)		495.00	\$380.00
Trunk Road Park & Ride (1)		380.00	\$0.00
		Remaining FY24 Allocation	\$0.00
		Total FY24 Allocation	\$20,000.00
Southcoast Region - Removal Location	Removal Estimate	Removal Actual (paid)	Running Allocation Balance
Glenn Highway (Mobile Home - approved by Vicky R	\$6,000.00	\$6,000.00	\$14,000.00
			\$14,000.00
			\$14,000.00
			\$14,000.00
			\$14,000.00
			\$14,000.00
		Remaining FY24 Allocation	\$14,000.00
		Total FY24 Allocation	\$40,000.00
Statewide - Removal Location (coded to region)	Removal Estimate	Removal Actual (paid)	Running Allocation Balance
Jakalof Bay (Seldovia)	\$20,000.00	\$14,000.00	\$26,000.00
Glenn Highway (Mobile Home removal assistance)	\$14,000.00	\$14,000.00	\$12,000.00
			\$12,000.00
			\$12,000.00
		Remaining FY24 Allocation	\$12,000.00

# Front Line Focus

## PFAS (Per- and Polyfluoroalkyl Substances)

- New Flourine-Free Foams are becoming available
- FY25 Budget includes \$2.5M to begin transition for 25 Airports
- New EPA Maximum Contaminant Limits (MCL) implementation timeline not established yet
- DOT&PF continues site characterization, monitoring, public information, and providing access to alternative water sources.



# Front Line Focus

## Dalton Highway / Alaska Highway

- Increased trucking activities: over 3,000 additional loads to support oil development
- New activities being proposed: Liquefied Natural Gas (LNG) to Fairbanks
- Continued capital investment: need for heavy maintenance
- Ore Haul activities on Alaska Highway

## Whittier Tunnel

- 2022 FHWA review of Tolling agreements and Maintenance Contracts
- Tolling Agreement: Initial Determination was 80% participate rate. Subsequent discussions regarding 23 USC 218 resulted in determination of 100% Fed Participation
- Maintenance Contract: FHWA determined 51% of work eligible. Resulting in shortfall of \$2.9M
- Developing revised tolling agreement



Whittier Tunnel Portal  
By Webber Infra, courtesy of Travis Peterson



# Front Line Focus

## Ketchikan #797 Water St Viaduct

88 span 1,624-foot-long structure comprised of a reinforced concrete tee-beam superstructure and a reinforced concrete pier and column substructure founded on driven concrete piles.

**High-corrosion marine environment Situated in an environment with:**

- Daily tidal fluctuations, restrict necessary preventative maintenance work to be performed
- Notable degradation in both the concrete superstructure and substructure, including issues such as delamination, concrete section loss, rebar corrosion/section loss, and deep/long cracks in pier caps and columns
- Restricting traffic over specific portions of the roadway due to a calculated decrease in live load carrying capacity of structural elements



# Highway Safety

## Fatalities

2023 (preliminary): 53 fatalities in 49 crashes

2022 (final): 82 fatalities in 72 crashes

2021 (final): 68 fatalities in 60 crashes

2020 (final): 62 fatalities in 51 fatal crashes

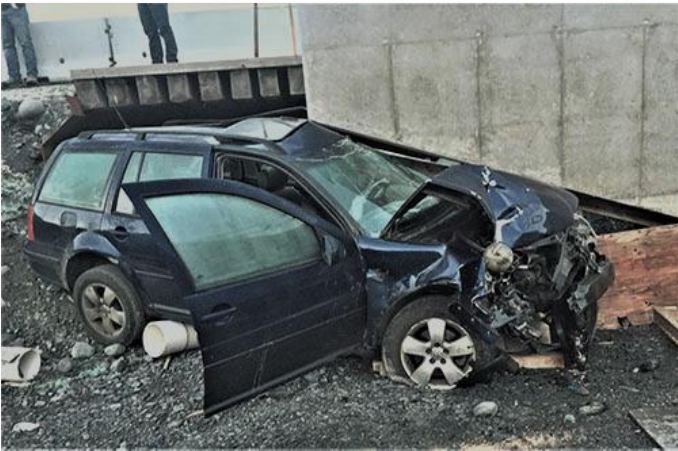
2019 (final): 65 fatalities in 60 fatal crashes

Alcohol impaired – **19%**

Unbelted – **20%**

Speeding related – **38%**

Non-motorist – **18%** of all fatalities



- Developing Complete Street Policy
- Joining Allies in Action for National Road Safety Strategy
- Conducting Road Safety Audits – Rural and Urban
- Addressing speed setting policy to address high pedestrian crashes
- Establishing contracts to address pedestrian pathways in severe winter events

- 2023-2027 Strategic Highway Safety Plan approved by FHWA
- Organizing the plan around the Safe Systems Approach:
  - Safe Road Users
  - Safe Vehicles
  - Safe Roads & Safe Speeds
  - Post-Crash Care

# Surface Transportation - Capital Program

## Federal Highway Program

Successfully obligated \$936M of federal aid highways projects and grants.

- Includes August redistribution - additional \$108M in transportation funds

## Design, Engineering and Construction

FY23 Authorized: \$124.1M

FY23 Actuals: \$122.3M

## Competitive Discretionary Grants

- Applied for over \$2.4B in competitive grant opportunities across all modes

## Alaskans awarded Surface Transportation grants in excess of \$692M

- National Culvert Removal Replacement and Restoration Grant Program 2022: \$44.1M
- Multimodal Project Disc. Grant (MPDG) Rural Surface Program Grant Awards 2022: \$10M
- Reconnecting Communities 2022: \$537K
- Rebuilding American Infrastructure with Sustainability and Equity 2023: \$27.8M
- Rebuilding American Infrastructure with Sustainability and Equity 2022: \$13.0M
- Safe Streets and Roads for All (SS4A) 2023: \$1.2M
- Maritime Administration (MARAD) Funded: \$185.6M
- Federal Transit Administration (FTA) Ferry Related: \$416.4M



# Capital Focus Points and Highlights

## Statewide Transportation Improvement Program (STIP)

DOT&PF revamped STIP format with a new interactive interface, new investment categories, map-based data, and a user-friendly comment interface.

The public responded with over **22,000** website views, providing **1,200** comments on over **120** projects.

The volume of responses required additional staff time to adjudicate, respond to and make appropriate adjustments to the final document. Accordingly, the current 2020-2023 STIP was extended for 180 days.

To download the STIP submittal, visit [dot.alaska.gov/stip](https://dot.alaska.gov/stip)



# Alaska Marine Highway System



## Maintenance Program

### Vessel Management System

- ✓ Starlink
- ✓ Vessel Server Installation
- ✓ AMOS
- Preventative Maintenance Modules
- Health Safety Security Environment
- Project Management

### Shipyard Planning

- Written Shipyard Specifications
- Goal: shorter overhauls, lower costs

### Vessel Schedule System Upgrade

- Beta testing in-house systems

### Capital Program:

Competitive Grants

Maritime Administration: \$185.6M

Federal Transit Administration: \$416.4M



# Alaska Marine Highway System

## Recruitment / Retention

### AMHS Crewing Operations

1/19/2024

Crew Status:

	Currently Employed	Total Needed	Current Status
<b>Wheelhouse*</b>	71	79	-8
Master	See above wheelhouse totals		
Chief Mate	See above wheelhouse totals		
2nd Mate	See above wheelhouse totals		
3rd Mate	See above wheelhouse totals		
Cief Engineer	17	22	-5
1st Engineer	14	18	-4
2nd Engineer	13	18	-5
3rd Engineer	10	23	-13
Bosun	15	12	3
Able Bodied Seaman	58	62	-4
Ordinary Seaman	28	28	0
OSP	15	14	1
WM	18	18	0
Jr. Engineer	9	15	-6
Oiler	25	29	-4
Wiper**	14	5	9

#### NOTES:

\*We are Short on licensed officers with pilotage. Need 27 more officers with full pilotage

\*\*Extra Wipers used for developing our own Oilers and Jr Engineers since we can't hire them

Steward positions not included as we are staffed with raw numbers, though this entry level pay position has a very high turnover rate, so recruiting is still a priority. Presently we are experiencing a shortage of cooks.

## 4th Quarter 2023 Recruitment Stats

Hired 32, lost 12 vessel crew employees.

### 4<sup>th</sup> quarter breakdown by position

- +3 Master Mates & Pilots (MM&P): hired 3 mates, lost 0
- Total Marine Engineer Beneficial Association (MEBA) count remained the same with no new hires and no departures
- Total Inland Boatman Union (IBU) on deck remained the same: hired 3, lost 3
- Total IBU Engine remained the same: hired 1, lost 1
- +17 IBU Stewards: hired 25, lost 8

### Licensed position count for 2023

- -3 MM&P: hired 8, lost 11
- -2 MEBA: hired 4, lost 6

## Recruitment Efforts

- Crewing Manager Recruitment
- AVTEC/University of Alaska Southeast
- High School Maritime Career Program
- Community Job Fairs: Feb. 6, Feb. 13, Feb. 21
- Bringing Retirees Back
- Sea Summit: March 6



# International Airport System

## Ted Stevens Anchorage Intl. Airport (ANC) / Fairbanks Intl. Airport (FAI)

### November 2023 Winter Storm

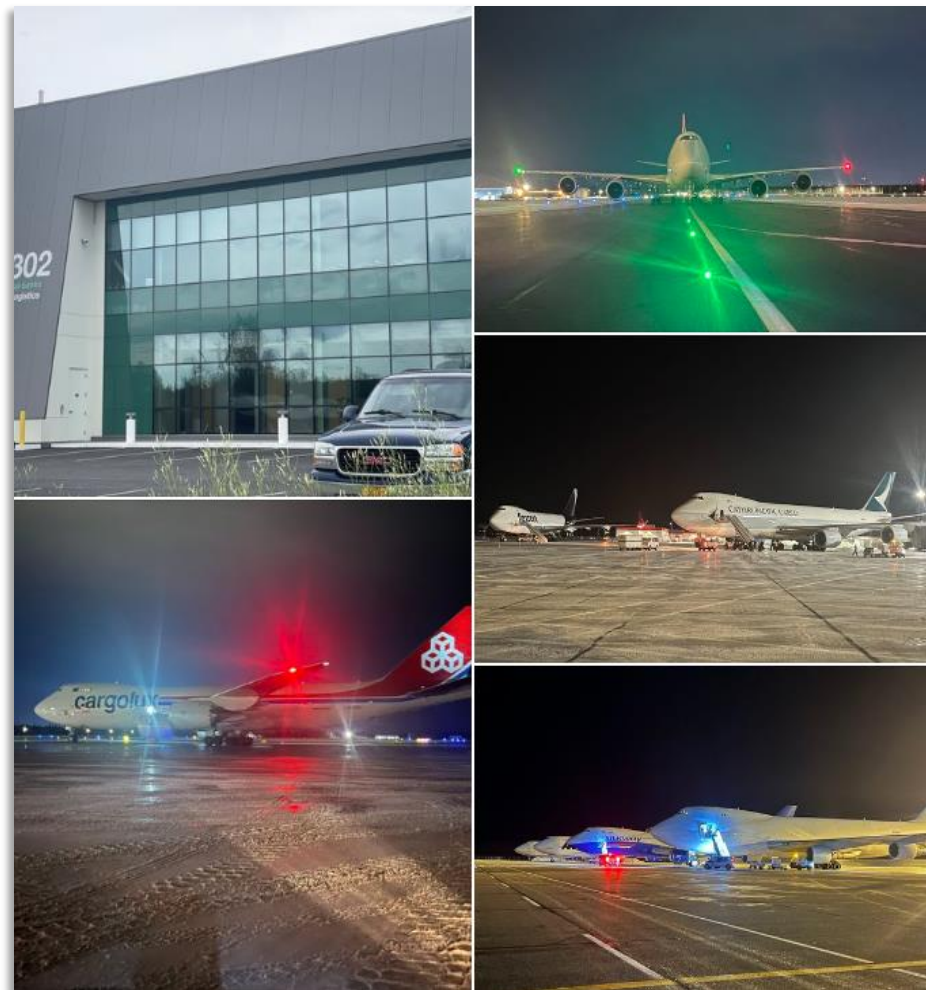
#### Aircraft Diversions: ANC to FAI

1. Atlas 8644 747-800
2. Atlas (Qantas) 7521 747-400
3. Silk Airlines 8115 747-800
4. Kalitta Air 813 747-800
5. Kalitta Air 853 747-400
6. Cargolux 5964 747-800
7. Cathy Pacific 086 747-800
8. Flexport "Giant" 876 747-400

#### International Airports

FY24 Authorized: \$112.1M

FY23 Actuals: \$103.1M



Aircraft Diversions ANC to FAI, November 2023.



# International Airport System

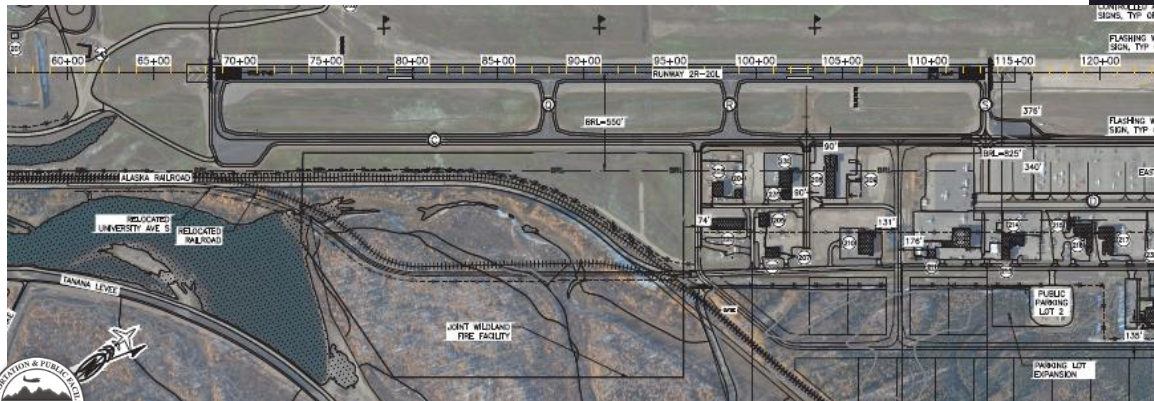
## Major Investment Activities

- ANC: Proposed UPS Expansion
- ANC: Fed Ex Expansion
- ANC: Alaska Cargo and Cold Storage
- FAI: DNR/BLM Joint Wildland Firefighting Facility

## International's Capital Investment FFY2023

- Airport Improvement Program \$73.8M
- Bipartisan Infrastructure Law \$14.3M

Total: \$88.1M



# Rural Aviation

## Statewide Aviation

FY24 Authorized: \$5.2M

FY23 Actuals: \$6.0M

Executed 62 Airport Improvement Program Grants, resulting in capital investments of \$220M for the rural airport system

## FFY 2023 Airport Improvement Program \$163.6M

55 Grants: Major Projects, Equipment, Surface Maintenance, and Planning

## FFY 2023 Bipartisan Infrastructure Law \$56.4M Homer/Kaltag/Marshall Projects



## SMART Grant

### Alaska Rural Remote Operations Workplan

Use drone technology to conduct infrastructure inspections and gather situational awareness data essential to Rural Alaska's way of life on snow, ice, and overland trails, partnering with Alaska Native and Rural Villages.

\$1.9M



# Division of Facility Services

**Over 820 Facilities Served:**  
DOT&PF, DEED, DOL&WD, DPS, DNR

Managing over 150 projects  
for 10 different agencies

## Construction Procurement

- Increased Agency Trainings and Delegations

## Resource Allocations

- Agency Requests

## Improved Asset Management

- Technology

## Division of Facilities Services

FY24 Authorized: \$100.5M

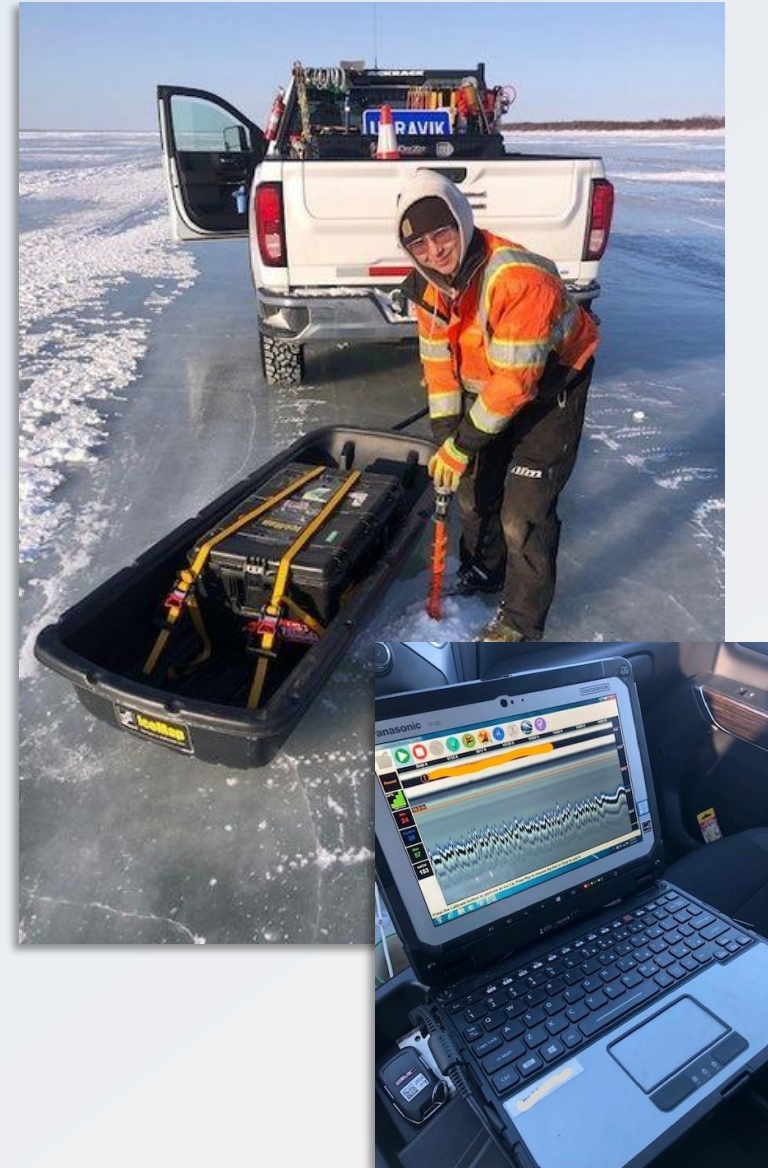
FY23 Actuals: \$95.4M

Position Counts: 144



# Advancing Opportunity

- Advanced Air Mobility (AAM)
- Ice Roads, Winter trails, Frontier Roads
- M11 Marine Highway Route
- Regional Planning Organizations
- Metropolitan Planning Organizations



# Thank you. Questions?

**Ryan Anderson, P.E.**

Commissioner

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