



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



ACUASI





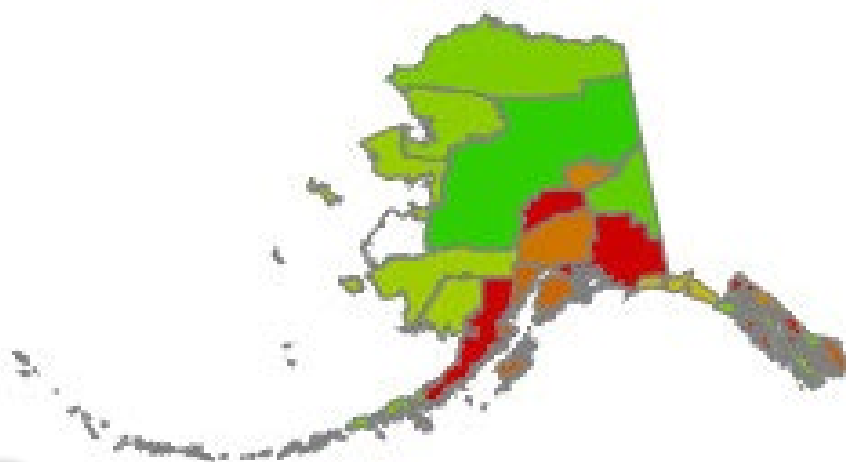
Alaska UAS Growth for 2022-2023

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



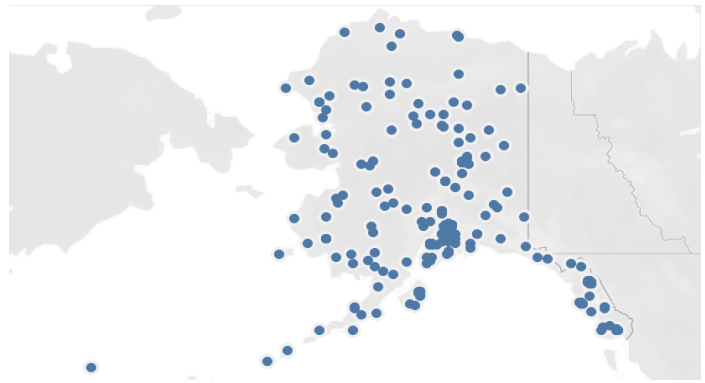
Unmanned Aviation (AK)

Remote Pilots = **3,241** ↑ 19% from 2022
Registered Unmanned Aircraft = **9,095** ↑ 12% from 2022

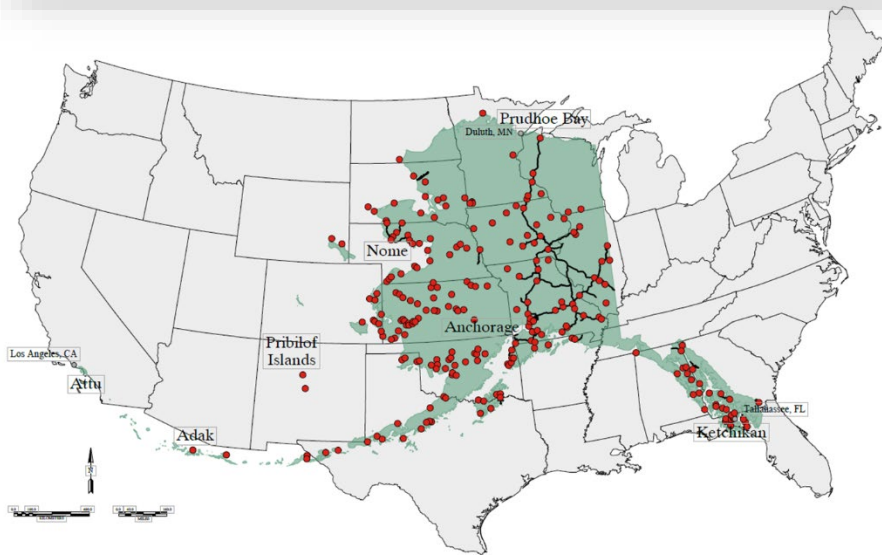
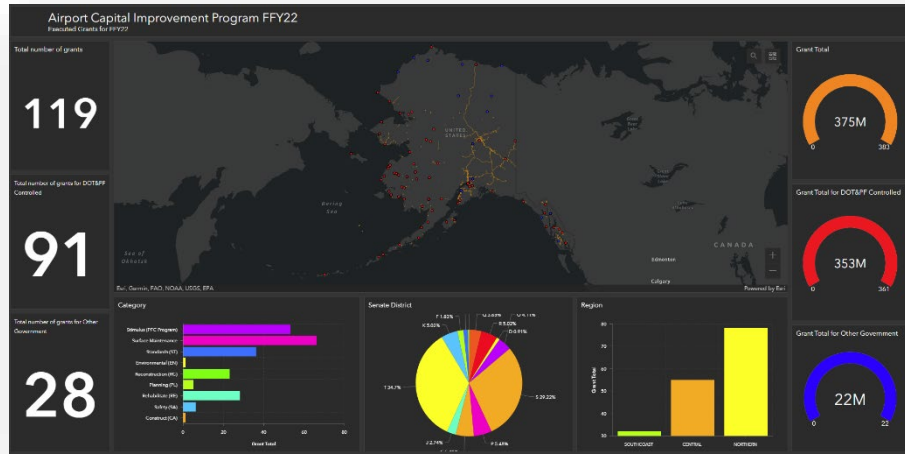


Manned Aviation (AK)

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)



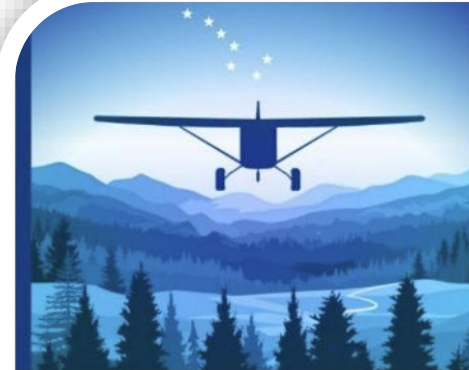
Safety Outreach

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

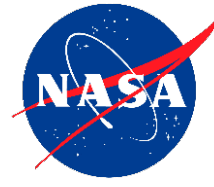
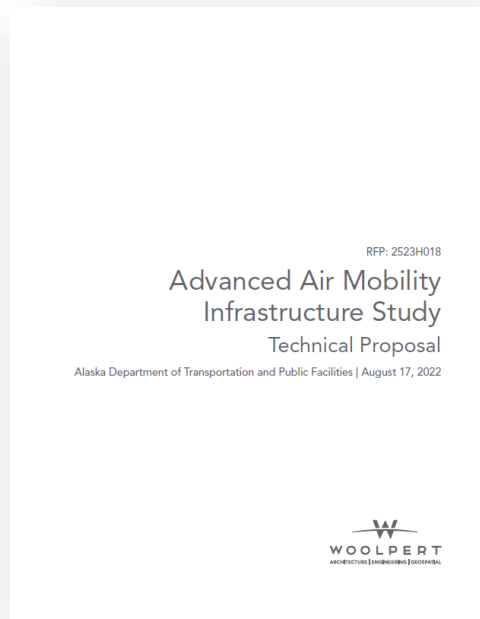
Develop an airspace navigation strategy with lower-altitude flight routes and...



Surveillance

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

AAM Development and Planning Roadmap



Surveillance
Technologies

Full
Weather
Radar

GPS
Augmentation

Autonomous

Low
weather/night
autonomous

Advanced Navigation



System Status
Transparency

Legacy
Navigation

Weather
Observations

Electronically
Visible
Cooperative
Airspace



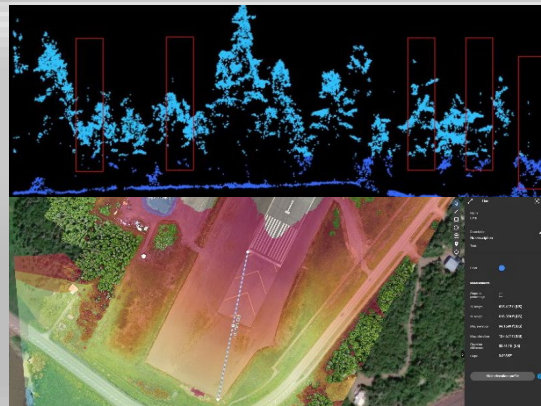
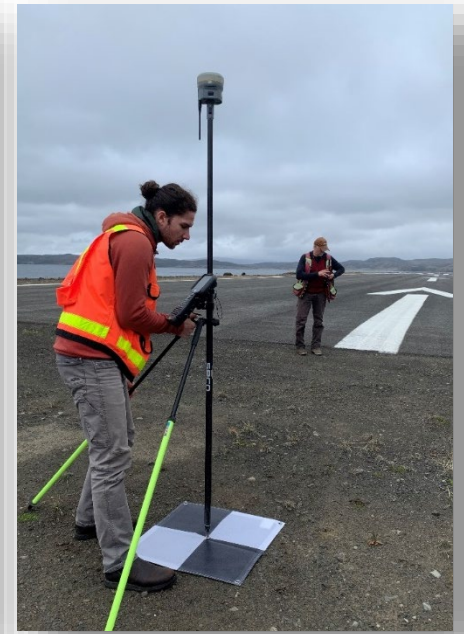
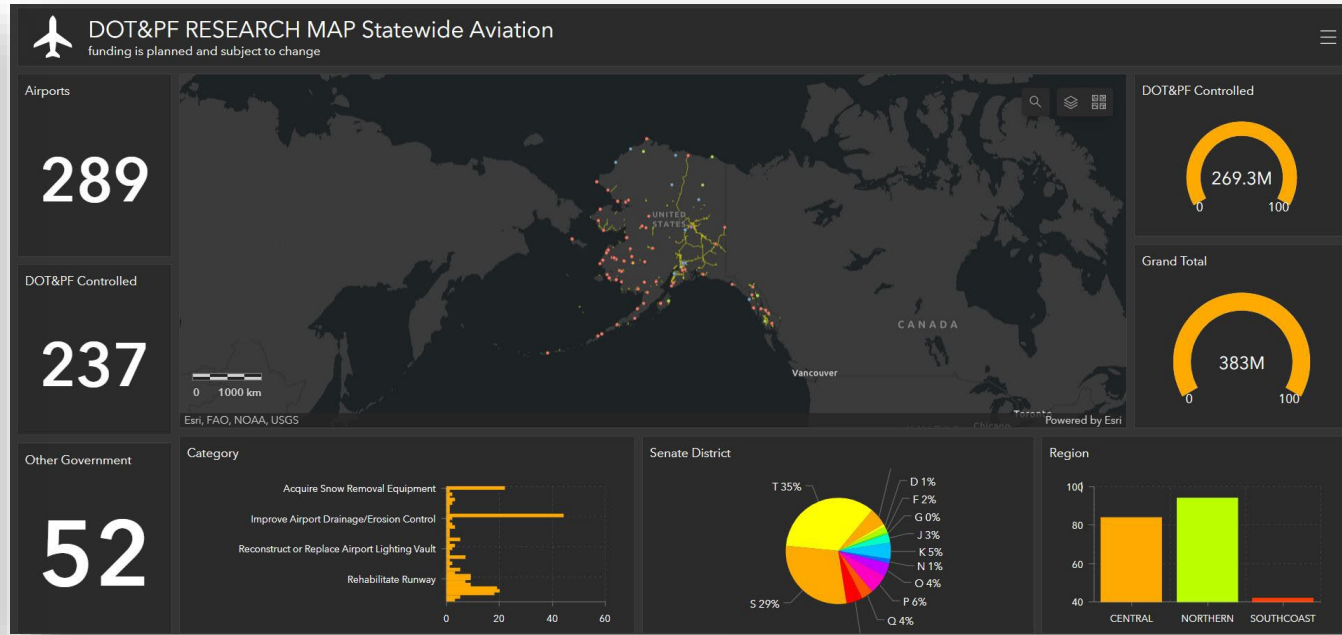
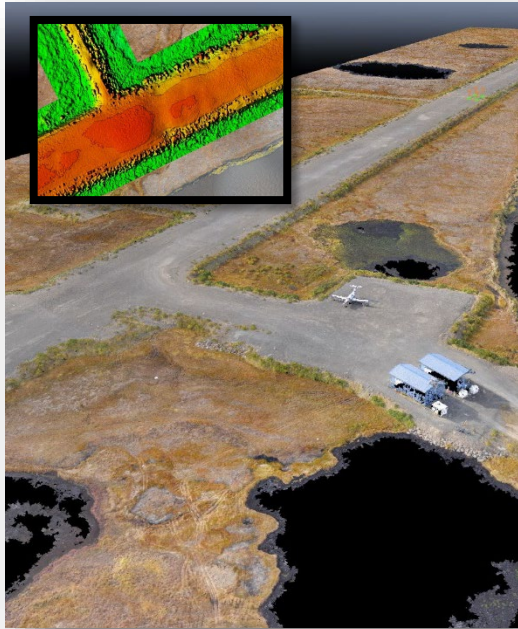
Safety
Language

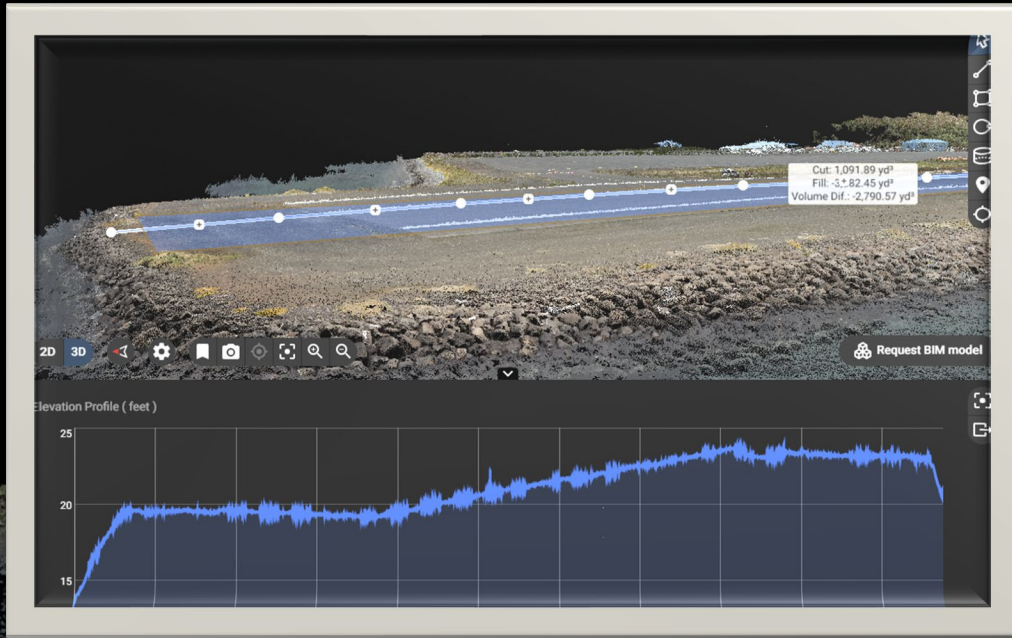


Full Airspace
Integration



AAM Infrastructure Monitoring & GIS (Geographic Information Systems)

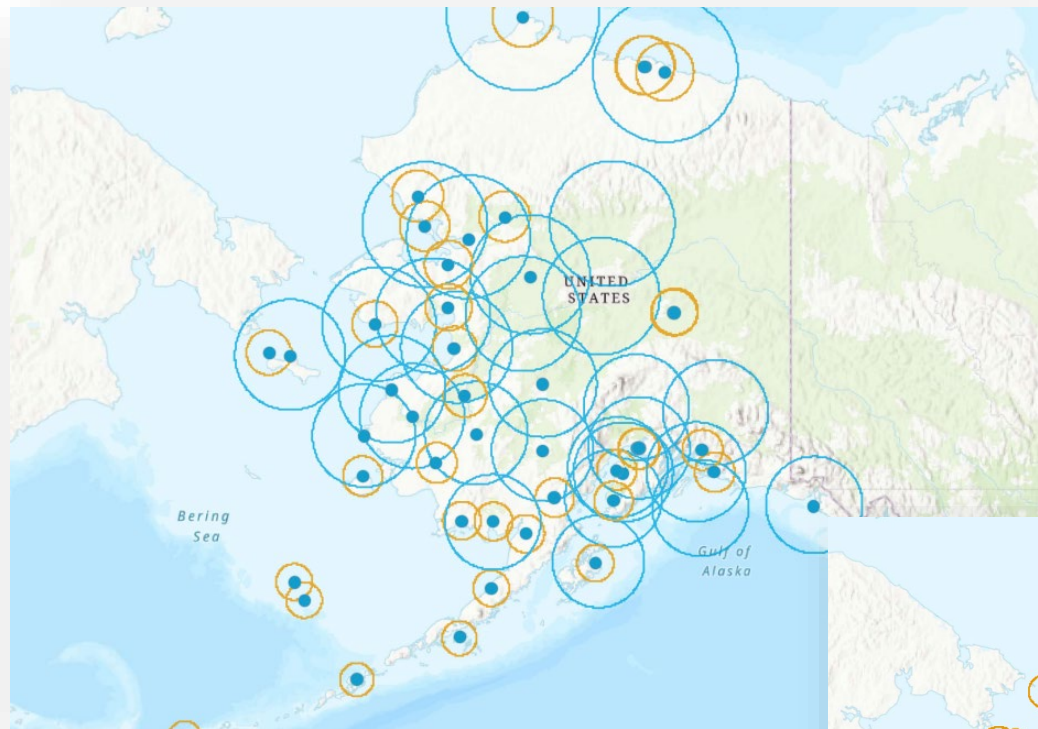




(SDP) Sand Point Airport



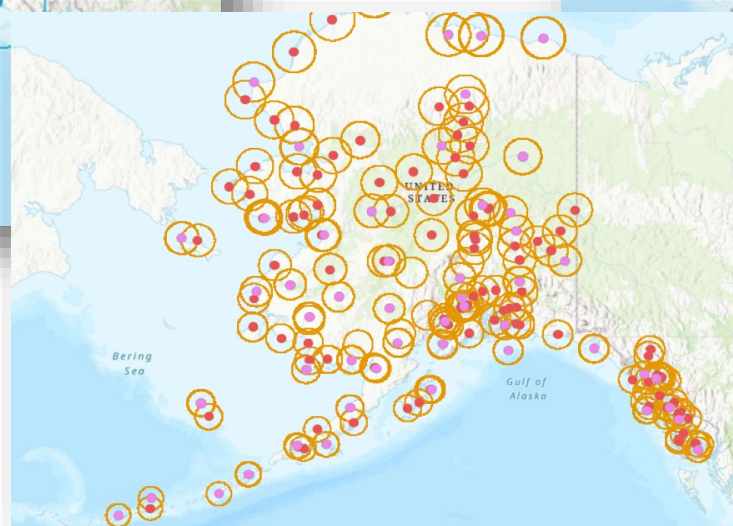
AAM Existing Infrastructure



Distance Measuring Equipment (DME)
Coverage



Next Generation Weather Radar
(NEXRAD)



Voice Comm Coverage

Automated Weather Observing Systems (AWOS) Dashboard

Alaska AWOS & ASOS Dashboard BETA (Last Updated 2/20/23)

Alaska Department of Transportation & Public Facilities

AWOS & ASOS
LOCATIONS

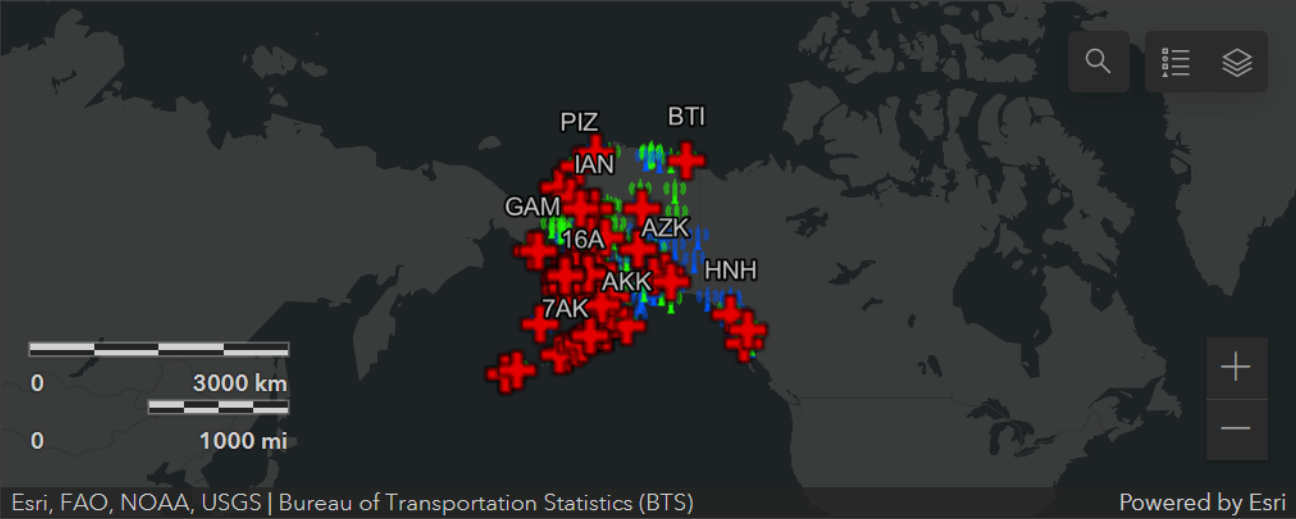
151

AWOS

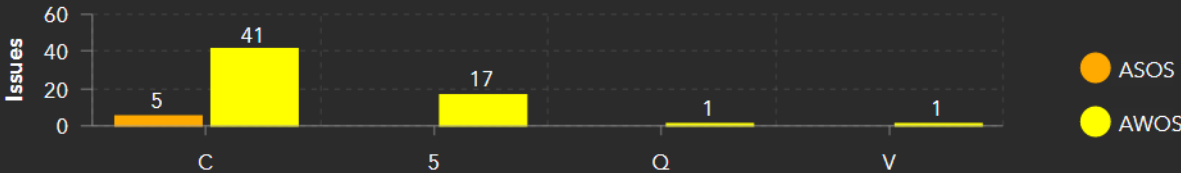
98

ASOS

43



MAINTENANCE ACTION CODE



AWOS & ASOS ISSUES

65

Last update: 5 seconds ago

1 of 65

AWOS & ASOS ISSUES

16A

CITY NUNAPI
TCHUK

FAC_ID 16A
ENT

FAC_TY AWOS
PE

OBJECT 1
ID

CODE_ 81
CATEG
ORY

Search...

0605:PAWG; WRG
SVC-A OTS per JNU
WFO. Dial up and VHF
good. Checks good
with FTI/PM. ATSS tvl
2/14. GSA tkt
2023000605.

ADK ASTI OTS due to
weather. ZAN
ASTI/MSM advised
links already adjusted
to max performance.
ASTI to monitor.

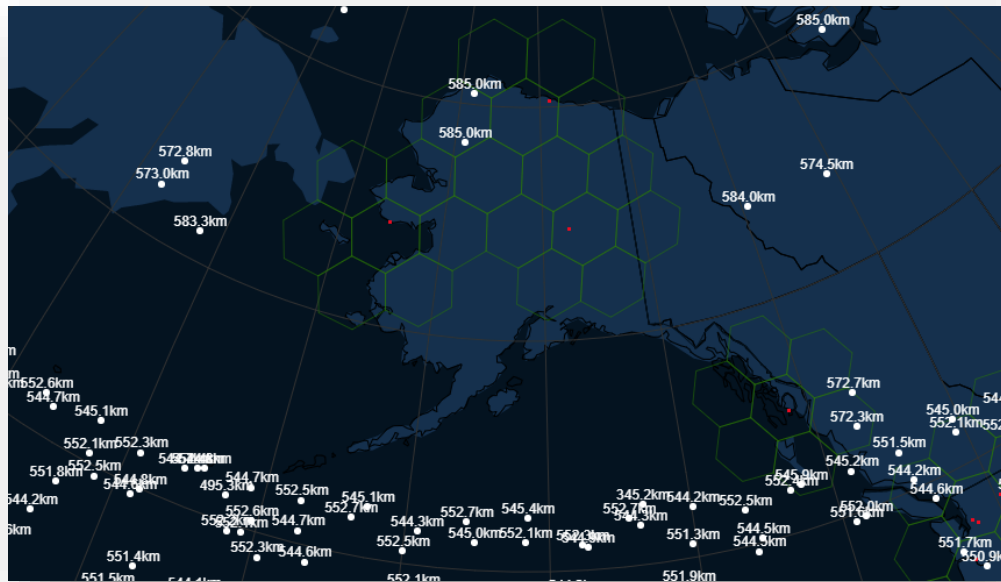
AWOS/PAVA dial-up
INOP. Line busy;
MERBOK//storm
caused pwr OTS,
phone OTS. GSA 6140.
ATSS requested UUI
recheck circuit. Emailed
GSA 2/8.

BTI AWOS
RAINGI IAGE OTS





AAM Rural Broadband Connectivity



PING ms

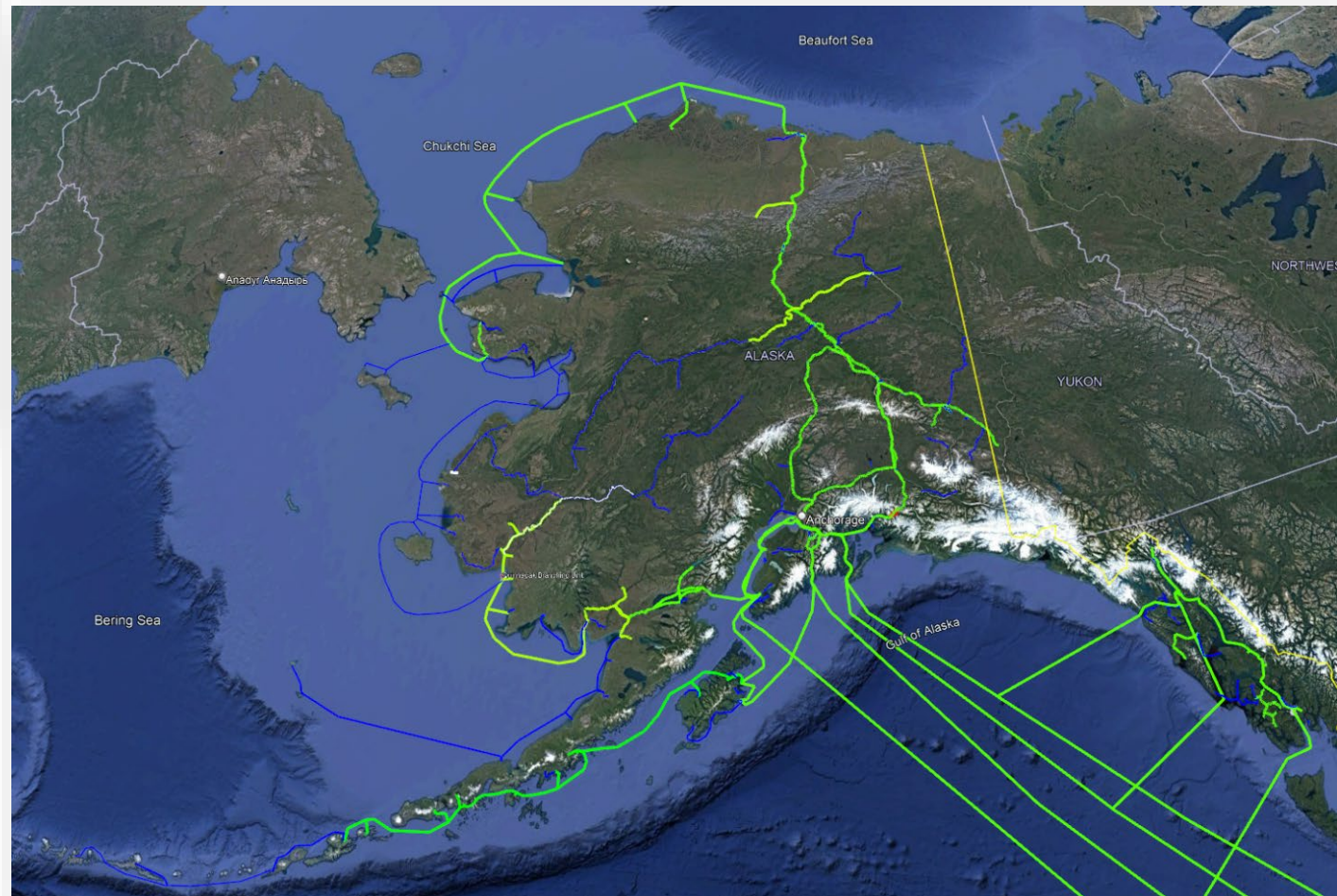
DOWNLOAD Mbps

UPLOAD Mbps

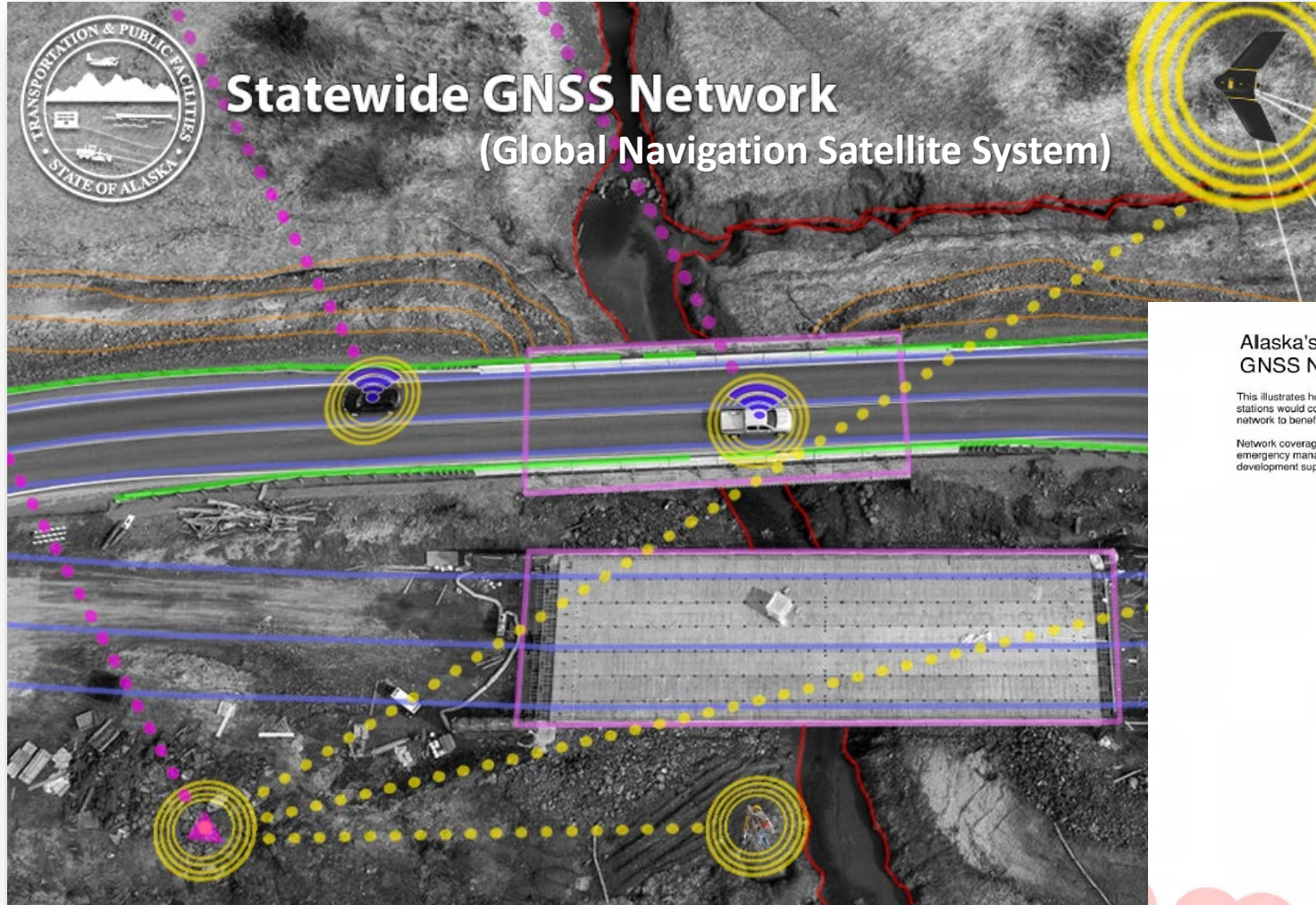
39

174.21

33.40



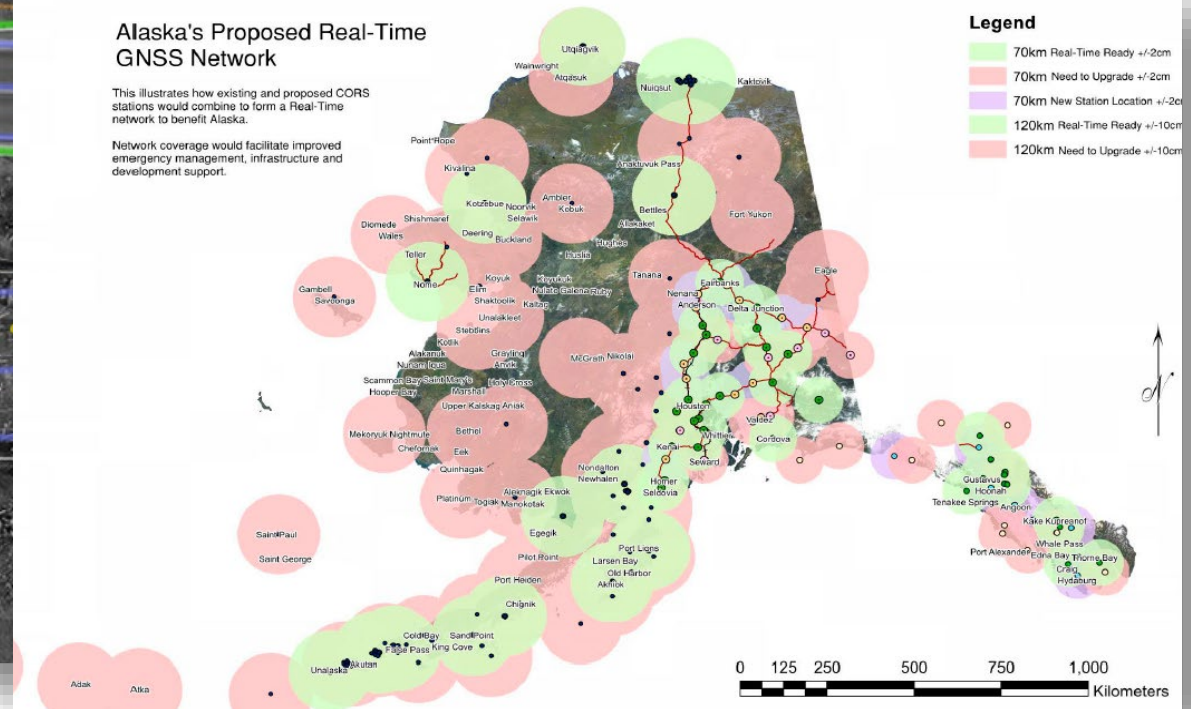
Alaska Continuously Operating Reference Network (ACORN)



Alaska's Proposed Real-Time GNSS Network

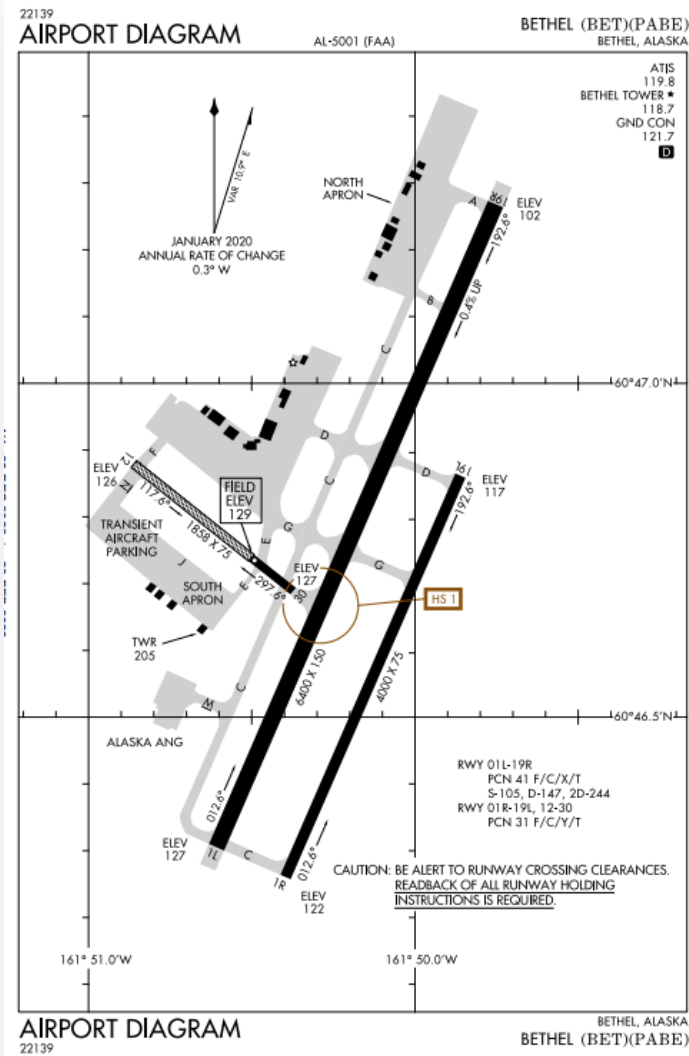
This illustrates how existing and proposed CORS stations would combine to form a Real-Time network to benefit Alaska.

Network coverage would facilitate improved emergency management, infrastructure and development support.

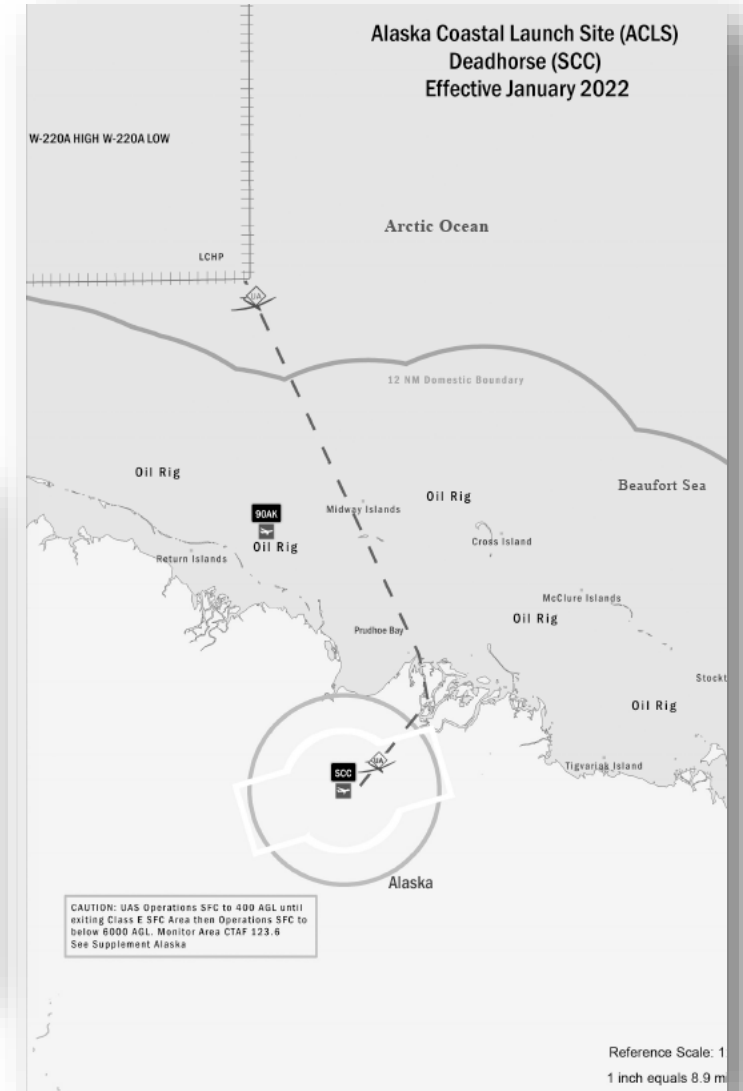




AAM Technology Deployment



Remote Tower



Alaska UAS & AAM Resources



Visit
dot.alaska.gov/uas
for all things UAS

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UAS Program Coordinator
Statewide Aviation
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Alaska Department of Transportation and Public Facilities
UNMANNED AIRCRAFT SYSTEMS

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UNMANNED AIRCRAFT SYSTEMS (UAS)

! The Operations Over People rule became effective on April 21, 2021. Drone pilots operating under Part 107 may fly at night, over people and moving vehicles without a waiver as long as they meet the requirements defined in the rule. Airspace authorizations are still required for night operations in controlled airspace under 400 feet.

☒ Operations Over People and at Night Information
☒ Operations Over People and at Night rule

Whether you're a new pilot or have years of experience, rules and safety tips exist to help you fly safely in the State of Alaska. To get started, be sure to select which type of user you are and find out what rules and regulations apply to your specific situation. Alaska DOT&PF has the authority to implement and manage regulations pertaining to state laws concerning unmanned aircraft operations within the state.

Click on one of the categories below to find out what is required before you can operate in Alaska.

Recreational User

Commercial Operator

Public Operator