



# Alaska Department of Transportation & Public Facilities

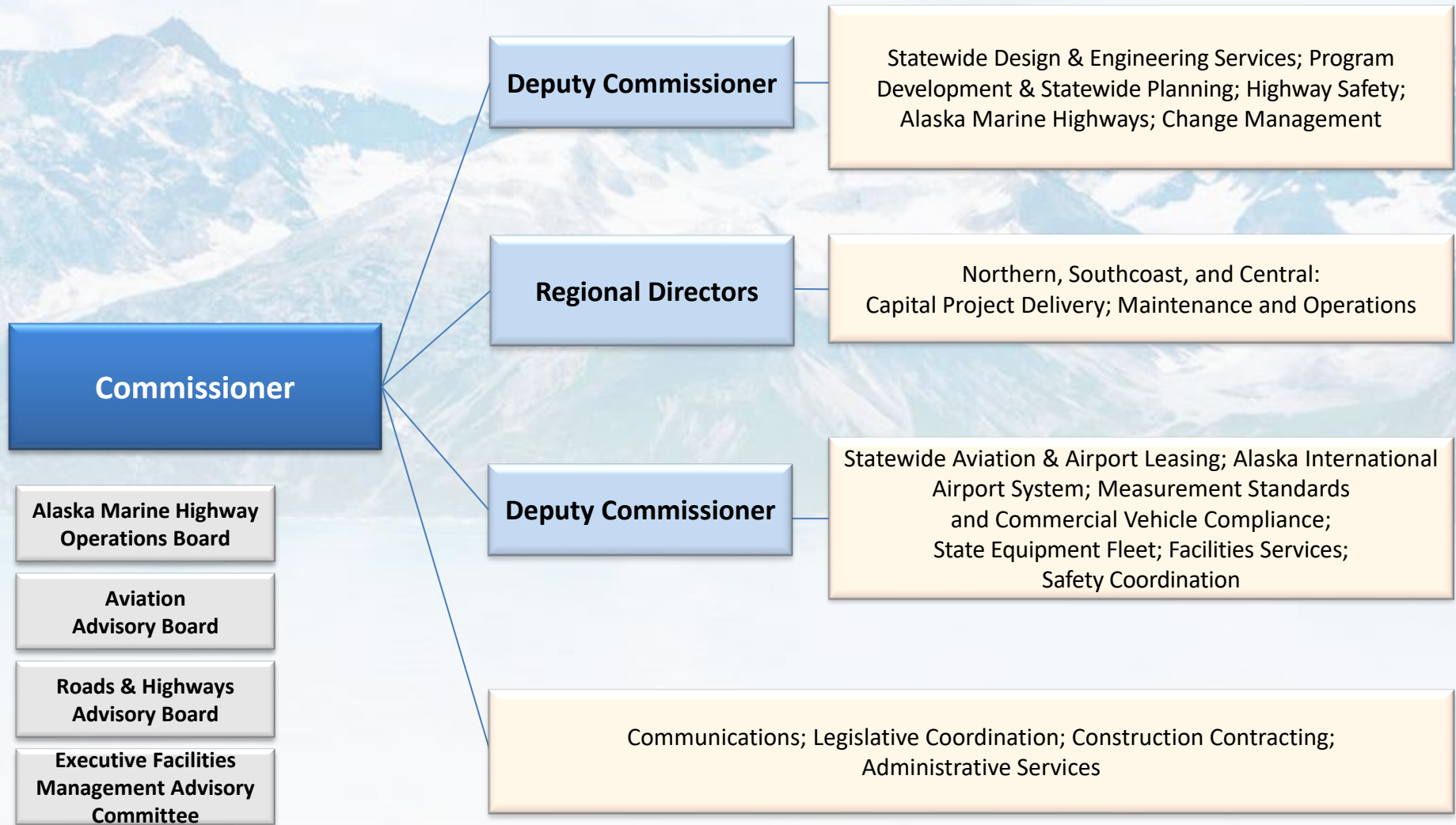
## Department Overview

Ryan Anderson, P.E., Commissioner  
John R. Binder, Deputy Commissioner  
Katherine Keith, Deputy Commissioner

January 31, 2023

Our mission is to **Keep Alaska Moving** through service and infrastructure.

# DOT&PF ORGANIZATION





# MISSION: *Keep Alaska Moving*

## Core Values

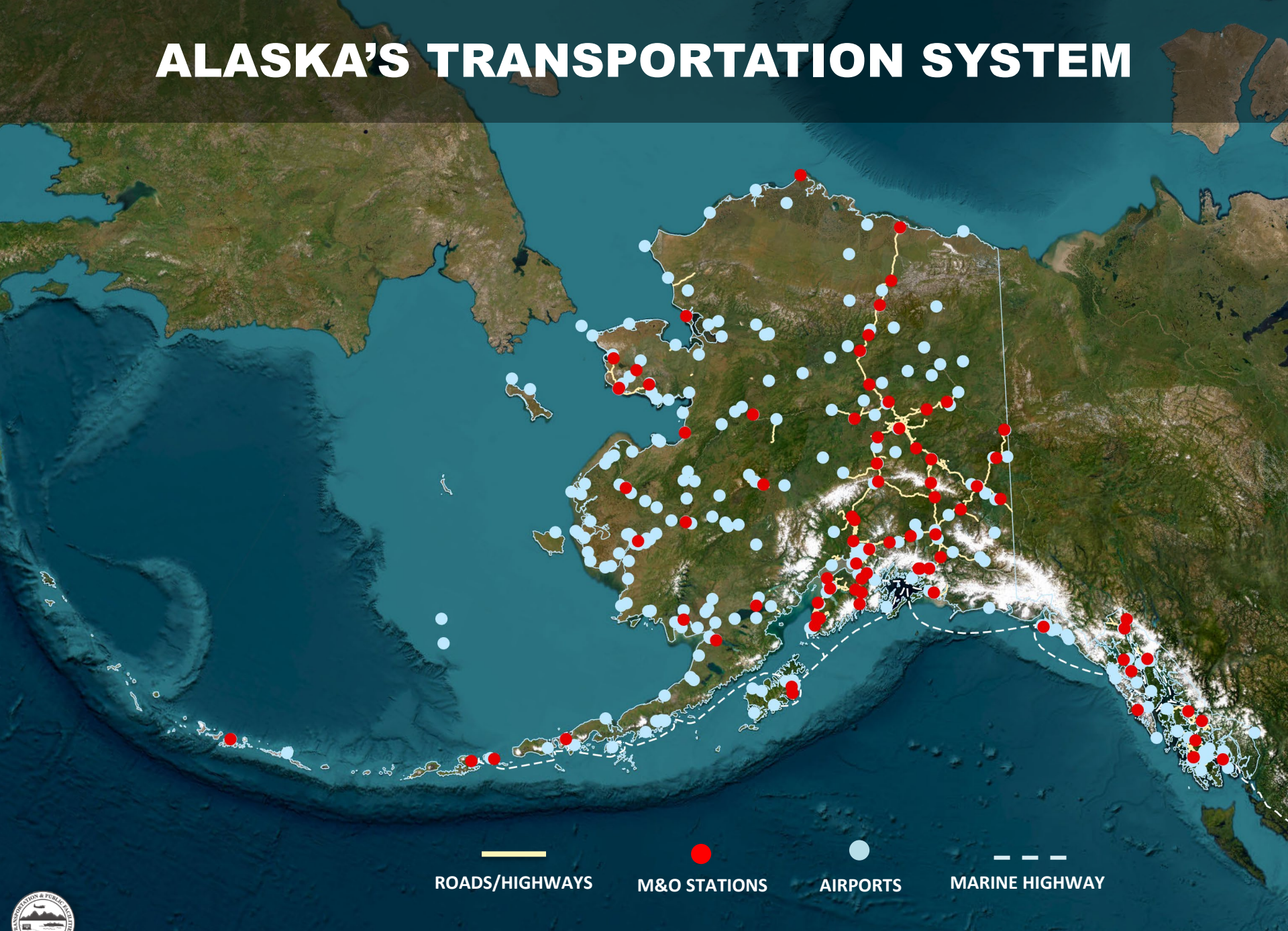
*Integrity • Excellence • Respect • Safety*

**DOT&PF oversees a network of highways that link together cities and communities throughout the state, thereby contributing to the development of commerce and industry in the state, and that aids in the extraction and development of its resources, and improves the economic and general welfare of the people of the state (AS 19.05.125)**





# ALASKA'S TRANSPORTATION SYSTEM





# ALASKA'S DOT&PF INFRASTRUCTURE

## ROADS & HIGHWAYS

**5,682** center line miles / **11,843** lane miles of roads / highways

## MAINTENANCE TEAMS

**80** DOT&PF staffed maintenance stations\*

## AVIATION SYSTEM

**235** rural airports,  
**2** international airports

## ALASKA MARINE HWY SYSTEM

**9** ferries,  
**35** ports of call, along **3500-mile** coastal route

## MARINE FACILITIES

**16** harbors,  
**1** set of breakwaters

## BRIDGES & TUNNELS

**851** DOT&PF owned bridges,  
**3** tunnels\*\*

## MEASUREMENT STANDARDS

Inspected **7,438** scales, **4,787** meters, and **296** accessories

## STATE EQUIPMENT FLEET

**7,366** pieces of state equipment & vehicles

## PUBLIC FACILITIES

**827** maintained, inclusive of  
**731** DOT&PF owned

## COMMERCIAL VEHICLE ENFORCEMENT

**9** Weigh Stations,  
**2,544,047** tons weighed FFY22

**STATEWIDE TRANSPORTATION ASSETS**  
Approximately **\$12.6B**

**STATEWIDE PERSONNEL AND DISTRIBUTION**  
**3,393** permanent full-time, part-time and non-permanent employees in **8** labor unions in **83** locations

Federal Fiscal Year (FFY)

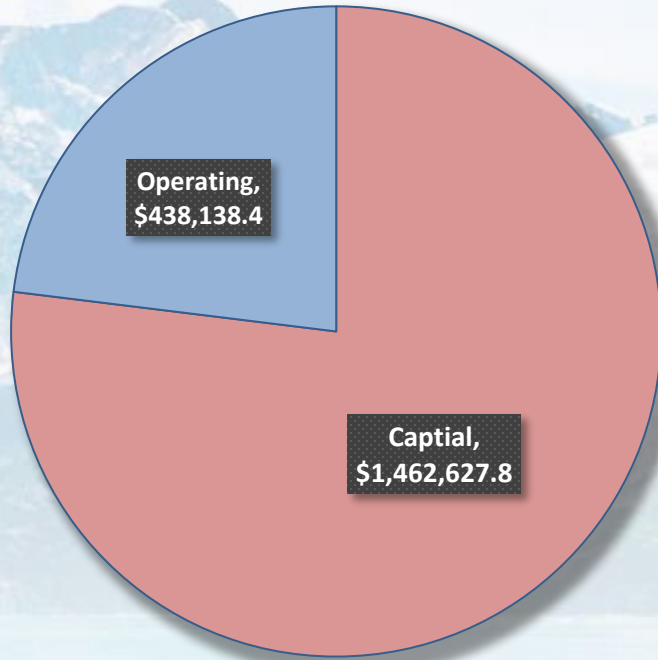
\*Includes seasonal maintenance stations

\*\*DOT&PF-owned tunnels and maintenance of the 2.5 mile Anton Anderson Memorial Tunnel

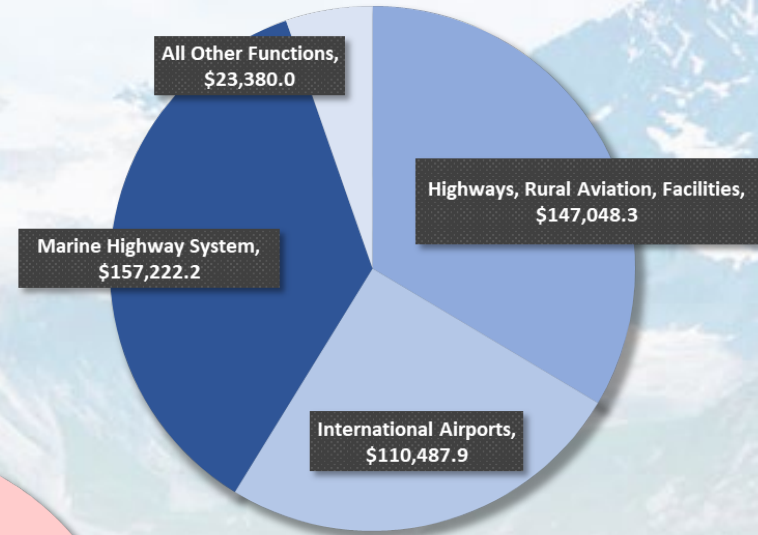


# ALASKA DOT&PF BUDGETS & FUNDING

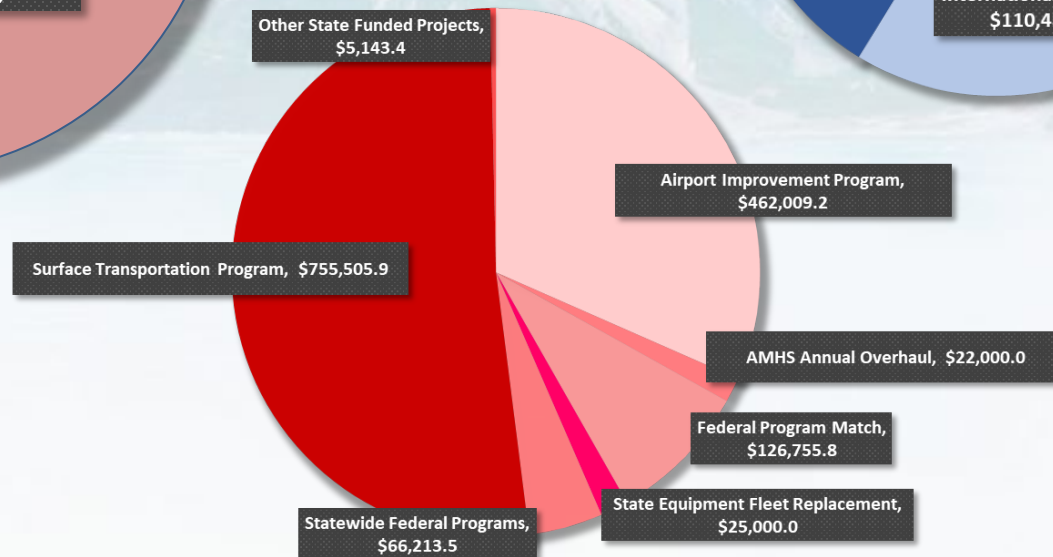
FY2024 Governors Proposed (\$1.9B)



Operating



Capital



\$ in Thousands (1,000); Duplicate funding excluded





# OUR TEAM

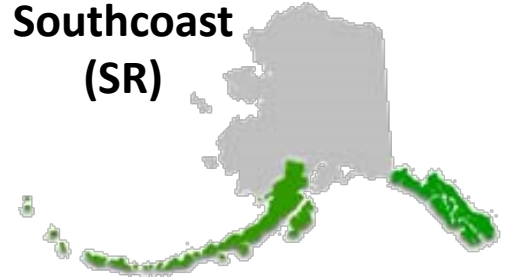
**Northern  
(NR)**



**Central  
(CR)**



**Southcoast  
(SR)**



**Statewide  
Aviation**



**Alaska International  
Airport System**



**Alaska Marine  
Highway System**



**Design and  
Engineering Services**



**State Equipment  
Fleet**



**Measurement Standards  
& Commercial Vehicle  
Compliance**



**Program  
Development**



**Facilities Services  
Division**



**Civil Rights  
Office**



# STRATEGIC INVESTMENT AREAS

SAFETY

ECONOMIC VITALITY

STATE OF GOOD REPAIR (SOGR)

RESILIENCY

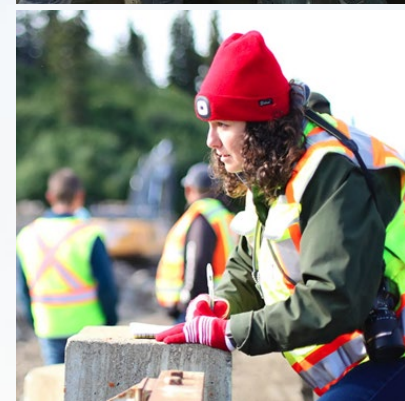
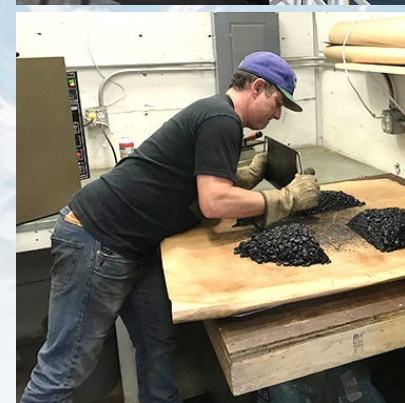
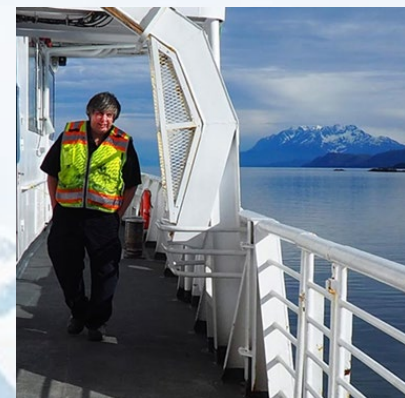
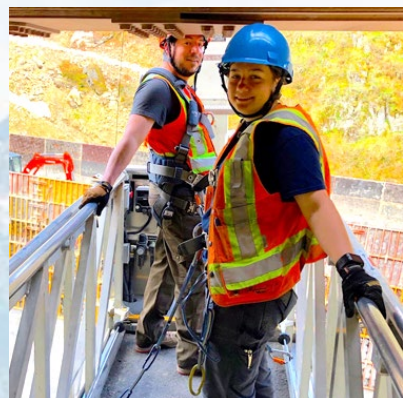
SUSTAINABILITY





# ORGANIZATIONAL EXCELLENCE

**WORKFORCE**  
**COMMUNICATION**  
**CULTURE**  
**INNOVATION**  
**INFORMATION**  
**RESOURCING**  
**PROJECT DELIVERY**





# INFORMATION X - TRAFFIC

## Challenges with the old system navigatorm

- Exclusively road traffic impacts
- Funding source did not cover aviation
- Excluded most rural Alaska projects
- Redundancy in effort with 511

## Solutions with the new system Traveler 511info AK

- Single source of information for all traffic impacts (maintenance, construction, weather, crashes, cameras)
- Meets the public where they're at--via phone, website, and mobile app
- Automatic data grab reduces data entry effort





# INFORMATION X - DATA



## Challenges

- Need to communicate more than traffic impacts
- No central location to find information
- Data is collected, stored, and managed differently in each region
- Extensive manual data entry

## Solutions

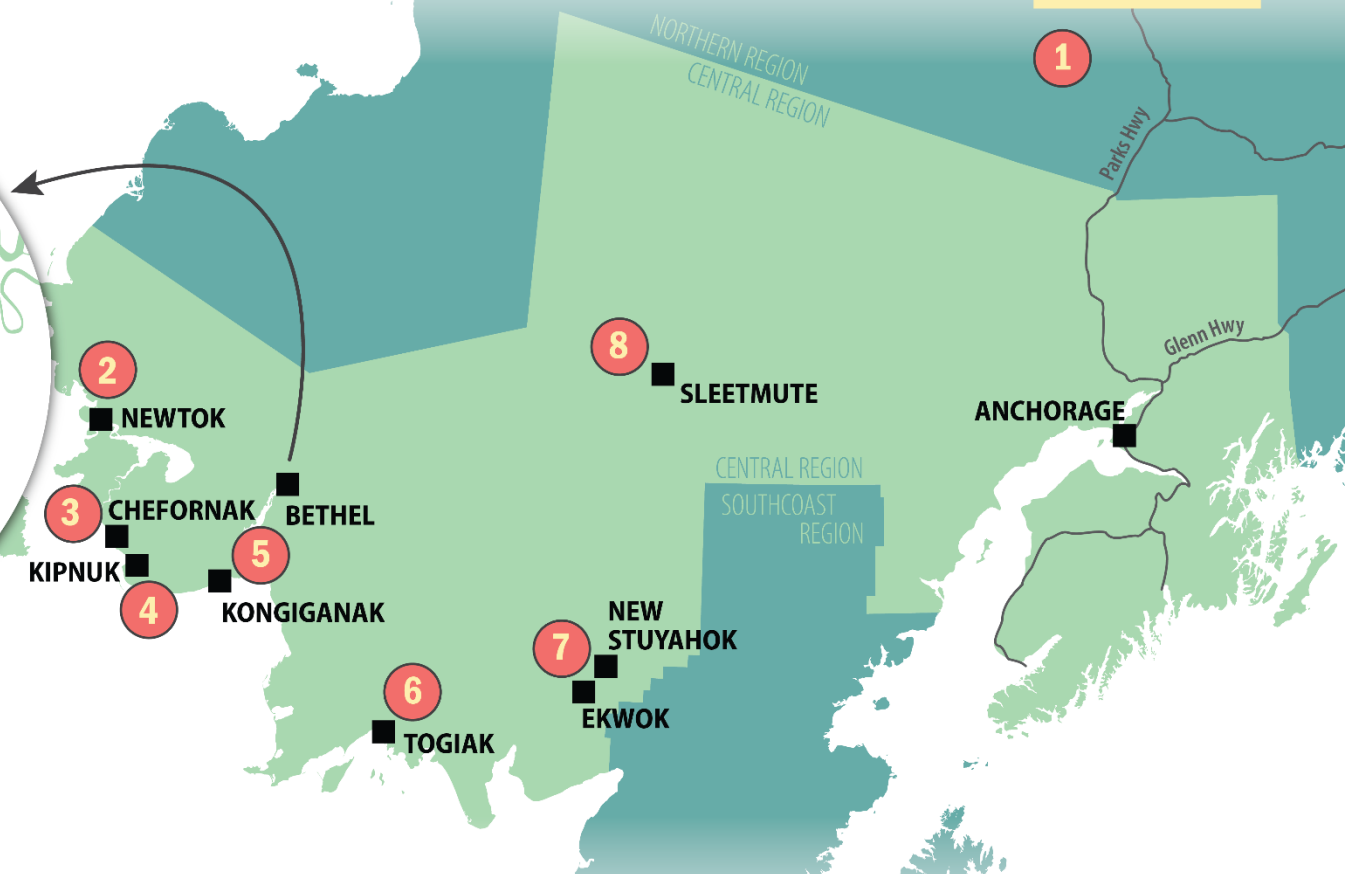
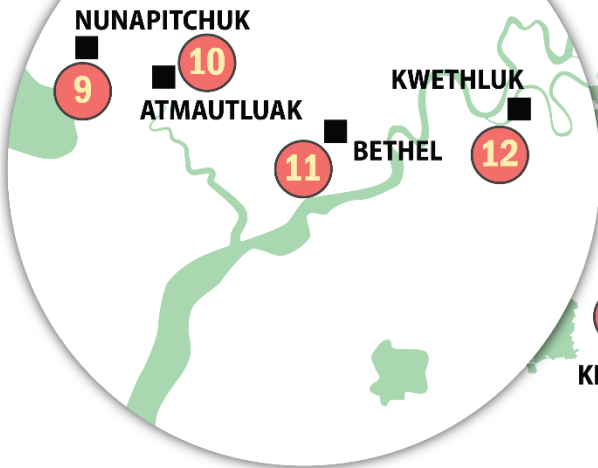
- Public-facing GIS map with expanded project info, STATEWIDE
- Layers of data show legislative boundaries, municipal boundaries, and more
- Automatic data processing and reports to reduce manual entry
- Scalable – useful for internal & external data



# CENTRAL REGION | 2023 CONSTRUCTION

## REGION-WIDE PROJECTS

### BETHEL AREA



- 1 | Automated Weather Observing Systems, Various Locations
- 2 | Newtok Airport Relocation
- 3 | Chefornak Airport Rehabilitation
- 4 | Kipnuak Airport Rehabilitation
- 5 | Kongiganak Airport Improvements
- 6 | Togiak Airport Resurfacing

- 7 | Ekwoak & New Stuyahok Airport Resurfacing
- 8 | Sleetmute Airport Runway Resurfacing and Lighting Replacement
- 9 | Nunapitchuk Airport Improvements
- 10 | Atmautluak Airport Improvements
- 11 | Bethel Main Runway Reconstruction
- 12 | Kwethluk Airport Rehabilitation





# ANCHORAGE MUNICIPALITY

## 2023 CONSTRUCTION

### AREA-WIDE PROJECTS

27 28 29

- 13** | Reeve Blvd, 5th Avenue to Post Road Pavement Preservation (AMATS)
- 14** | A Street, Northern Lights Blvd to 40th Avenue Pavement Preservation
- 15** | A Street, Midtown Couplet Overhead Signal Indication
- 16** | Minnesota Drive: Tudor to 15th Avenue Pavement Preservation
- 17** | Anchorage International Airport - Multiple Projects
- 18** | Muldoon Road, Debarr Road to E 36th Avenue Pavement Preservation
- 19** | Chugach Foothills Connector, Phase II (AMATS)
- 20** | Elmore Road Pavement Preservation: Abbott Road to Providence
- 21** | Dowling Road and Seward Highway Interchange Reconstruction
- 22** | Seward Highway: O'Malley to Dimond Reconstruction
- 23** | O'Malley Road Reconstruction, Livingston St to Hillside Dr, Phase II
- 24** | De Armoun Road, E 140th Avenue to Hillside Drive Pavement Preservation
- 25** | McHugh Road Weather Information System Tower Upgrade
- 26** | Hiland Road MP 0-3.2 Pavement Preservation (AMATS)
- 27** | Anchorage Area Drainage Improvements FY 2019
- 28** | Anchorage District, Group B – Nov 2018 Earthquake
- 29** | HSIP: Central Region Guardrail Inventory & Upgrade



# MAT-SU AREA | 2023 CONSTRUCTION

## AREA-WIDE PROJECT

30

CANTWELL

TALKEETNA

31

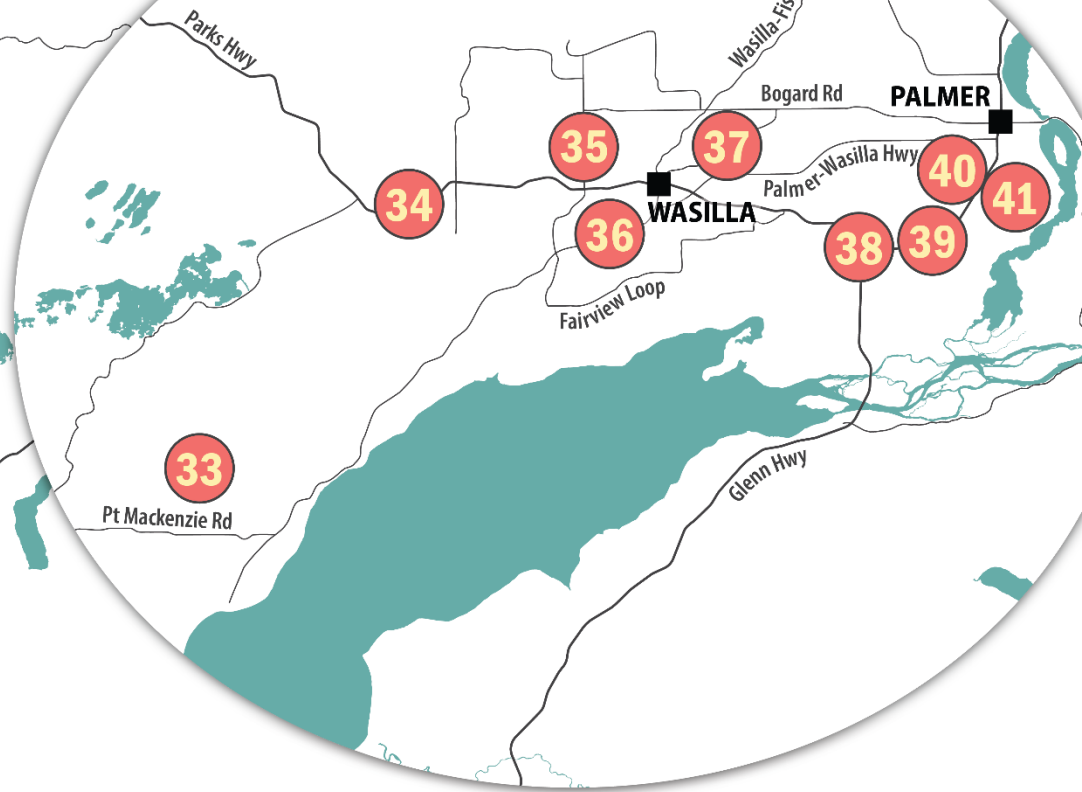
WASILLA

PALMER

ANCHORAGE

- 30 | HSIP: Central Region Guardrail Inventory and Upgrade (North)
- 31 | Parks Hwy Bridge Replacements at Montana, Sheep, & Goose Creeks
- 32 | Kings River Bridge
- 33 | Mat-Su Borough Road Repairs - Nov 2018 Earthquake
- 34 | Parks Highway MP 48.8 to 52.3 Reconstruction

## WASILLA - PALMER AREA

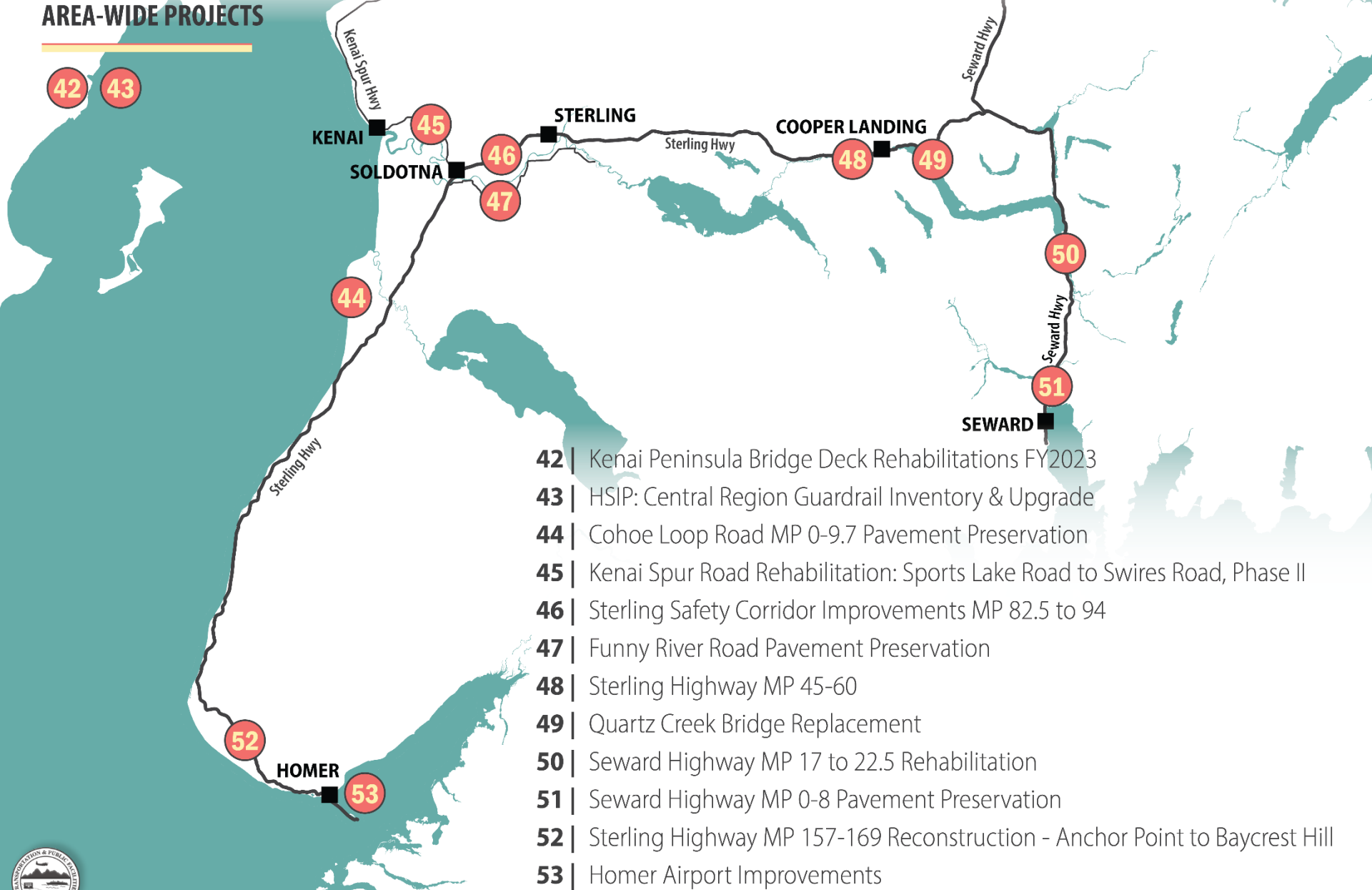


- 35 | Church Road and Spruce Avenue Intersection Flashing Beacon
- 36 | Knik Goose Bay Road, Fairview Loop to Palmer-Wasilla Highway, Phase I
- 37 | Seward Meridian Pkwy Rd Improvements, Phase II Palmer-Wasilla Hwy to Seldon Rd
- 38 | Glenn Highway & Parks Highway Interchange Repairs - Nov 2018 Earthquake
- 39 | Glenn Highway, Colleen Street Intersection & Frontage Road
- 40 | Glenn Highway: Parks Highway to S. Inner Springer Loop, Phase II
- 41 | Glenn Highway: Parks Highway to S. Inner Springer Loop Pathway, Phase II



# KENAI PENINSULA | 2023 CONSTRUCTION

## AREA-WIDE PROJECTS



# NORTHERN REGION

## NORTHERN REGION | 2023 CONSTRUCTION

CONTINUING IN 2023

- 1 | Noorvik Airport Rehabilitation
- 2 | Kotzebue to Cape Blossom Road Stage 1
- 3 | Shageluk Airport Access Road Improvements
- 4 | Dalton Highway MP 289-305 Rehabilitation
- 5 | Totchaket Road
- 6 | Parks Highway MP 231 Enhancements
- 7 | Alaska Highway MP 1235-1251 Rehabilitation
- 8 | Alaska Highway MP 1222-1227 Resurfacing
- 9 | Burma Pit Road Little Tonsina Bridge
- 10 | Richardson Highway MP 40-51 Resurfacing
- 11 | Northern Region Guardrail

BEGINNING IN 2023

- 12 | Point Hope Airport Realignment
- 13 | Kotzebue to Cape Blossom Road Stage 2
- 14 | Selawik Barge Access & Boardwalk Improvements
- 15 | Shishmaref Airport Erosion Control
- 16 | Deering Airport, Snow Fence & Access Road
- 17 | Brevig Mission Airport Lighting & Resurfacing
- 18 | Nome Port Road Improvements
- 19 | St. Mary's Airport Improvements
- 20 | Marshall Airport Improvements
- 21 | Dalton Highway MP 18-37 Reconstruction
- 22 | Elliott Highway MP 51-63 Reconstruction
- 23 | Healy Spur Road Rehabilitation
- 24 | Alaska Highway MP 1330-1390 Passing Lanes
- 25 | Richardson Hwy MP 233 Bear Creek Bridge Replacement

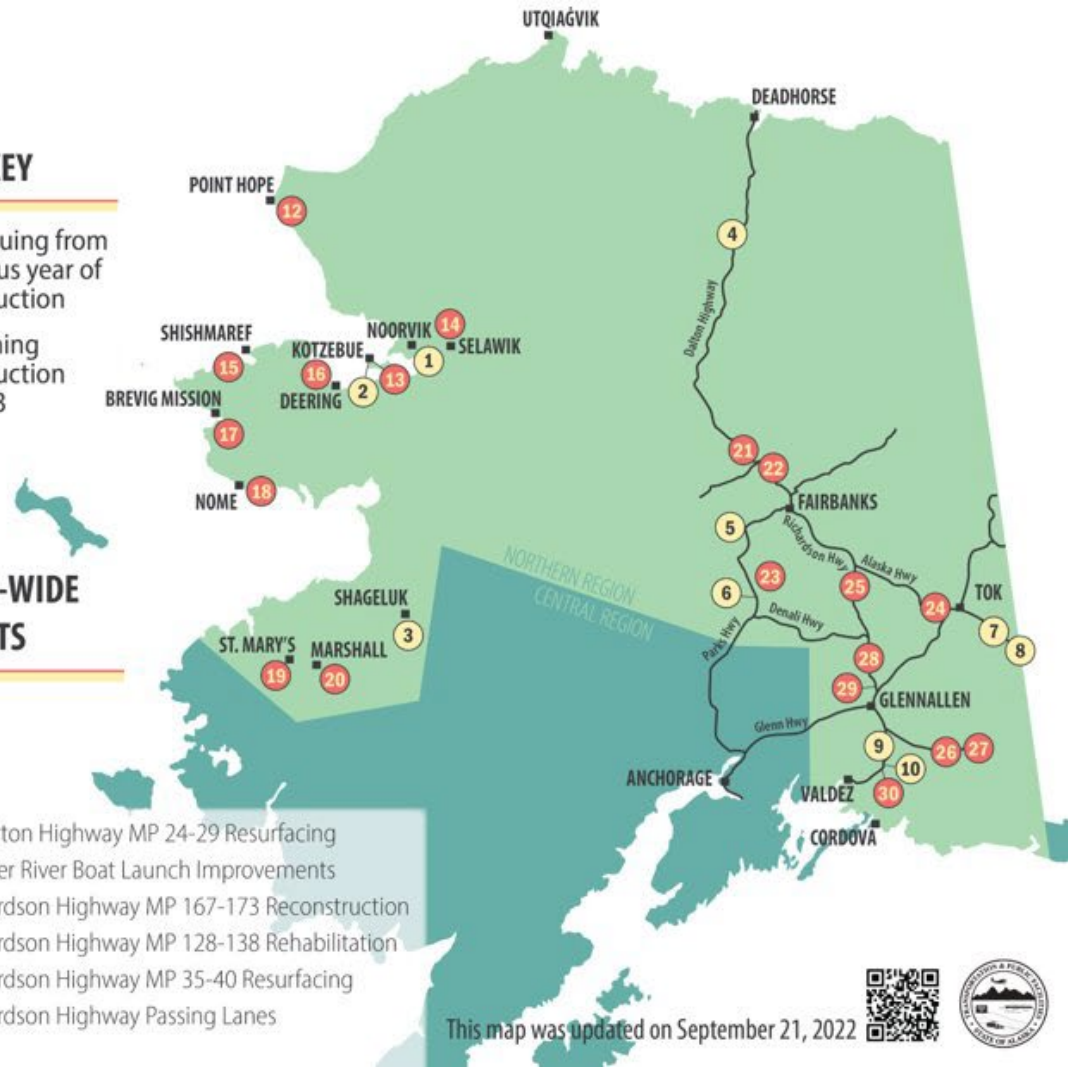
### COLOR KEY

- Continuing from previous year of construction
- Beginning construction in 2023

### REGION-WIDE PROJECTS

BEGINNING IN 2023

- 26 | Edgerton Highway MP 24-29 Resurfacing
- 27 | Copper River Boat Launch Improvements
- 28 | Richardson Highway MP 167-173 Reconstruction
- 29 | Richardson Highway MP 128-138 Rehabilitation
- 30 | Richardson Highway MP 35-40 Resurfacing
- 31 | Richardson Highway Passing Lanes





# NORTHERN REGION

## FAIRBANKS AREA | 2023 CONSTRUCTION

### CONTINUING

- 32 | Chena Hot Springs Road MP 0-6 & Roundabouts
- 33 | Airport Way West Improvements
- 34 | Airport Way / Steese Expy Reconstruction and Steese Expy Chena River Bridge Redeck
- 35 | Rosie Creek Road Improvements

### BEGINNING IN 2023

- 36 | Old Steese at Fox Shoulder Widening
- 37 | Northern Region ADA Improvements College Road
- 38 | Aurora Drive Noyes Slough Bridge Replacement
- 39 | East College Road Resurfacing
- 40 | 5th Avenue Reconstruction
- 41 | University Avenue (Segment 2c)
- 42 | Chena Ridge and Chena Pump Resurfacing
- 43 | FAI General Aviation Apron Rehabilitation
- 44 | Richardson Hwy MP 359 Railroad Crossing
- 45 | Digital Messaging Signs (Parks & Richardson Hwys)
- 46 | Richardson Hwy MP 357-362 Bicycle/Pedestrian Path
- 47 | Fairbanks Area Vehicle Plug-Ins
- 48 | FAST Planning Surface Upgrades
- 49 | North Pole Street Light Standardization

### AREA-WIDE PROJECTS

47 48 49

### COLOR KEY

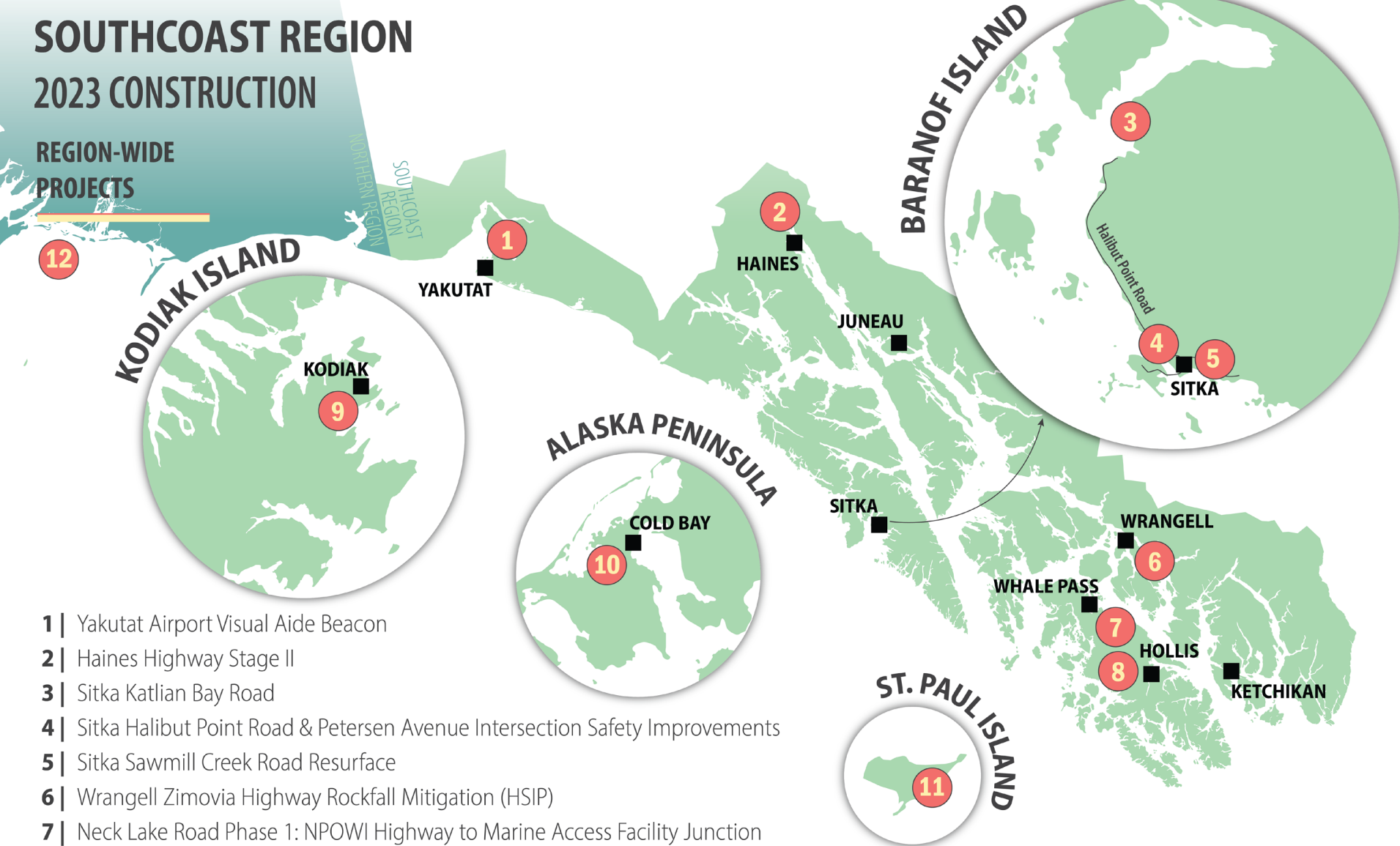
- Continuing from previous year of construction
- Beginning construction in 2023



# SOUTHCOAST REGION

## 2023 CONSTRUCTION

### REGION-WIDE PROJECTS



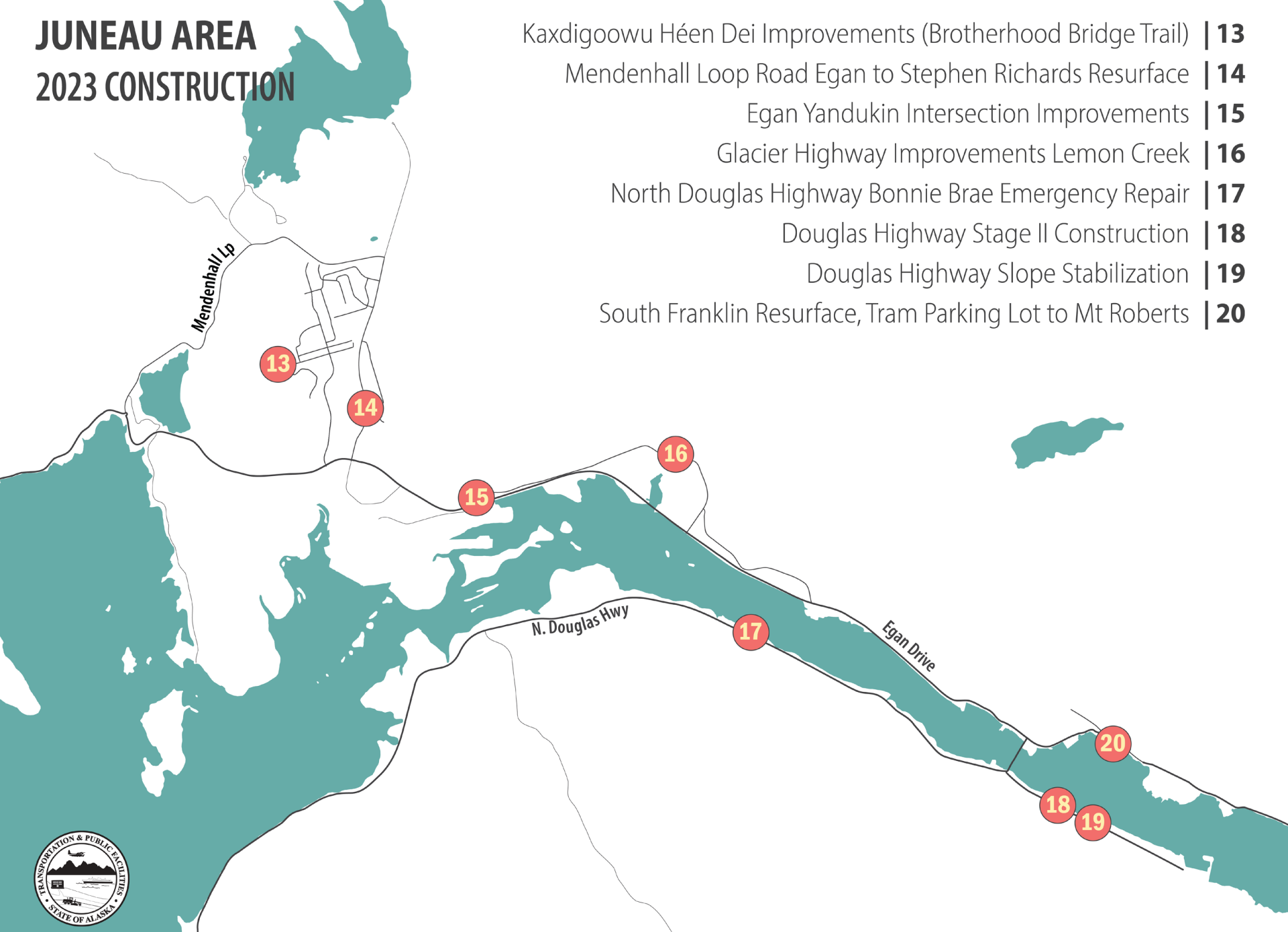
- 1 | Yakutat Airport Visual Aide Beacon
- 2 | Haines Highway Stage II
- 3 | Sitka Katlian Bay Road
- 4 | Sitka Halibut Point Road & Petersen Avenue Intersection Safety Improvements
- 5 | Sitka Sawmill Creek Road Resurface
- 6 | Wrangell Zimovia Highway Rockfall Mitigation (HSIP)
- 7 | Neck Lake Road Phase 1: NPOWI Highway to Marine Access Facility Junction
- 8 | Prince of Wales Island Hollis Highway Guardrail Safety Improvements (HSIP)
- 9 | Kodiak Airport Perimeter Fencing Upgrades
- 10 | Cold Bay Airport Chemical/Snow Removal Equipment Building
- 11 | St. Paul Visual Aide
- 12 | FEMA Emergency Projects





# JUNEAU AREA

## 2023 CONSTRUCTION



- Kaxdigoowu Héen Dei Improvements (Brotherhood Bridge Trail) | **13**
- Mendenhall Loop Road Egan to Stephen Richards Resurface | **14**
- Egan Yandukin Intersection Improvements | **15**
- Glacier Highway Improvements Lemon Creek | **16**
- North Douglas Highway Bonnie Brae Emergency Repair | **17**
- Douglas Highway Stage II Construction | **18**
- Douglas Highway Slope Stabilization | **19**
- South Franklin Resurface, Tram Parking Lot to Mt Roberts | **20**



# KETCHIKAN AREA 2023 CONSTRUCTION



- 21** | Wolfe Point Slope Stability Improvements
- 22** | Gravina Airport Ferry Layup Facility
- 23** | Revilla New Ferry Berth & Upland Improvements
- 24** | Tongass Avenue Improvements
- 25** | Ferry Terminal Upgrades (Berth 3)
- 26** | Water Street Trestle No. 1 Improvement
- 27** | Stedman & Deermount Streets Intersection Safety Improvements
- 28** | Herring Cove Bridge Replacement





# **SOUTHCOAST REGION: Katlian Bay Road Project**

**Risks:** 9 miles new road construction

## **Challenges**

- Extremely steep terrain
- Unexpected quantities of overburden
- Natural and construction related landslides
- Strict permitting requirements

## **Solutions**

- Completed a pioneer route and survey in 2022 reducing the number of unknown conditions
- Optimize alignment during winter shutdown to conditions encountered constructing the pioneer route
- Work closely with permitting agencies and adjacent property owners to facilitate alignment shifts and larger waste areas

Original Contract: \$31.8M

Original Completion Date: 30Sep2023

Estimated Contract at Completion: \$53.8M

Estimated Contract Completion: 31Dec2024

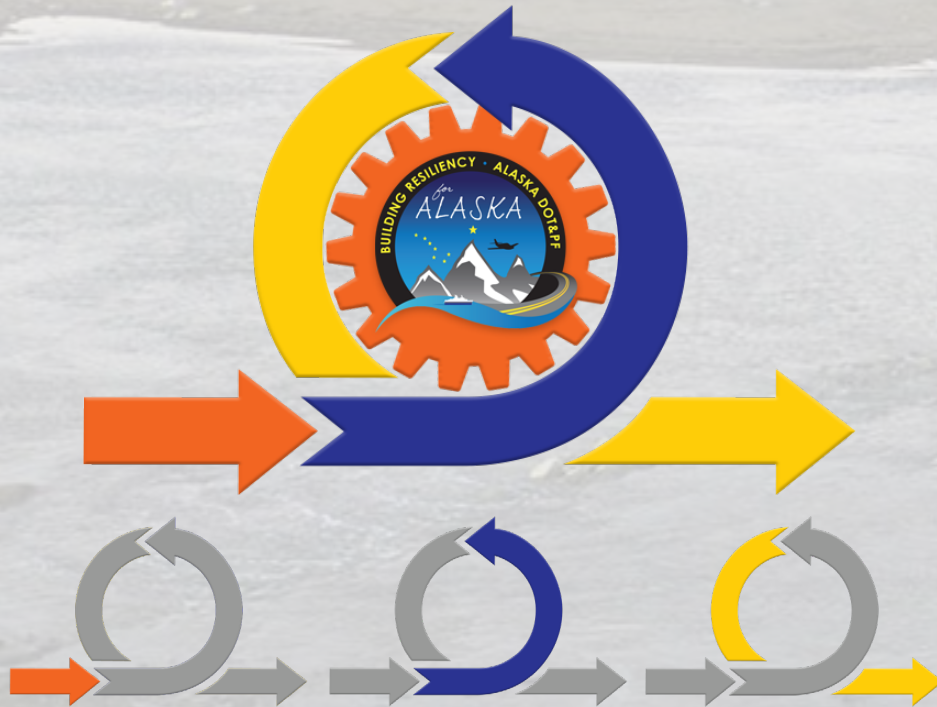
Total Cost at Completion (Est.): \$67.9M





# SERVICES TO ALASKANS

- Safety Corridors
- West Coast Alaska Storm Response
- Winter Maintenance
- Community-Driven Planning
- AMHS Reliability

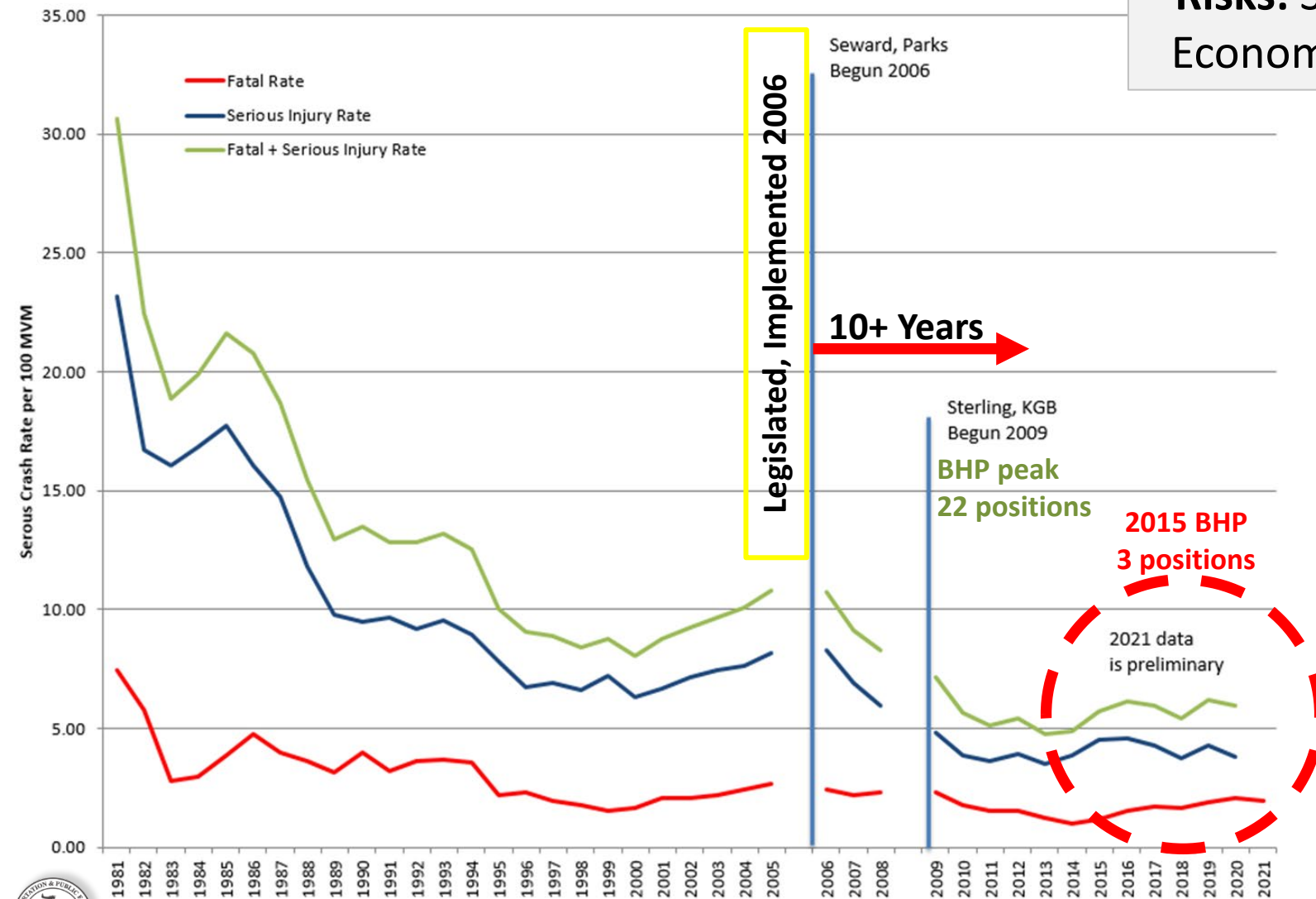




# SAFETY CORRIDORS

Safety Corridors: Serious Crash Rate (5 year rolling average)

**Risks: Safety and Economic Vitality**



# SAFETY CORRIDORS: Next Steps



**Solutions:** Engineering, Enforcement, Education, Emergency Response

## Engineering Solutions

- Seward Highway, Potter Marsh to Girdwood
- Parks Highway, Wasilla to Houston
- Sterling Highway, Sterling to Soldotna
- Knik-Goose Bay Road, Palmer-Wasilla Highway to Point MacKenzie Road

## Education Campaigns

## Enforcement Campaigns

- Bureau of Highway Patrol

## Emergency Response Support

- Glenn Highway Integrated Corridor Management





# WEST COAST ALASKA STORM RESPONSE

## Risks: Safety, Resiliency

### Challenges

- Multiple day storm Sept. 16-19
- Impacts over hundreds of miles
- High winds, strong coastal wave, storm surge, floods
- Norton Sound sea level rise of 8-18 ft.
- Over 50 miles of fed-aid highway damaged

### Solutions

- Local DOT&PF maintenance took early actions to reopen runways
- Emergency Declarations completed quickly
- Emergency Procurements prioritized
- Contractors, Communities, & DOT&PF staff teamed up to repair infrastructure
- Partnerships with DMVA, DEC, FAA, ANTHC, FEMA, FHWA, Local Governments & more



Photo Courtesy of Cheri McConnel;  
Photos Courtesy of DOT&PF Storm Damage Survey

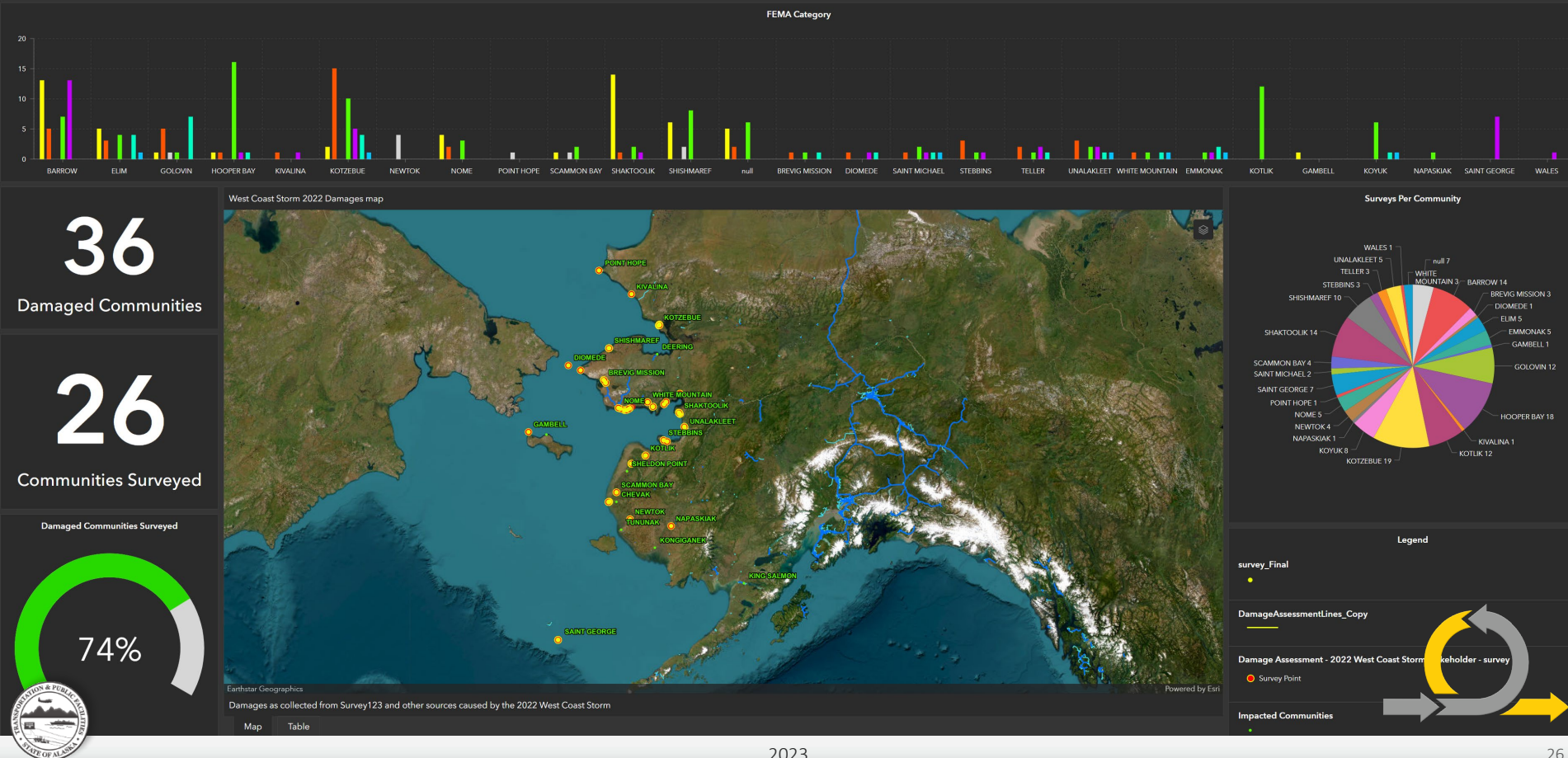




# WEST COAST ALASKA STORM RESPONSE: Next Steps

**Solutions:** Technology, Coordinated Damage Assessments, Real time responses to repair requests, Agile Project Management Processes

Alaska DOT&PF West Coast Storm Response This dashboard is still being updated.





# WINTER MAINTENANCE

**Risks:** Safety, Economic Vitality,  
Resiliency

**DOT&PF Challenges:**

- Increasing frequency of extreme events
- Vacancies, shortage of qualified workers
- Supply chain challenges
- Constrained resources





# WINTER MAINTENANCE: Next Steps

**Solutions:** Partnering, Workforce Development; Recruitment Retention, Flexibility / Scalability

## Partnering

- Local Government coordination
- Leveraging DOT&PF resources statewide

## Workforce Development

- Incident Command System training
- CDL, Equipment Operators

## Recruitment Retention

- Flexible work schedules 1X1 & 2X2
- Mission Critical Incentive Pay

## Flexibility/Scalability

- Use of contracts for emergency response
- Use of contracts or local government agreements to meet basic level of service



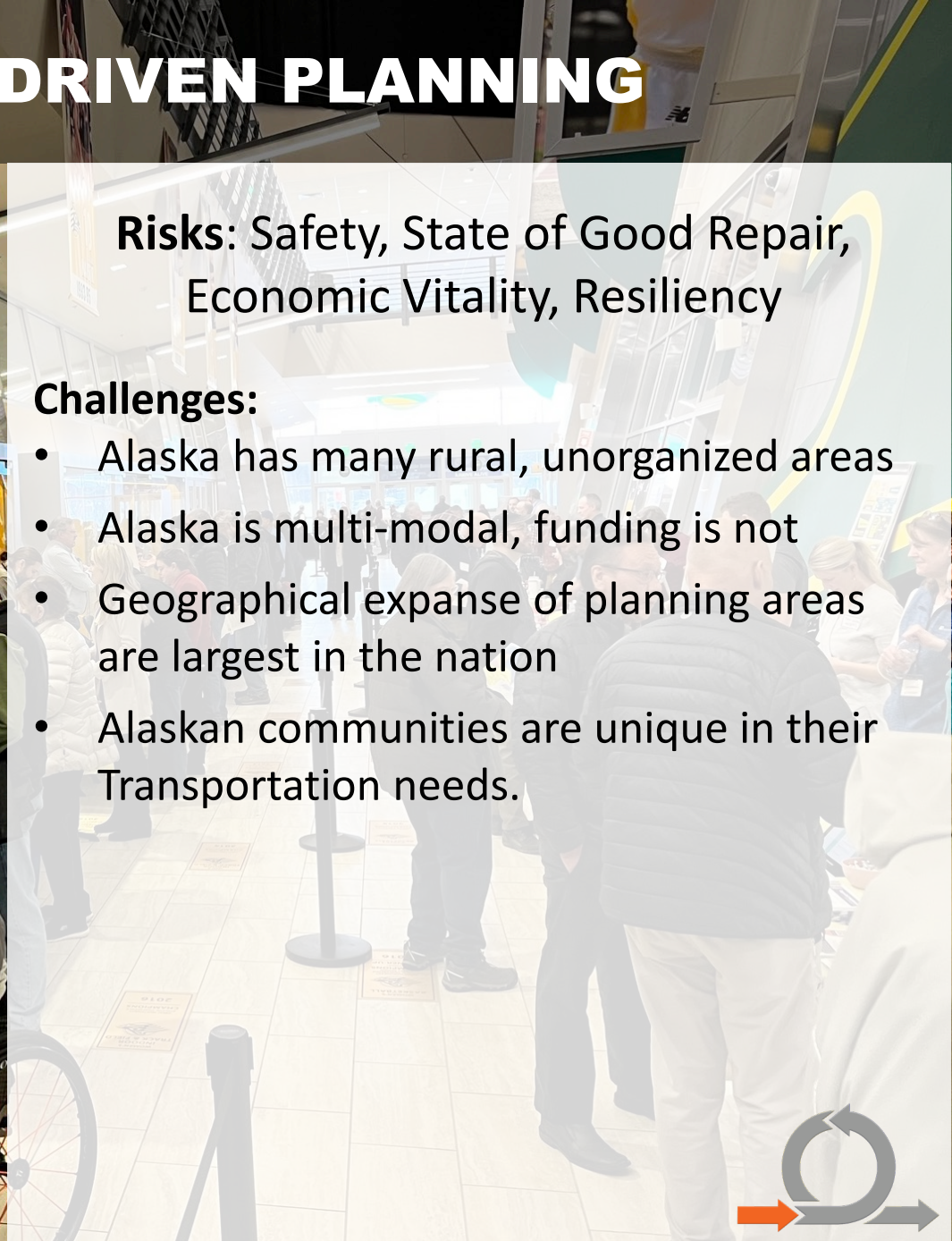


# COMMUNITY-DRIVEN PLANNING

**Risks:** Safety, State of Good Repair, Economic Vitality, Resiliency

**Challenges:**

- Alaska has many rural, unorganized areas
- Alaska is multi-modal, funding is not
- Geographical expanse of planning areas are largest in the nation
- Alaskan communities are unique in their Transportation needs.





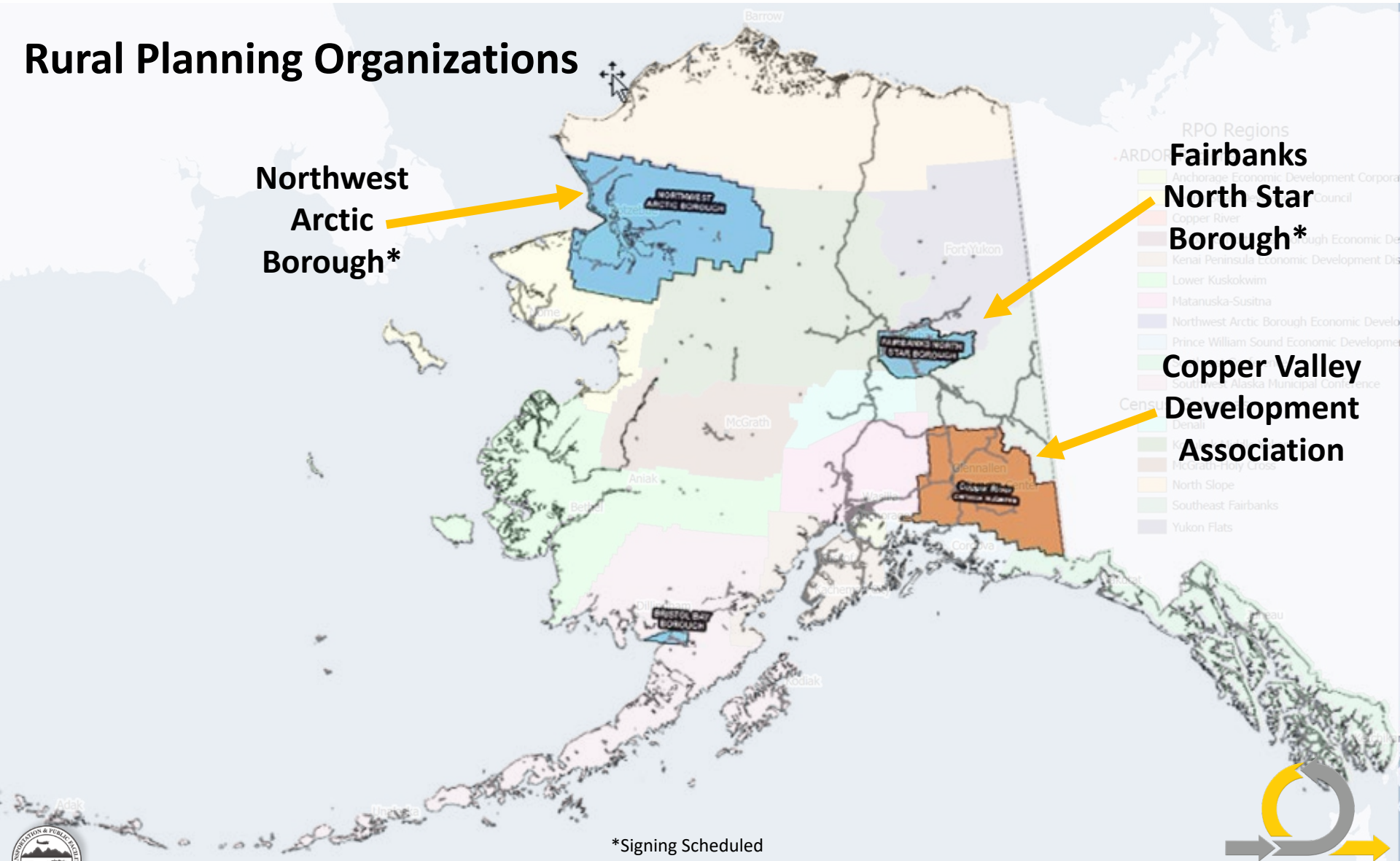
# COMMUNITY-DRIVEN PLANNING: Next Steps

## Rural Planning Organizations

**Northwest  
Arctic  
Borough\***

**Fairbanks  
North Star  
Borough\***

**Copper Valley  
Development  
Association**



# AMHS RELIABILITY

**Risks:** Safety, State of Good Repair, Economic Vitality

Aging vessels more expensive, longer in shipyard, impacting schedule and budgets.

## Challenges

- Unexpected delays for travelling public
- Overhaul timeframes increase
- Overhaul expense increasing
- Essential service to coastal communities is reduced with due to ship availability reductions





# AMHS RELIABILITY: Next Steps

**Solutions:** Capital investment; IIJA;  
Discretionary Grants

- Charting the Course Initiative
- Operational Audit
- Review of maintenance and overhaul practices
- Leverage younger ships in the fleet
- Pursue capital program for vessel replacement via IIJA funding, discretionary grants





# THANK YOU.

Ryan Anderson, P.E.

Commissioner

907-465-3900

[DOT.Commissioner@Alaska.gov](mailto:DOT.Commissioner@Alaska.gov)



*Northern lights dance over the Tazlina  
Maintenance Station.*

Photo by Carolyn Conway, Alaska DOT&PF

