



Alaska Department of Transportation & Public Facilities Senate Transportation Committee

Ryan Anderson, P.E., Northern Region Director

February 13, 2018

Keep Alaska Moving through service and infrastructure

Northern Region

Design & Construction

Employee Spotlight



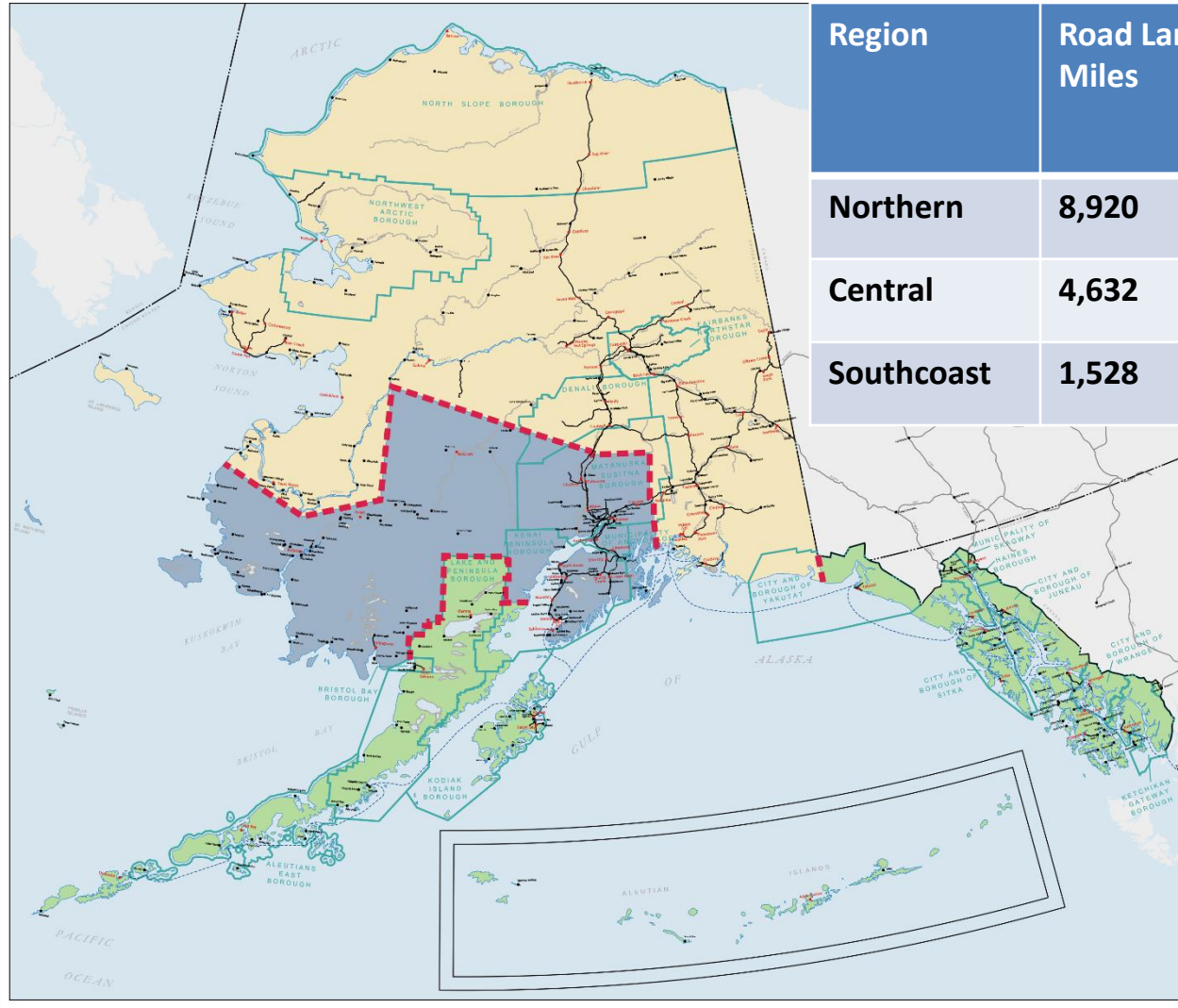
Brandy Milles

Northern Region Employee of the Year

- Construction Engineering Technician
- Three years of service with DOT&PF
- Completed UAV Pilot's Licensing program to become certified drone pilot
- Innovation: measuring material stockpiles with drones to increase efficiency and save money

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Region	Road Lane Miles	Maintenance Stations	Airports
Northern	8,920	37	101
Central	4,632	20	70
Southcoast	1,528	19	69

Northern Region Local Government Summary

- 124 Communities
- 6 boroughs
- Over 50 city governments
- Over 100 tribes
- 1 metropolitan planning organization (FMATS)



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Regional Focus Areas

- Results Based Alignment
- 2018 Construction Season
- 2017 Accomplishments
- Leveraging Technology
- Innovative Contracting
- Project Teams Pilot Program





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Results Based Alignment (RBA)

“A service delivery framework from which we measure the efficiency and effectiveness of the services delivered in support of our mission”

Regional Measures for Project Delivery:

- Programmed Dollars planned versus delivered
- Average Project Development Time
- Design/Construction Costs at Award
- CIP Dollars: Contracting vs. In-House

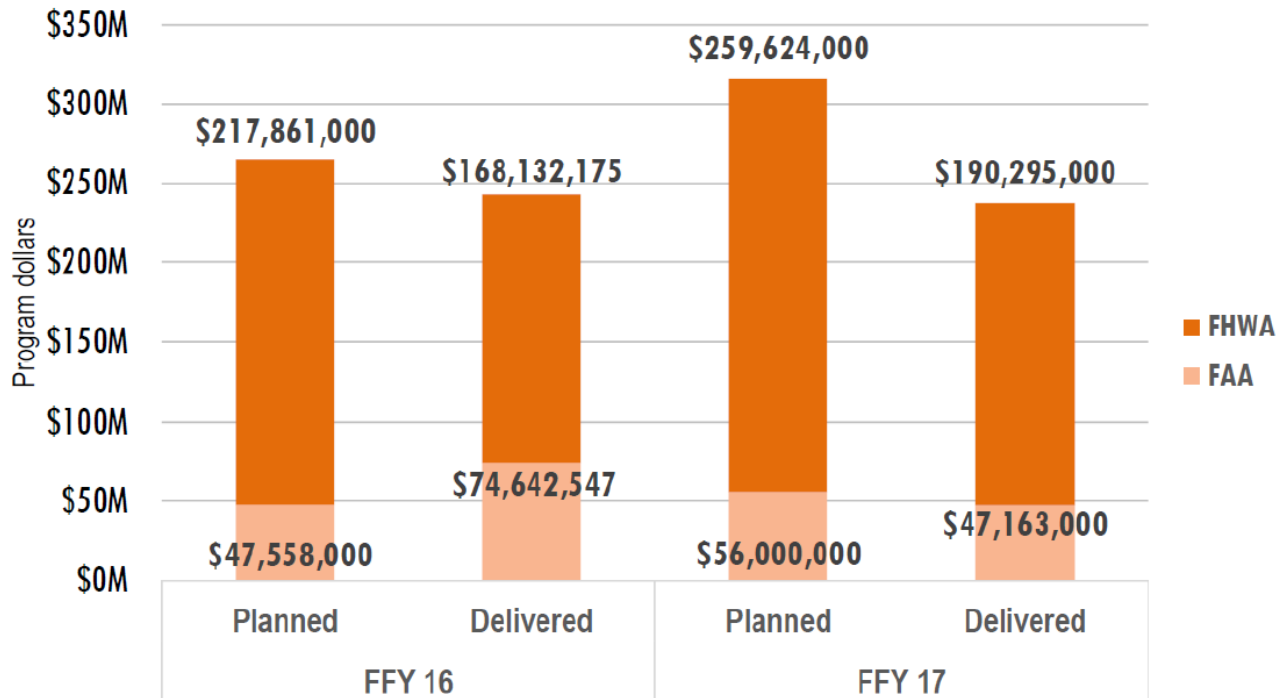


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Results Based Alignment (RBA)

Program dollars planned versus delivered



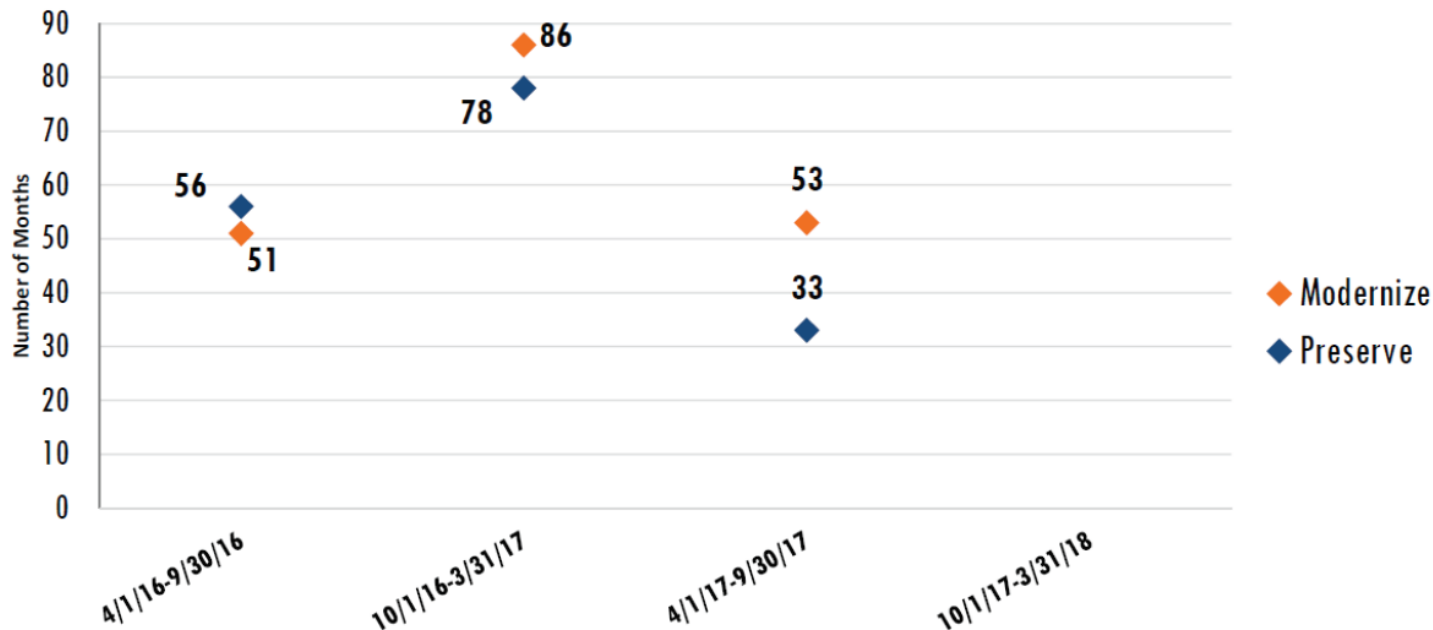
Data Source: *Project control obligation data sets*

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Results Based Alignment (RBA)

Average project development time from project initiation to bid



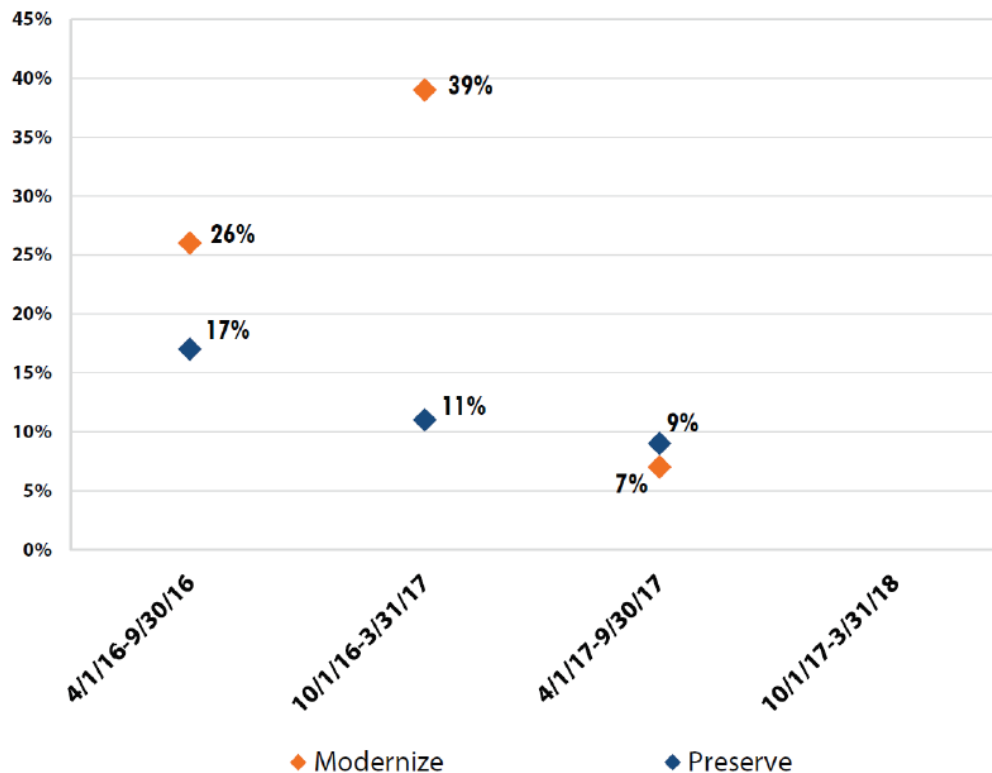
Data Source: *Project Control/Contracts ATP and bid award records*

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Results Based Alignment (RBA)

Design/construction costs at award reported upon project bid opening



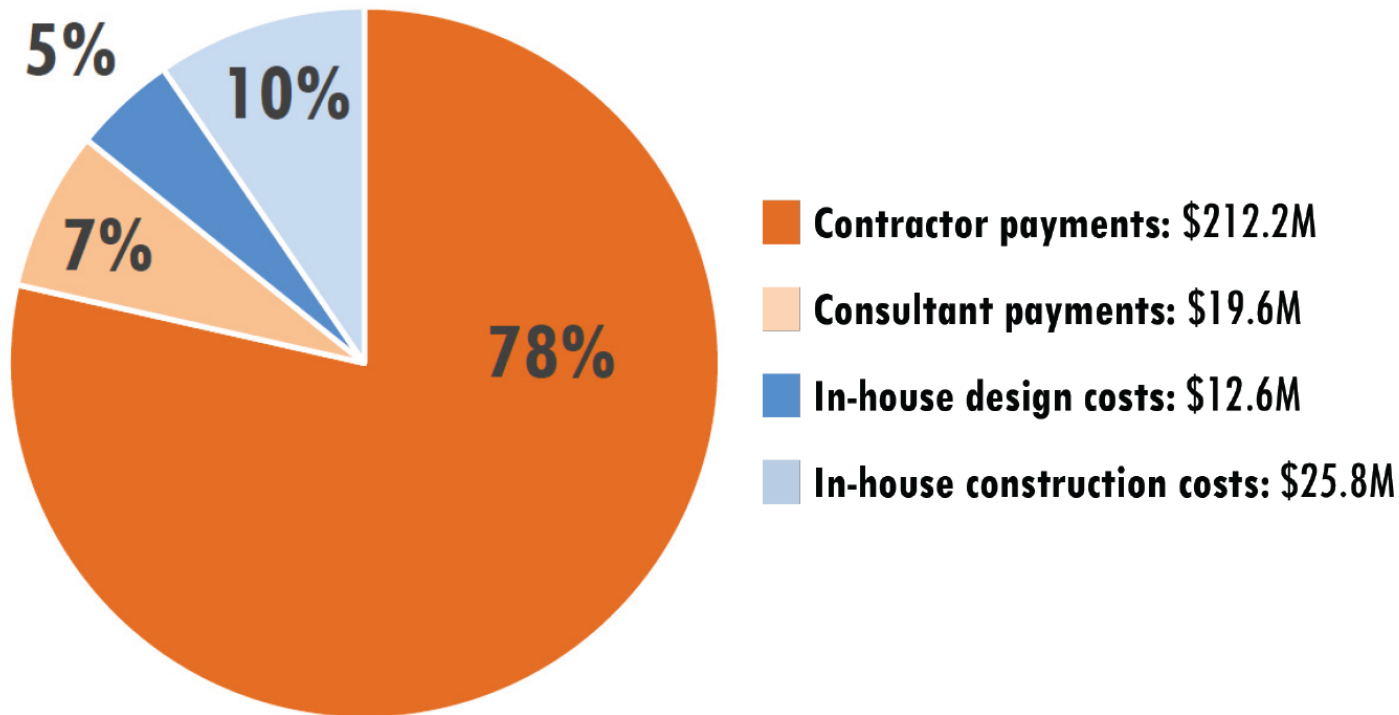
Data Source: *IRIS/Alder Reports, construction contract records*

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Results Based Alignment (RBA)

CIP dollars to contracting versus in-house



Reporting Period: July 1, 2016 - June 30, 2017

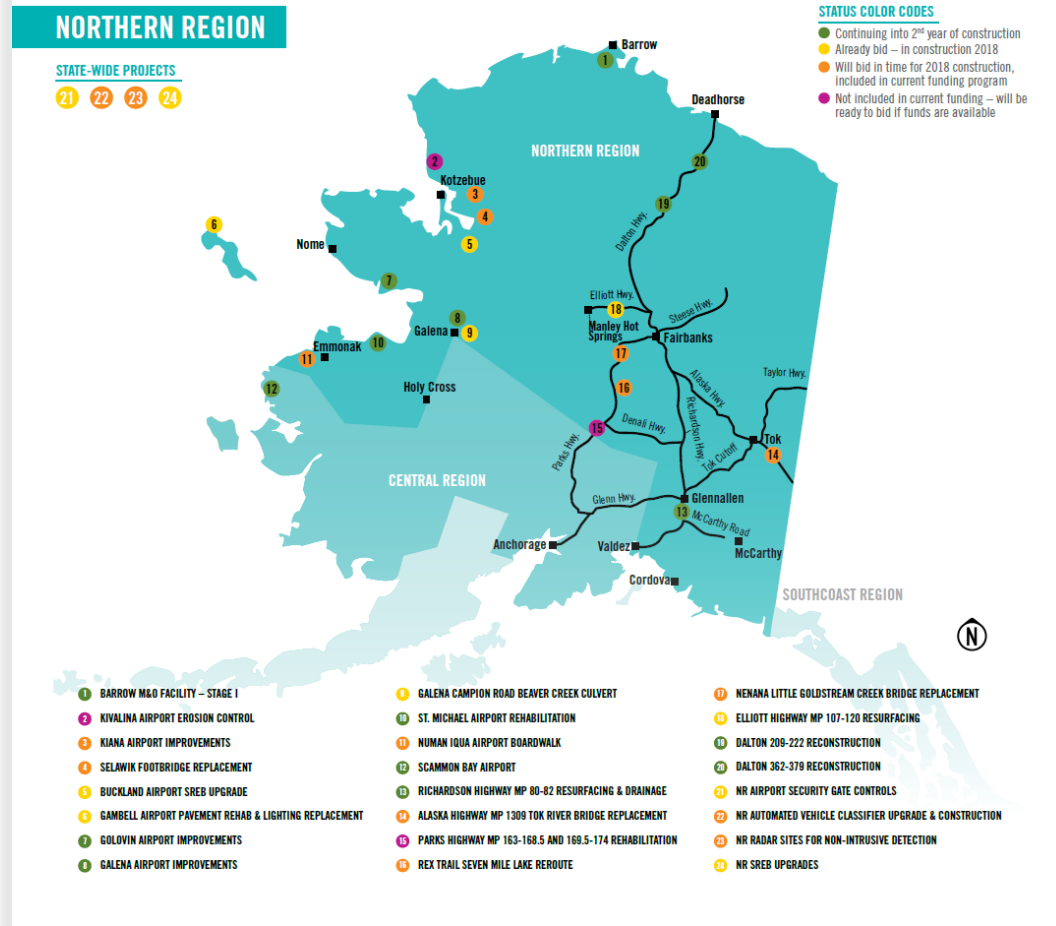
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Coming soon...

- **25** rural Northern Region projects
- **8** projects continuing into 2nd year of construction
- **6** new projects already bid
- **9** new projects funded and will be ready to bid in time for 2018 season
- **2** new projects will be ready to bid, but are not currently funded

2018 CONSTRUCTION SEASON



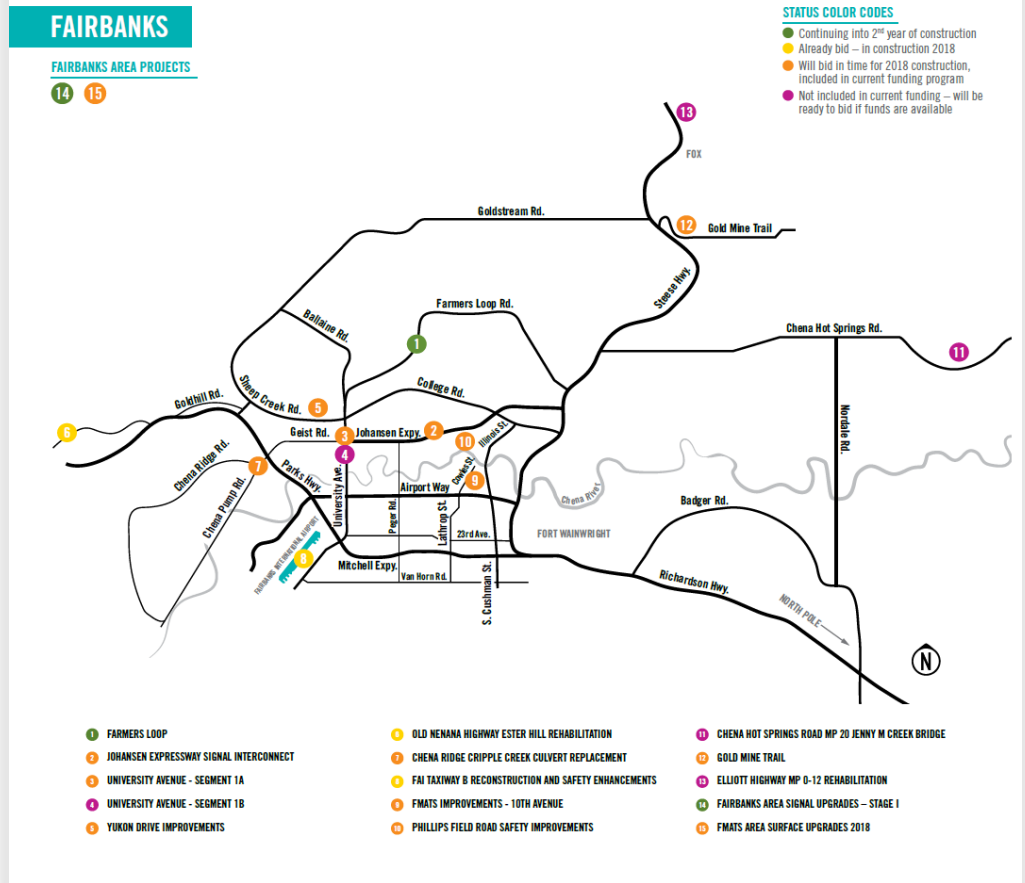
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Coming soon...

- **14** Fairbanks-area projects
- **2** projects continuing into 2nd year of construction
- **2** new projects already bid
- **8** new projects funded and will be ready to bid in time for 2018 season
- **2** new projects will be ready to bid, but are not currently funded

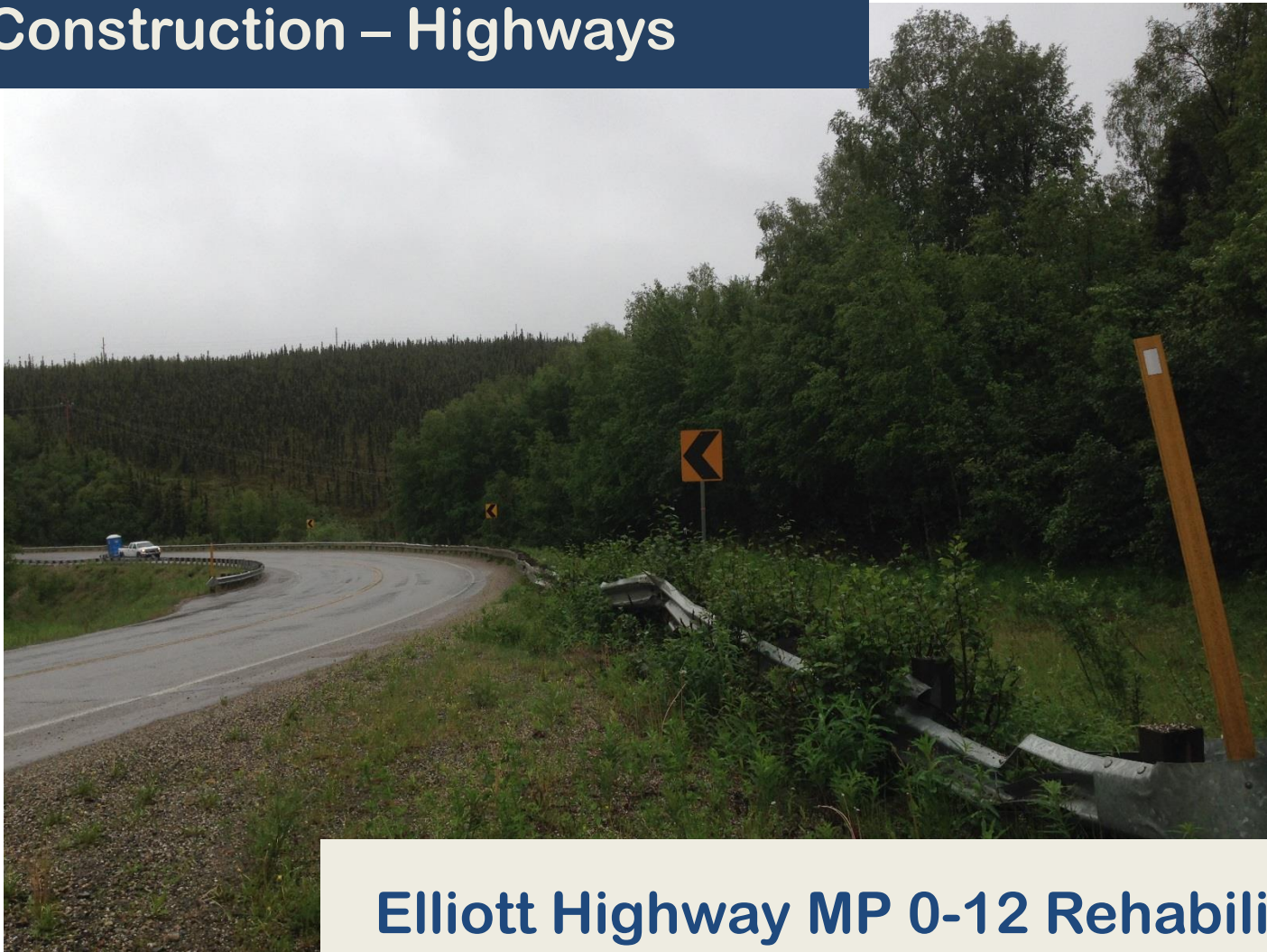
2018 CONSTRUCTION SEASON



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2018 Construction – Highways



Elliott Highway MP 0-12 Rehabilitation

Northern Region

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2018 Construction – Bridges



Alaska Highway MP 1309 - Tok River Bridge Replacement

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2018 Construction – Fairbanks Area

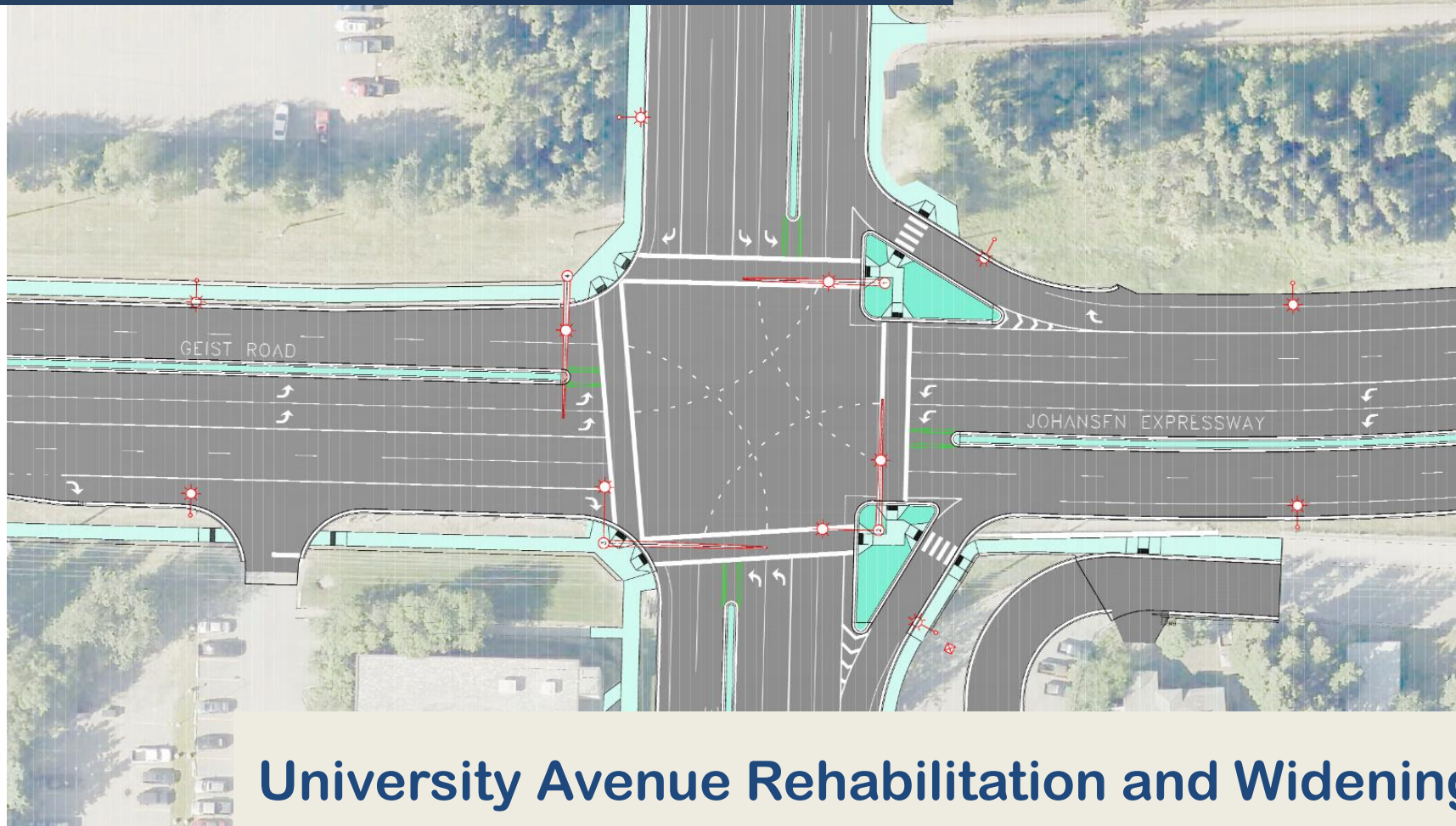


Old Nenana Highway / Ester Hill Rehabilitation

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2018 Construction – Fairbanks Area

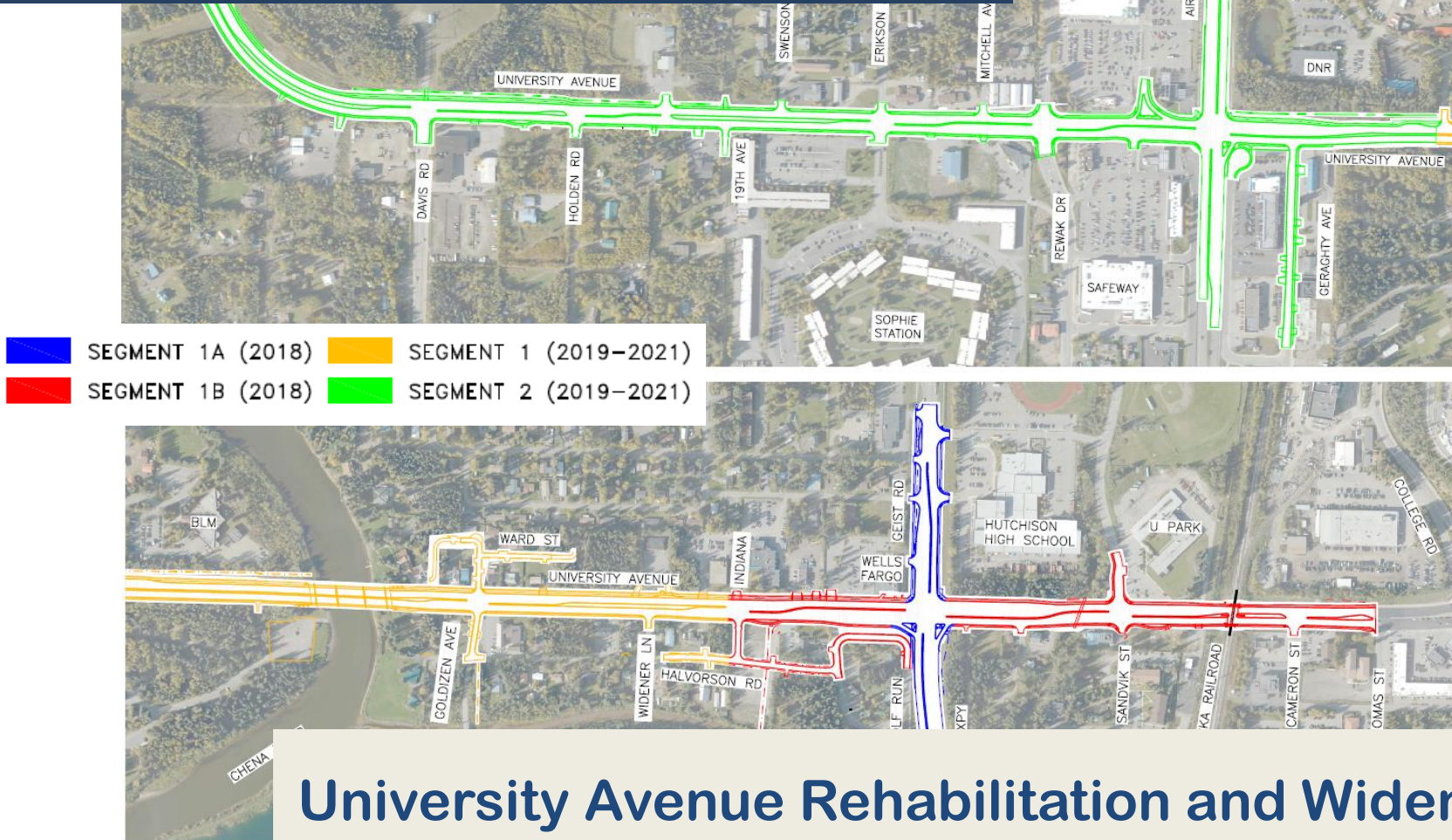


University Avenue Rehabilitation and Widening

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2018 Construction – Fairbanks Area



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2018 Construction – Fairbanks Area



Farmers Loop Resurfacing

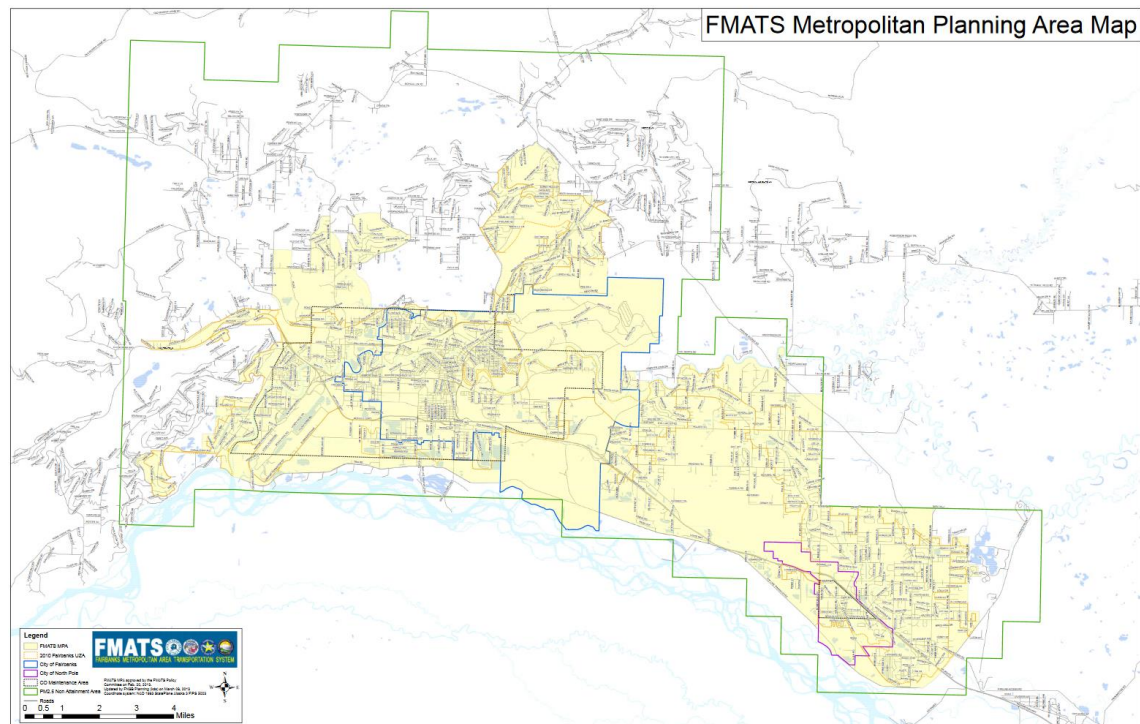
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Fairbanks Metropolitan Area Transportation System

FMATS Participating Organizations

- State of Alaska
 - DOT&PF
 - DEC
- Fairbanks North Star Borough
- City of Fairbanks
- City of North Pole
- Fort Wainwright
- University of Alaska Fairbanks
- Fairbanks International Airport
- Freight Industry
- Alaska Railroad Corporation



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2018 Construction – FMATS

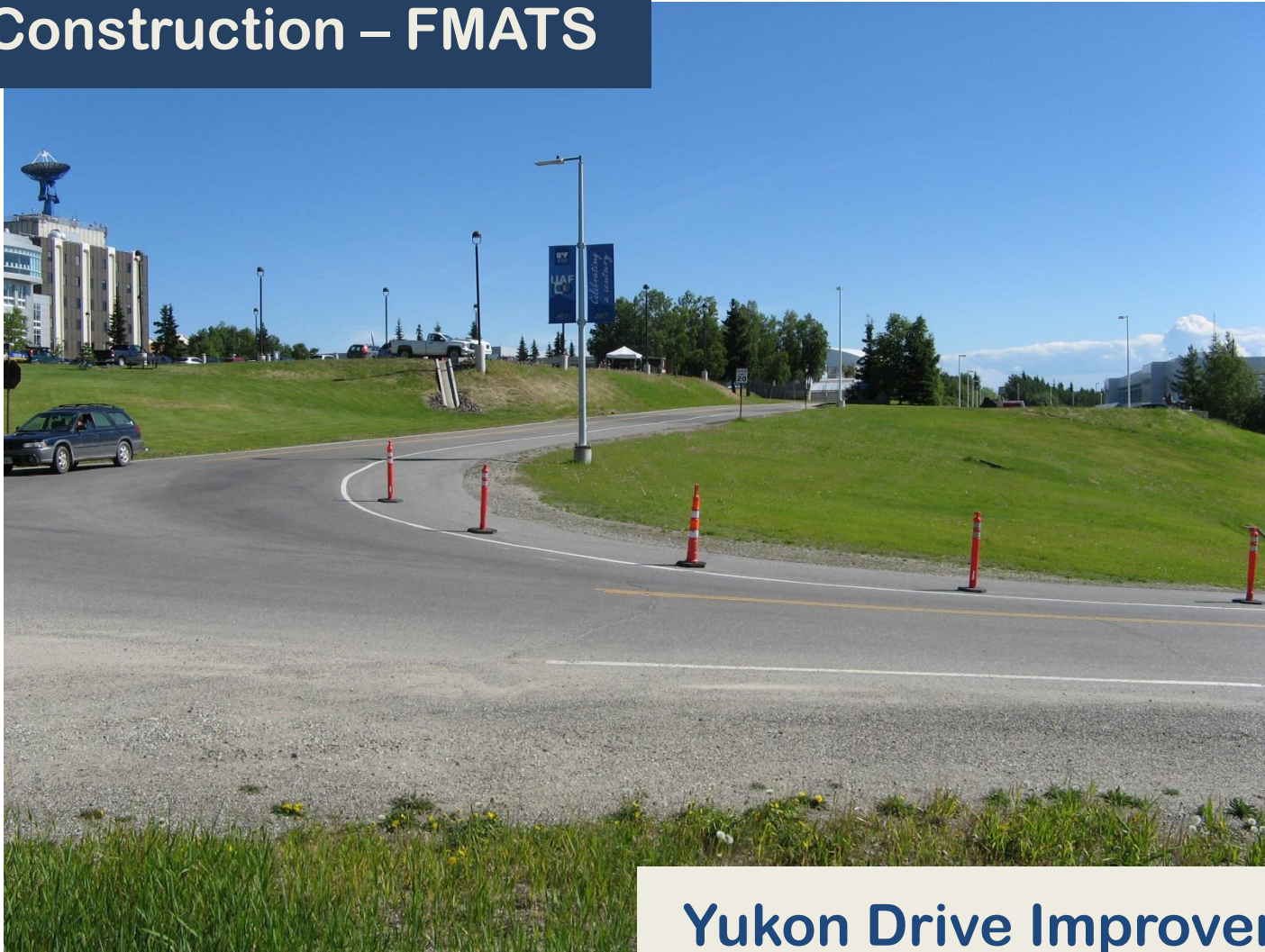


FMATS 2018 Surface Upgrades

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2018 Construction – FMATS



Yukon Drive Improvements

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Accomplishments - FMATS



Noble Street Upgrades

Where to find construction info

The screenshot displays the Alaska Navigator website interface. At the top, a yellow mountain range graphic is above the 'navigator' logo and the text 'STATE of ALASKA DEPARTMENT of TRANSPORTATION & PUBLIC FACILITIES'. The main content area is divided into several sections:

- Now viewing Statewide**: A dropdown menu for 'Select Another Region'. Below it, a welcome message: 'Welcome to the Alaska Navigator, your source for road construction information. Select a region to view construction projects and closures in your area.'
- MAP LEGEND**: A yellow box with a map icon. It lists 'Project' (yellow pin) and 'Project with ROAD CLOSURES' (red pin). A note says: 'Click a marker on the map for a project overview. Follow the link on the overview for detailed project information.'
- IN ALL CONSTRUCTION AREAS**: A yellow box with a warning icon. It lists safety tips: 'Traffic fines are double', 'Watch for changing driving surfaces', 'Watch for reduced speed limits', 'Be alert to and follow directions of flaggers', 'Drive with headlights on', 'Allow additional time when traveling', and 'Watch for equipment and workers'.
- Map**: A map of Fairbanks, Alaska, showing construction projects. A red hatched area indicates a project. A tooltip for 'NOBLE STREET UPGRADES' states: 'ROAD CONSTRUCTION through October. Noble Street will be completely CLOSED during 2:57 pm Apr 10, 2017. View Project Details'.
- TRAVELING SOON?**: A yellow box with a list of upcoming projects and closures, each with a location pin icon and a link: 'PARKS HIGHWAY, CHURCH ROAD to PITTMAN ROAD', 'RASPBERRY ROAD, JEWEL LAKE ROAD to MINNESOTA DRIVE PAVEMENT PRESERVATION', 'GLENN HIGHWAY and MULDOON ROAD INTERCHANGE IMPROVEMENTS', 'KLATT ROAD and JOHNS ROAD ROUNDABOUT and IMPROVEMENTS', 'FUTURE ROAD CLOSURE: Beginning in May 2017, an extended 21-day ROAD CLOSURE at t', and 'MOA: FLASHING YELLOW ARROWS PROJECT and SIGNAL UPGRADE, PHASE I'.
- Today's date is:** APRIL 13, 2017. Last updated at: 11:53 April 13, 2017.

The footer contains a yellow bar with links: 'Get a print-ready list of projects', 'Need help using this map?', 'Alaska Department of Transportation', 'Title VI Nondiscrimination', and social media icons for Facebook and 511.

AlaskaNavigator.org

Where to find construction info



511.Alaska.Gov or call 511

Where to find construction info



Alaska Department of Transportation & Public Facilities

added 3 new photos.

Published by Betsy Hess [?] · March 28 at 1:52pm ·

Traffic has moved to a detour bridge at Mile 75.6 Tok Cutoff as part of the Sana River Bridge Replacement. Be alert to a 30 mph speed limit on the detour bridge.

The detour is expected to be in place through the end of August.

Photos: Demo work is under way on the old Sana River bridge.

Check AlaskaNavigator.org for project updates.



6,013 people reached

Boost Post

Like Comment Share



Alaska DOT&PF @AlaskaDOTPF · Apr 5

Our crew members could be your family, friends or neighbors. Work zone safety is in your hands. #WorkZoneSafety #OrangeForSafety #NWZAW



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Social media

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2017 Construction Season

Northern Region 2017

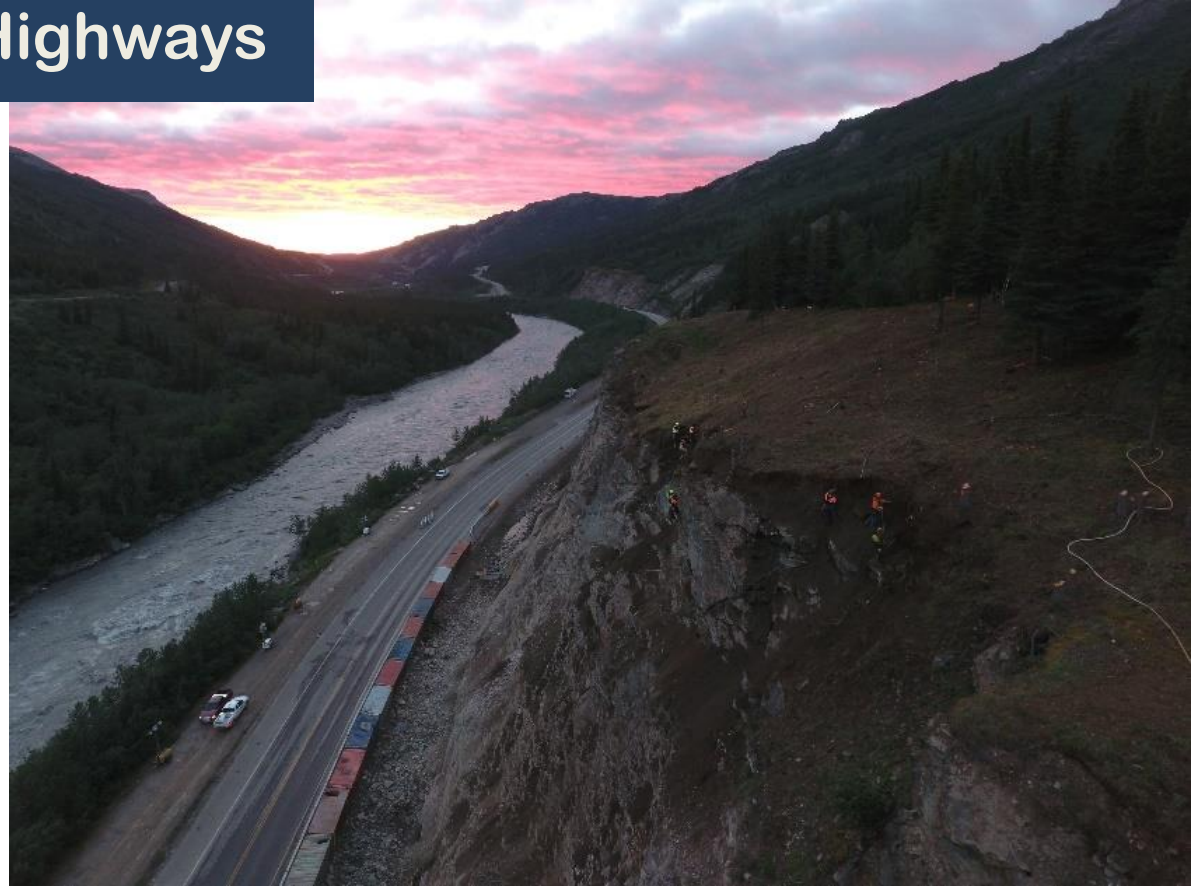
- 40 active construction projects in 16 communities
- Over \$300M in active construction contracts
- Over \$100M in active design contracts



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Accomplishments - Highways



Parks Highway MP 239-252



Northern Region

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Accomplishments - Highways



Richardson Hwy MP 337 - Eielson AFB Intersection

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Accomplishments - Bridges



Taylor Highway MP 64 - Chicken Creek Bridge

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Accomplishments - Bridges



Tok Cutoff MP 75 - Slana Creek Bridge

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Accomplishments - Bridges



**Richardson Highway:
MP 235 Ruby Creek
MP 295 Banner Creek**

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Leveraging Technology



Development of Low Distortion Projections & remote sensing to support surveying and engineering

Drones

Northern Region

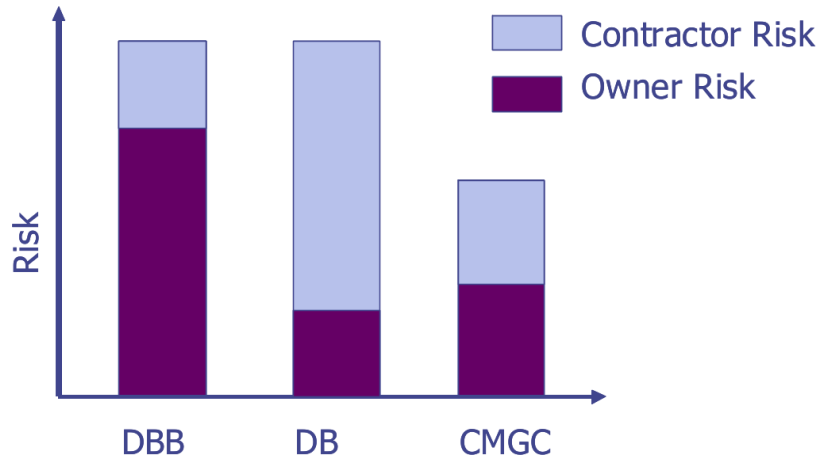
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Innovative Contracting

Construction Manager/General Contractor (CMGC)

Risk Management:

- **Project risks are shared** and can be minimized when worked through collaborative team effort.
- DOT&PF retains control over design and contract administration



Cost/Value:

- Risks identified in advance → overall project cost savings and cost certainty
- Maximizes **innovation** and **efficiencies**
- **Improved quality** with invested contractor as partner

Schedule/Funding:

- **Permitting assistance** on specific contractor methods
- **Collaboration** to expedite schedule
- **Cost certainty** allows for flexibility in creating work packages to align with funding

CMGC

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Pilot Program: Project Delivery Teams

Teaming in Construction for Time and Cost Savings



Desired Program Outcomes

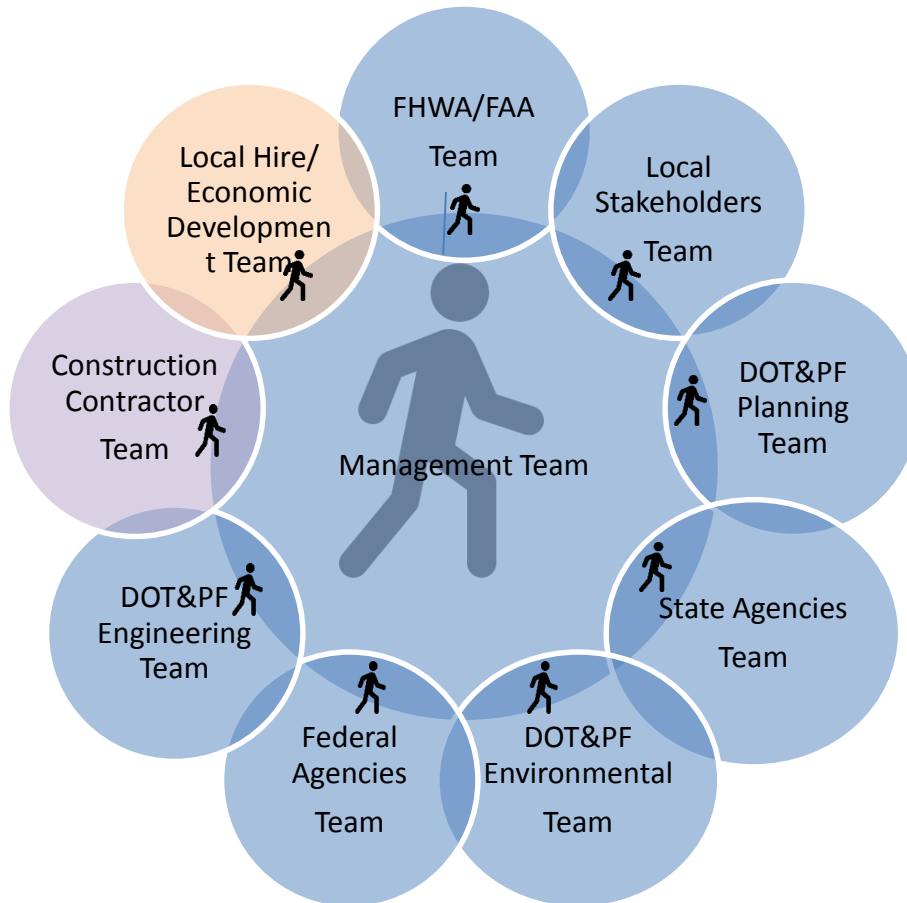
- Improved Delivery Timeframes
- Reduced Project Costs / Greater Cost Certainty
- More adaptive project delivery processes recognizing the constantly changing transportation needs of Alaska.



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Pilot Program: Project Delivery Teams



Teaming Successes

- Condensed environmental approval timelines
- Time savings with focused planning
- Cost savings with shorter time frames
- Actively involved communities
- Innovative contracting
- Leveraging technology



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Pilot Program: Project Delivery Teams

Focus on Planning

Active federal involvement in planning processes.

- Focusing on project planning will result in projects that are better-defined with greater cost certainty.

Team Support

Active participation in multidisciplinary teams.

- Advocating for federal agency participation at all phases of project development.

Flexibility to Perform Concurrent Processes

Reduce duplicative efforts.

- Allow for environmental document and permit application public reviews to run concurrently.

Innovative Contracting

Alternative procurement.

- Ability to fully integrate alternative procurement processes at the team's discretion.

Community Economic Development

Community Involvement

- Provide flexibility to maximize local involvement in projects.



Thank you!