Alaska Department of Transportation & Public Facilities

Statewide Aviation

# 2023 State of Alaska
# Unmanned Aircraft Systems (UAS) & Advanced Air Mobility (AAM)

March 14, 2023

# Alaska UAS/AAM Development

## $35.4 Million Programmed for CY 2023 for UAS Research and Development

- Funding Sources
  - U.S. DOT & FAA
  - State of Alaska
  - Private Investments
- Partnerships
  - ACUASI
  - State of Alaska Agencies
  - Federal
  - Private Industry

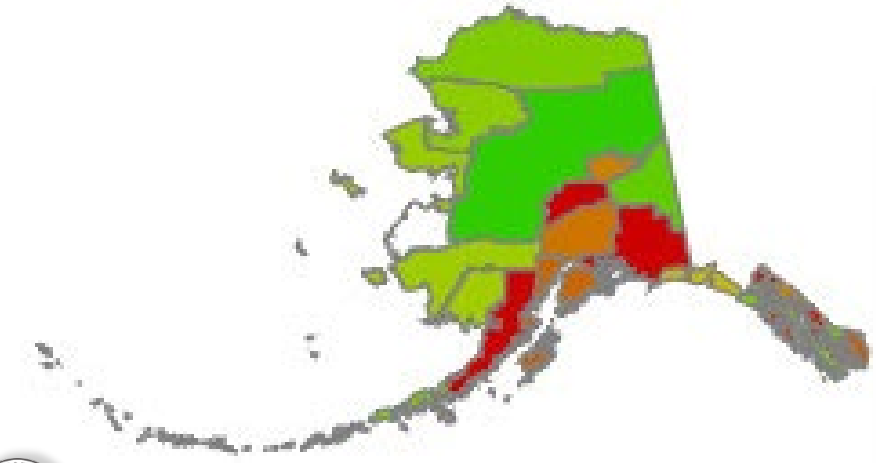
# Alaska UAS Growth for 2022-2023

## FAA | UAS Drone Popularity

Reporting data as of 1/10/2023 3:56:10 AM ET

### Ratio of Population to Drone Registrations

| Rank of Popularity | Name | Population | Registrations | Ratio 1 to Population |
|---|---|---|---|---|
| 1 | Alaska | 738,432 | 9,091 | 81 |
| 2 | Hawaii | 1,431,603 | 15,628 | 92 |
| 3 | Utah | 2,995,919 | 30,821 | 97 |
| 4 | Idaho | 1,654,930 | 17,003 | 97 |
| 5 | Colorado | 5,456,574 | 55,587 | 98 |
| 6 | Washington | 7,170,351 | 68,218 | 105 |



### Unmanned Aviation (AK)

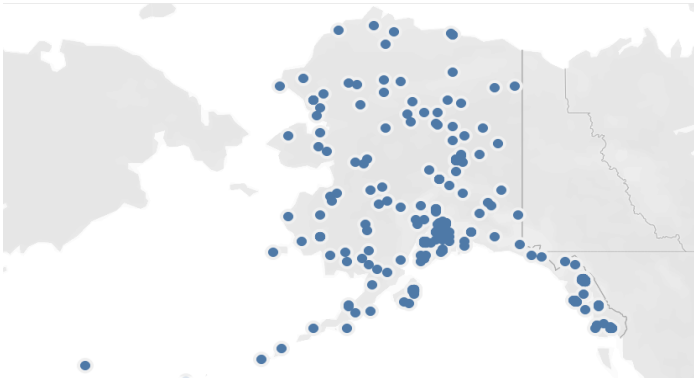
Remote Pilots = **3,241** ↑ 19% from 2022

Registered Unmanned Aircraft = **9,095** ↑ 12% from 2022

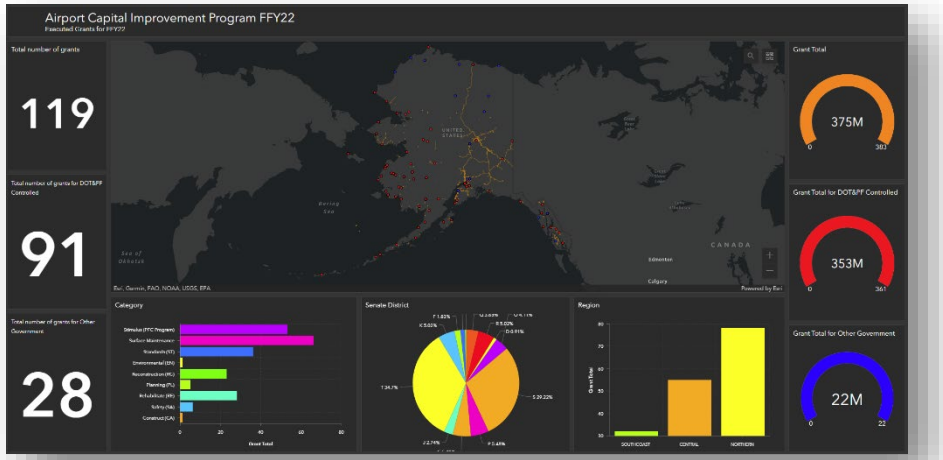
### Manned Aviation (AK)

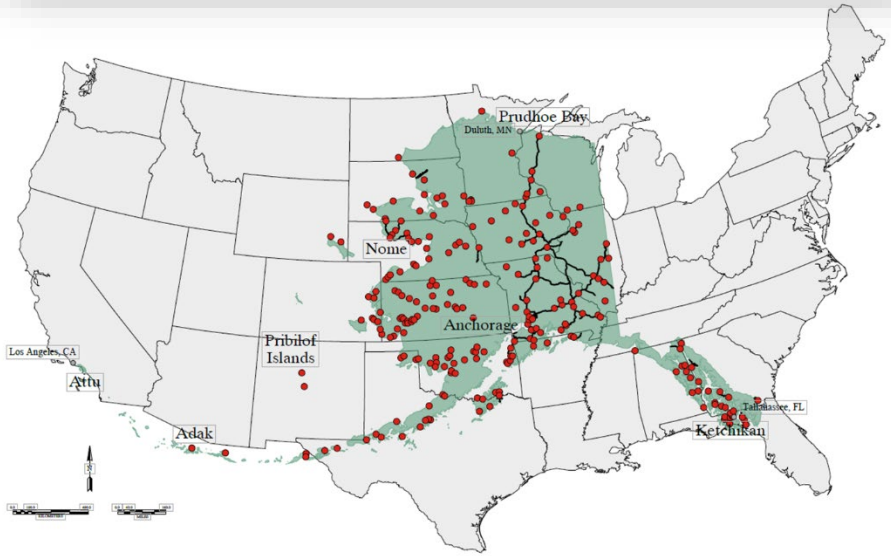
Manned Pilots = **9,428** ↑ 3% from 2022

Registered Manned Aircraft = **8,668** ↑ 4% from 2022



# AAM Gap Analysis and Transportation System



# FAA Alaska Aviation Safety Initiative (FAASI)

Safety Outreach

Continue and develop new safety outreach collaborations to address concerns...

Aeronautical Charting

Improve navigation charting by verifying and adding mountain pass information...

Weather Reporting Enhancements

Install weather observing systems at airports and continue testing new weather...

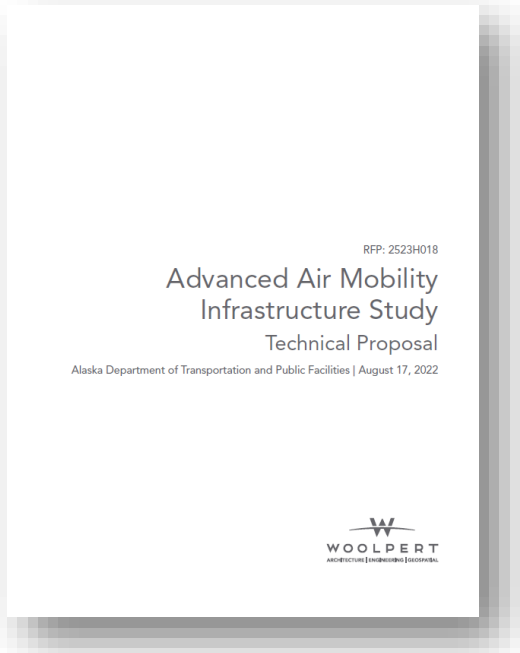
Navigation Strategy Development

Develop an airspace navigation strategy with lower-altitude flight routes and...

Surveillance

Expand ADS-B service coverage to areas that don't have it

# AAM Development and Planning Roadmap




Full Airspace Integration

Autonomous

Low weather/night autonomous

Advanced Navigation

Electronically Visible Cooperative Airspace

Weather Observations

Surveillance Technologies

System Status Transparency

Safety Language

Legacy Navigation

GPS Augmentation

Full Weather Radar

Fairbanks International Airport
AeroNexus®

UAF University of Alaska Fairbanks

ACUASI

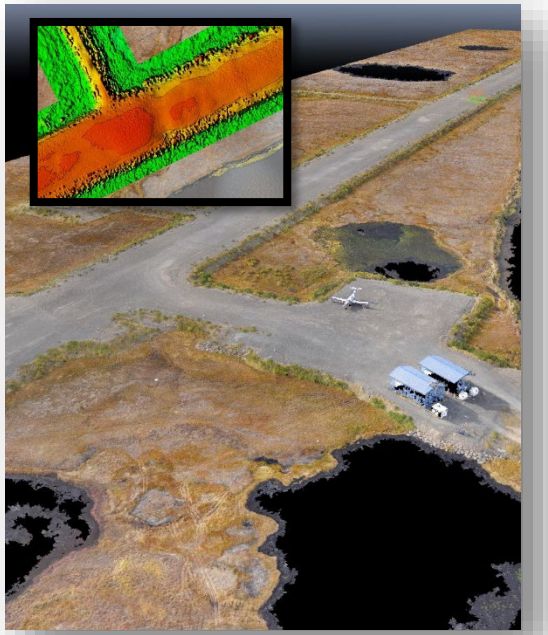
ASSURE
Alliance for System Safety of UAS through Research Excellence

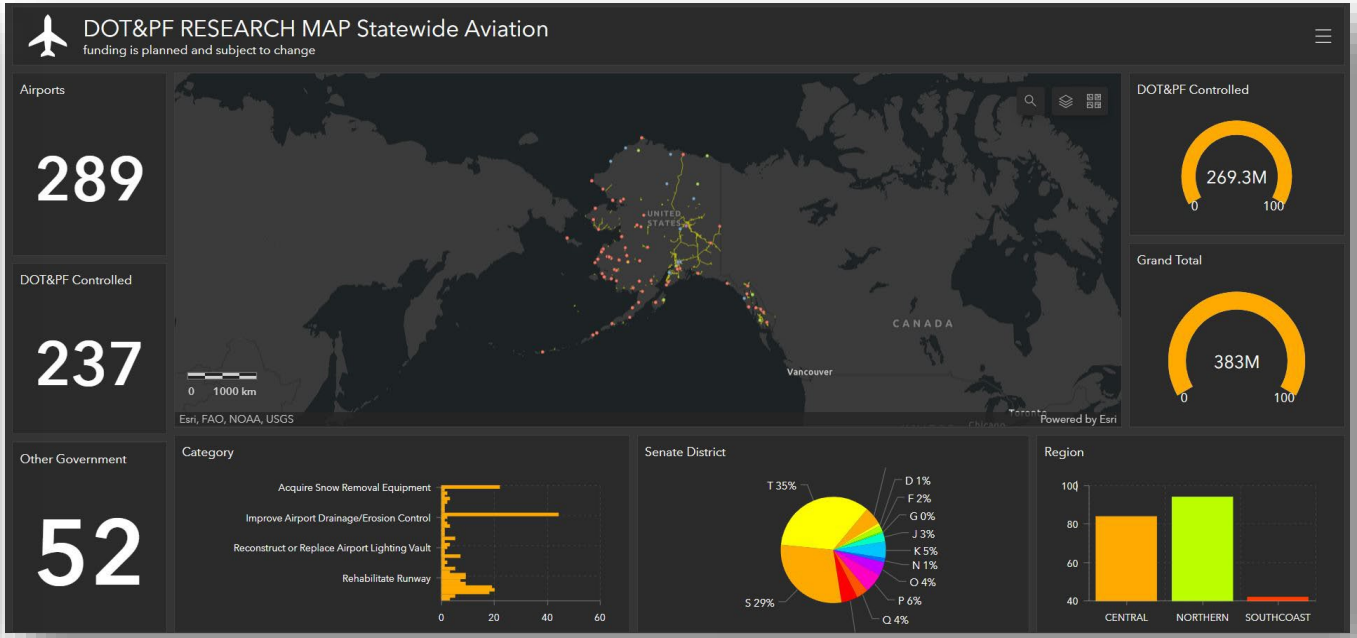
BEYOND

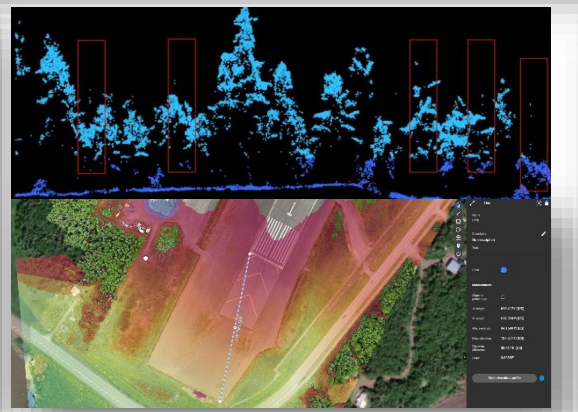
Alaska Airmen Association

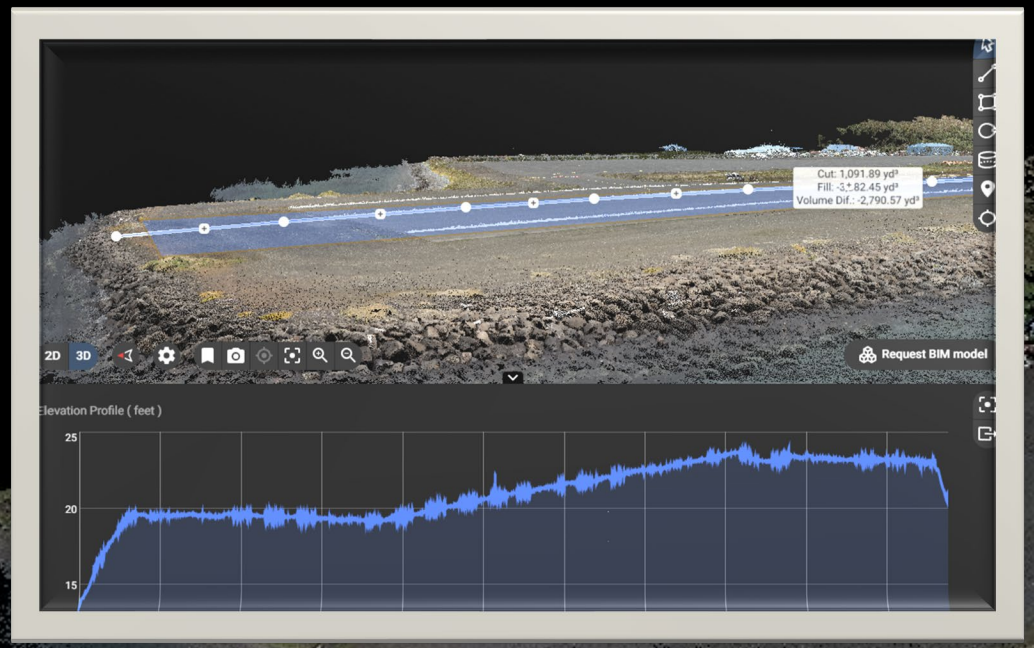
AACA Alaska Air Carriers Association

# AAM Infrastructure Monitoring & GIS (Geographic Information Systems)



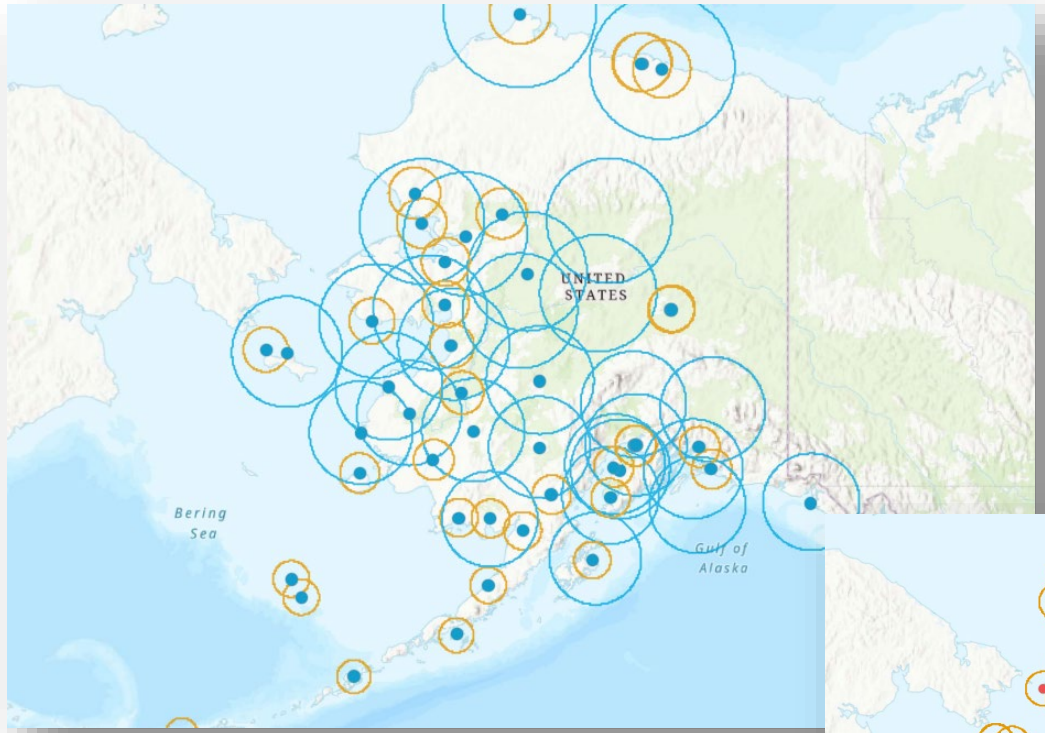




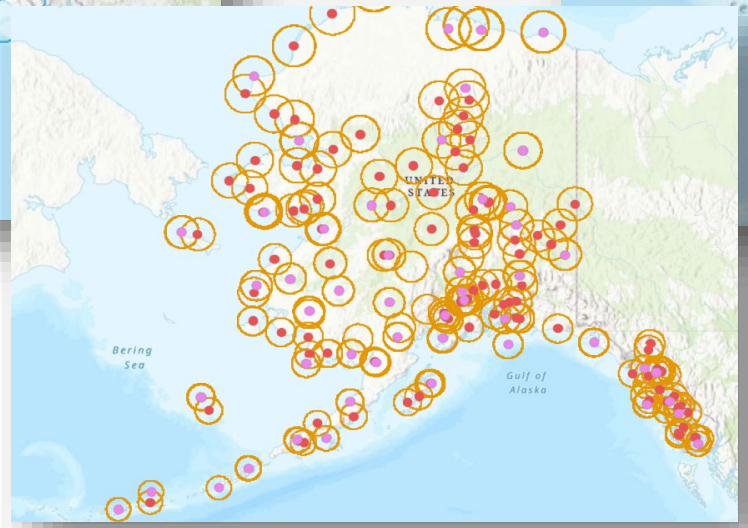



# (SDP) Sand Point Airport

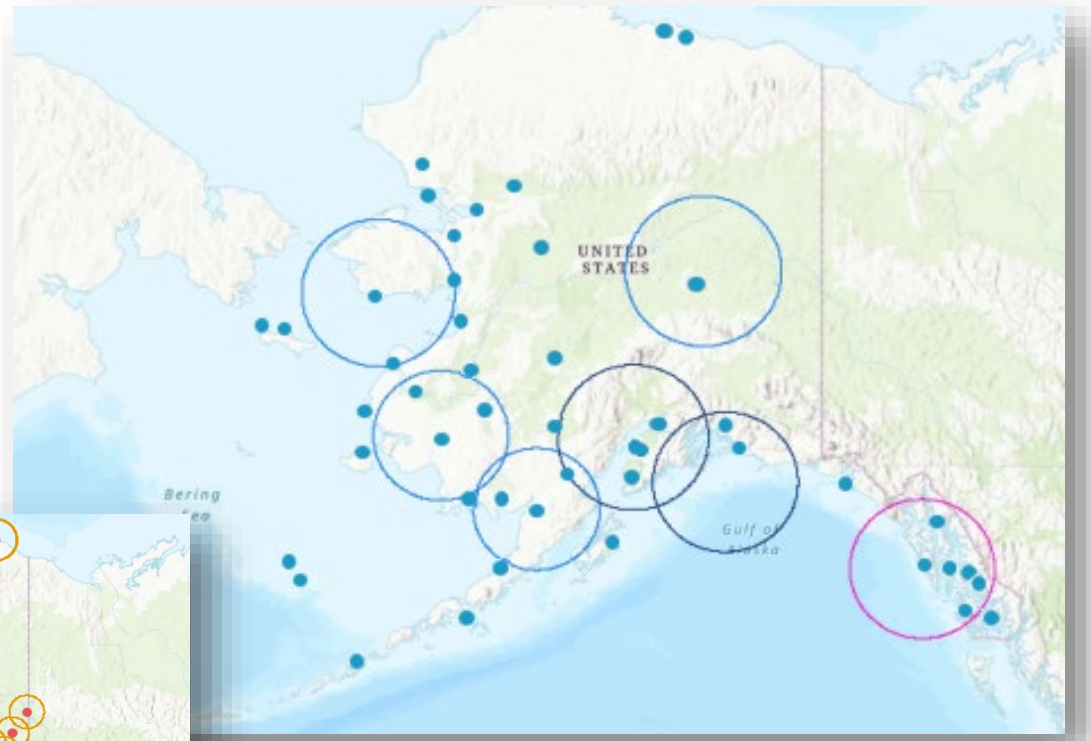
# AAM Existing Infrastructure




Distance Measuring Equipment (DME) Coverage

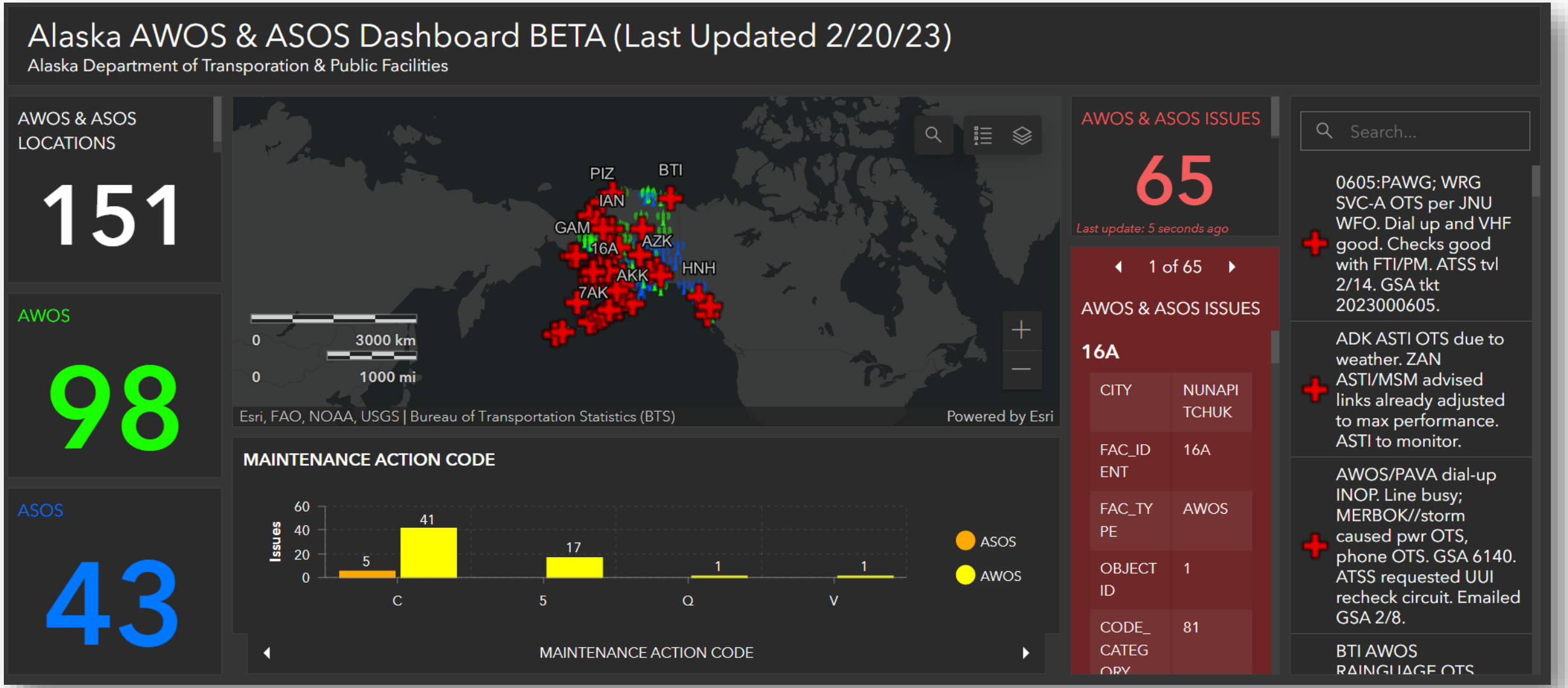



Voice Comm Coverage

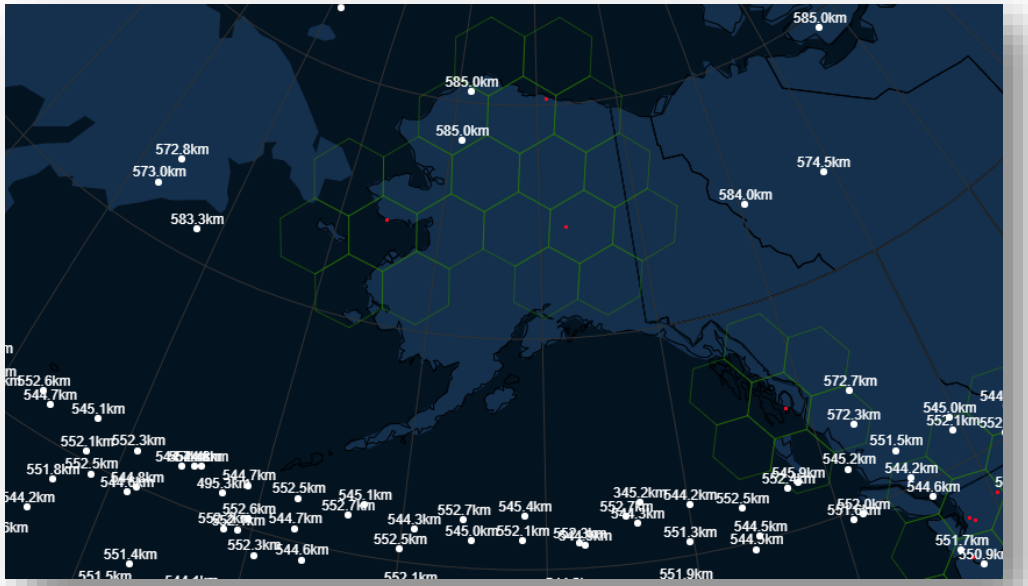


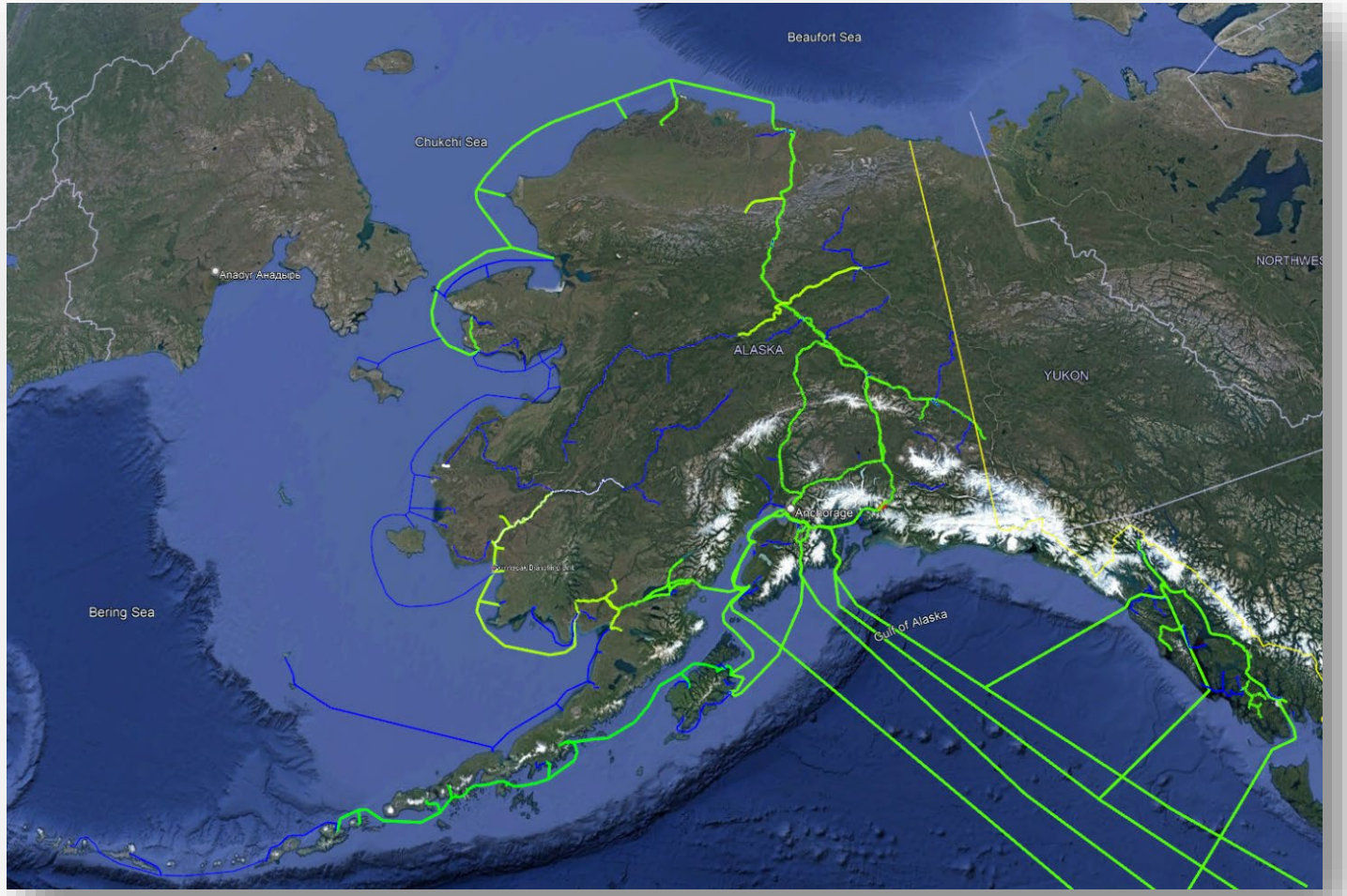

Next Generation Weather Radar (NEXRAD)

# Automated Weather Observing Systems (AWOS) Dashboard



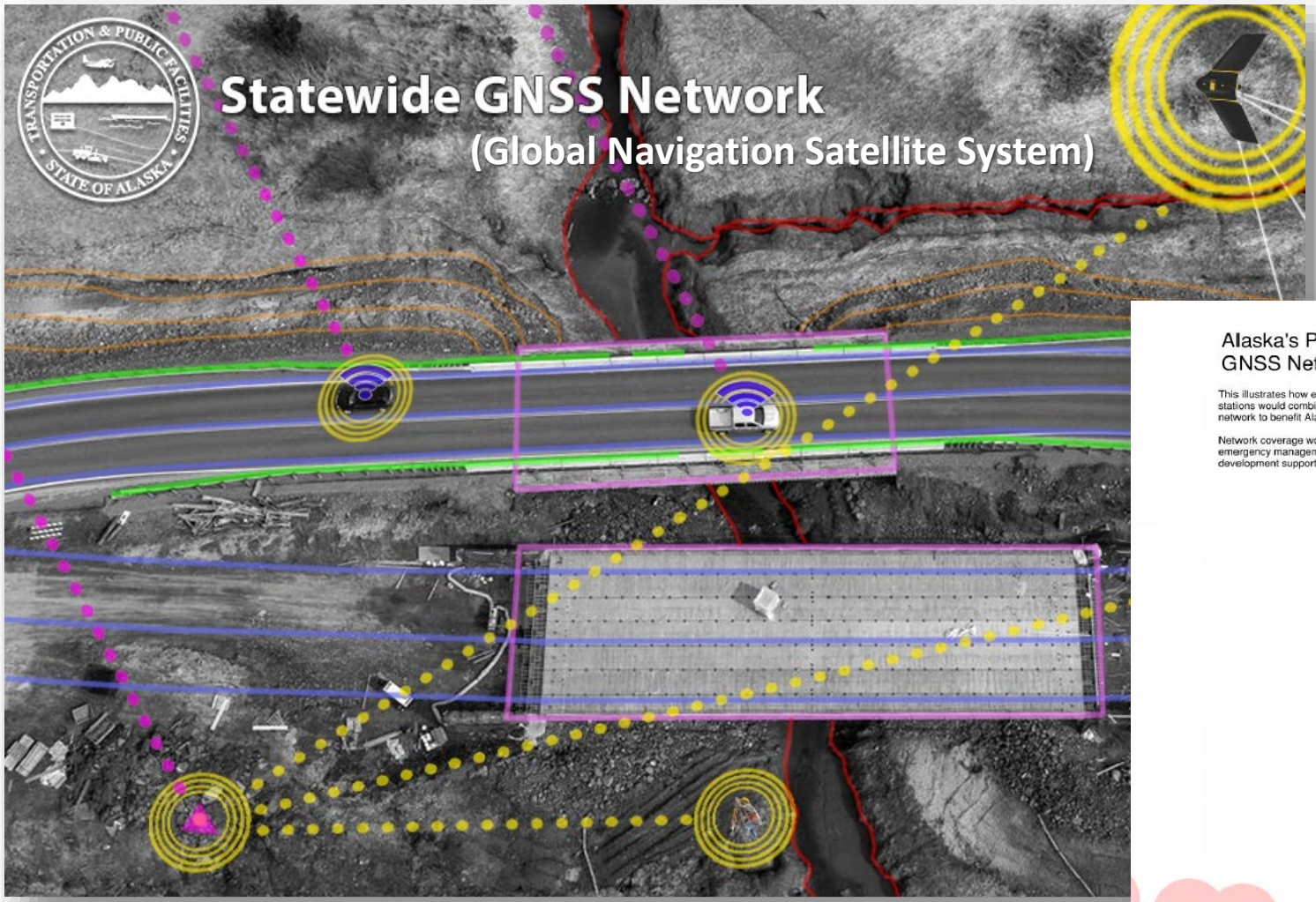
# AAM Rural Broadband Connectivity

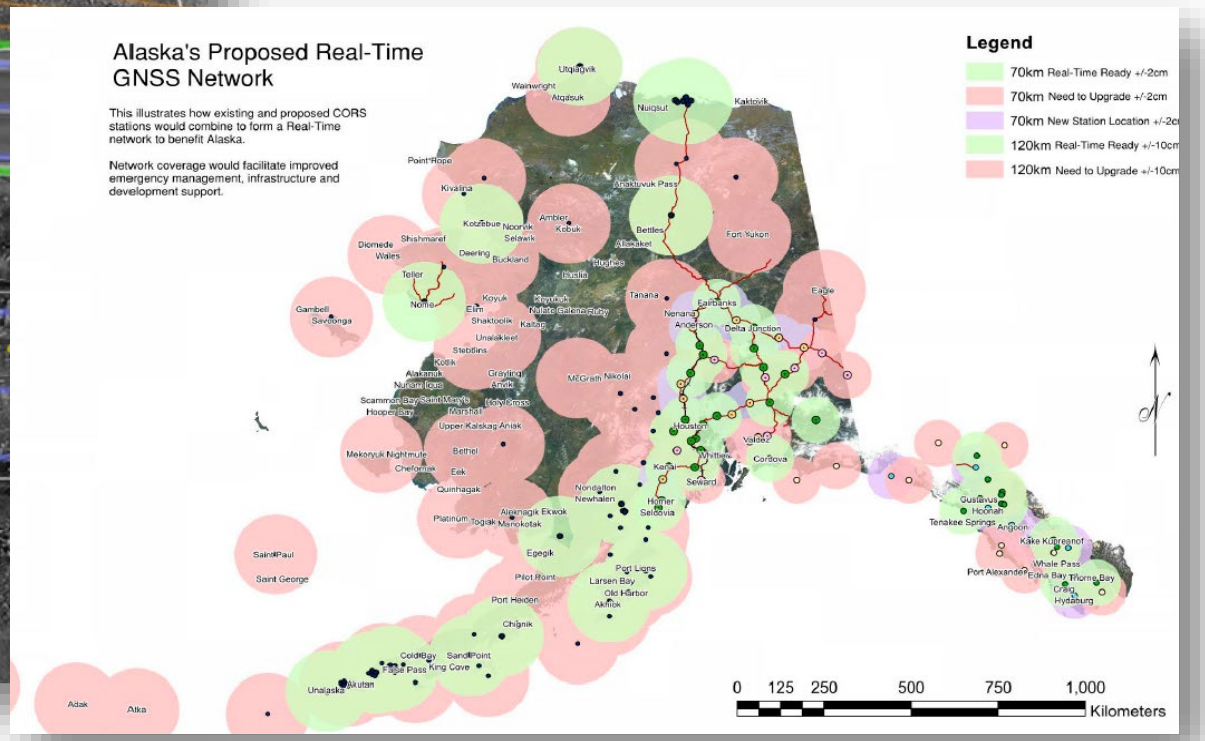


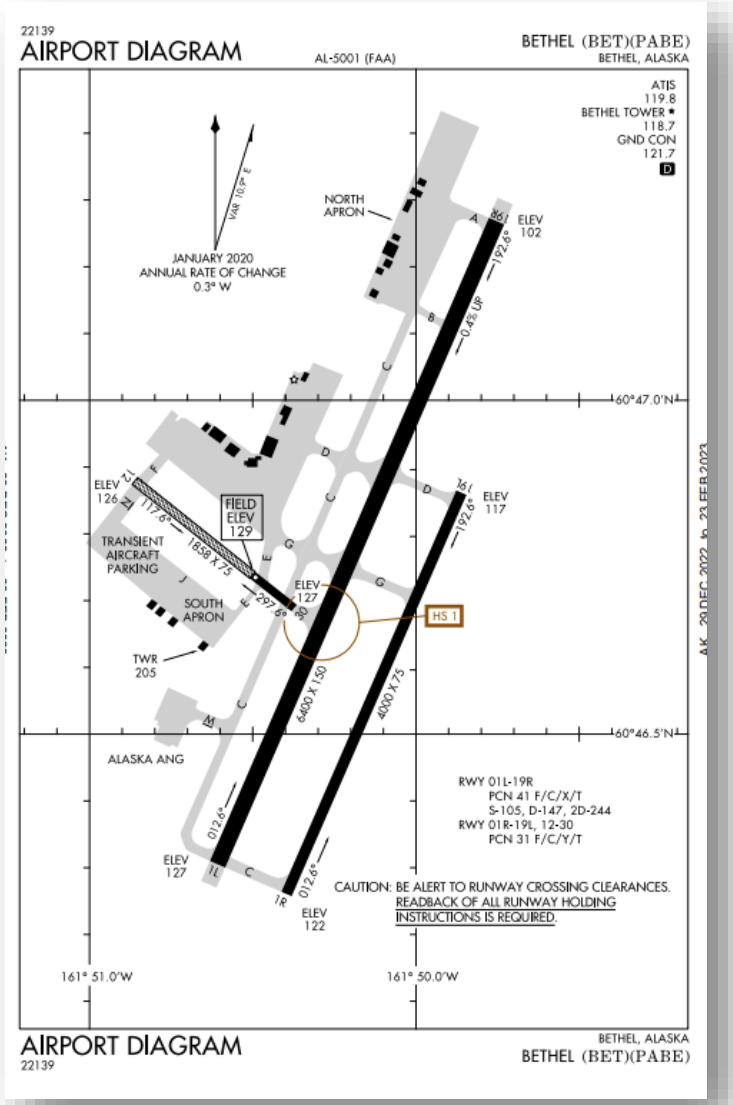

| PING ms | DOWNLOAD Mbps | UPLOAD Mbps |
|---|---|---|
| 39 | 174.21 | 33.40 |

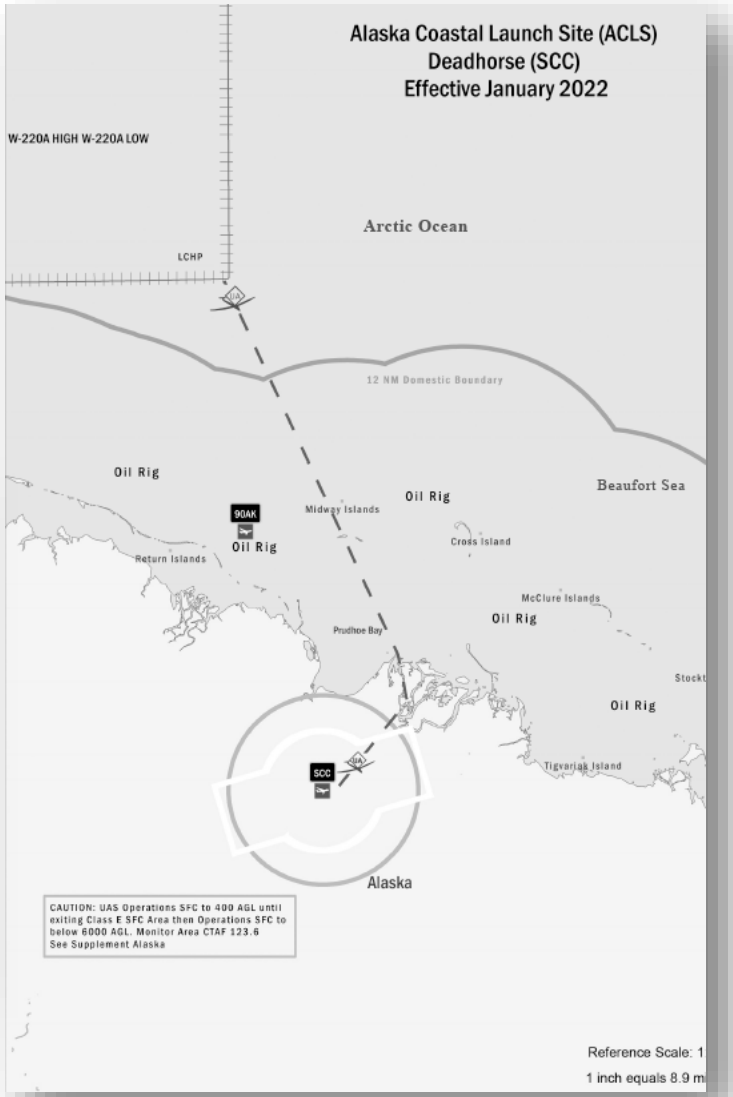
# Alaska Continuously Operating Reference Network (ACORN)



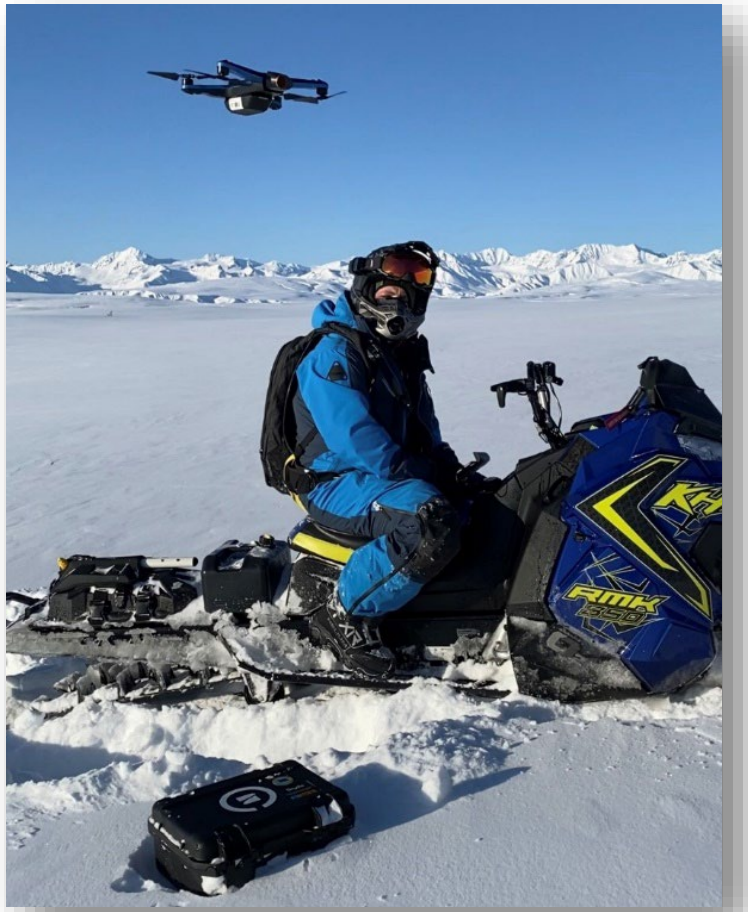
# AAM Technology Deployment






Remote Tower

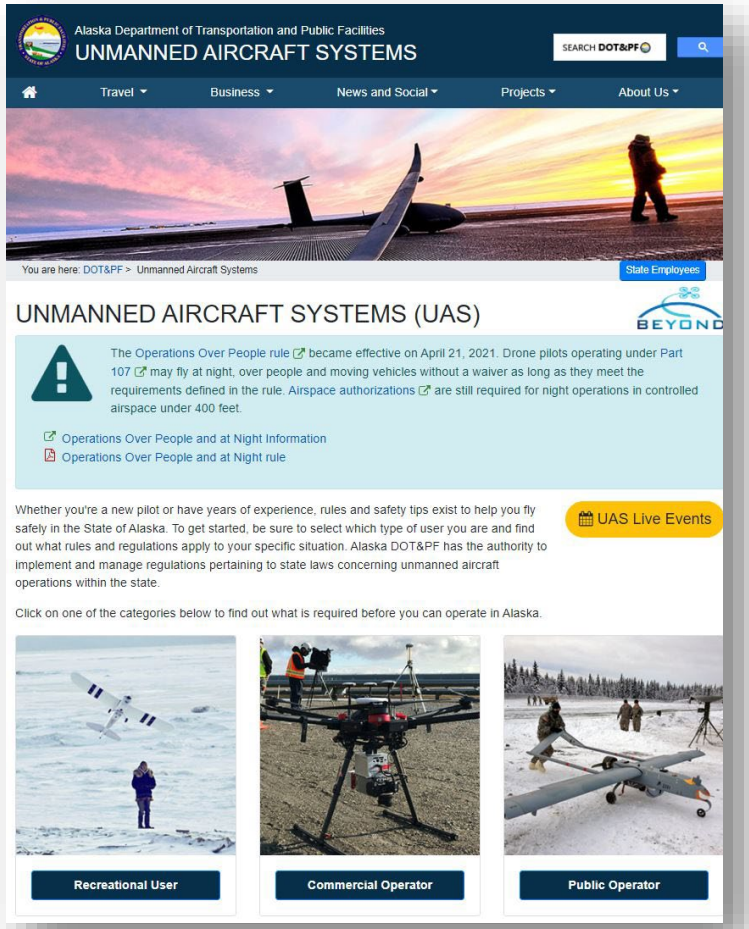
# Alaska UAS & AAM Resources



**Visit**

**dot.alaska.gov/uas**

**for all things UAS**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