



Alaska Department of Transportation & Public Facilities

Aviation Overview

John R. Binder III, Deputy Commissioner

February 9, 2023

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



MISSION STATEMENTS



Alaska DOT&PF

“Keep Alaska Moving through service and infrastructure”



Alaska International Airports System (AIAS)

“To keep Alaska flying and thriving”



Statewide Aviation (SWA)

“To sustain and improve the quality of life throughout Alaska”

AK-9721-P



ORGANIZATION / LEADERSHIP



Department of Transportation and Public Facilities

Commissioner

Deputy Commissioner



Alaska International
Airport System



Statewide Aviation

Ted Stevens Anchorage
International Airport

Fairbanks
International Airport

235 Rural
Airports





ALASKA INTERNATIONAL AIRPORT SYSTEM



Fairbanks International Airport



Ted Stevens Anchorage International Airport





AIAS STRUCTURE

AN 

+

=



Fairbanks
International Airport
"AeroNexus"



Alaska
International Airport
System

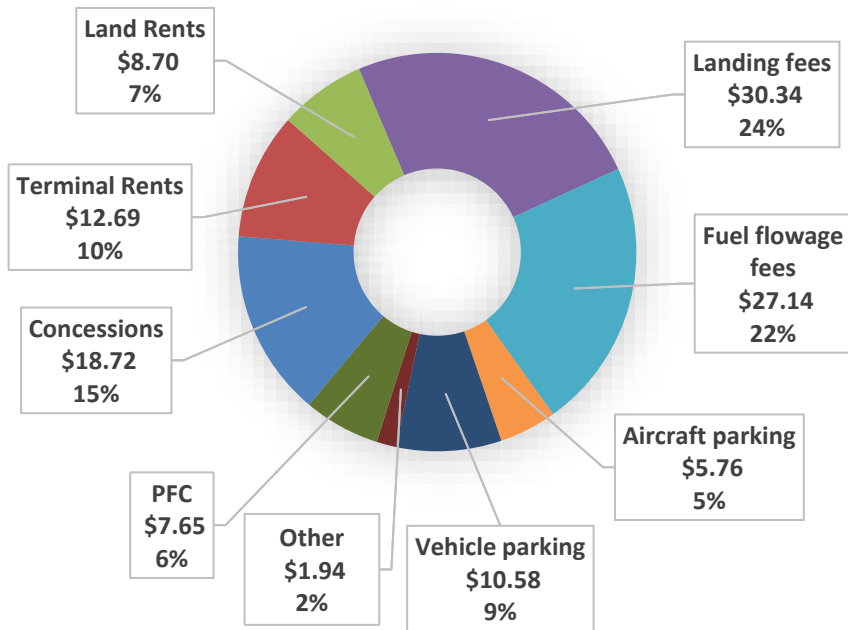
Created over 50 years ago by Ch88 SLA 1961 -
(AS 37.15.410-550)



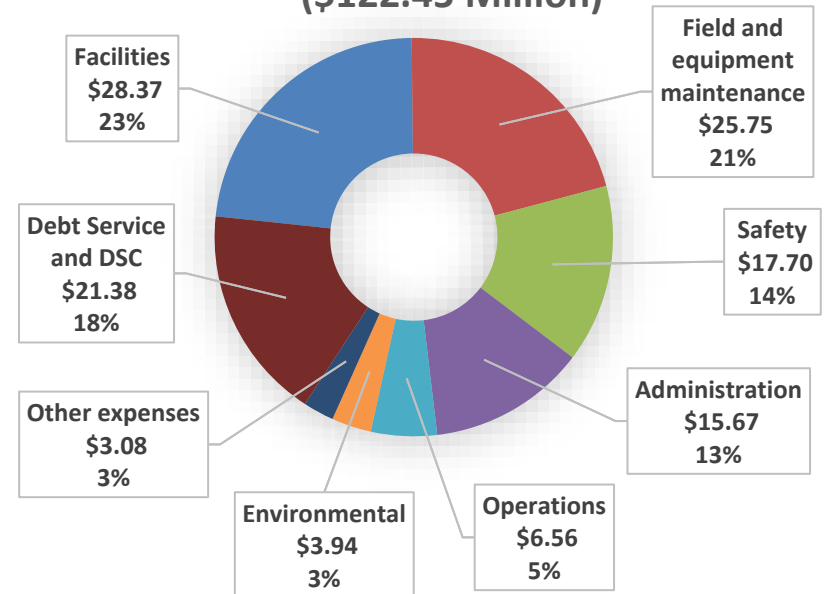
ANNUAL REVENUE AND OPERATIONS, MAINTENANCE AND DEBT COSTS

- Funded through Customer Charges -

AIAS FY2022 Revenue Sources*
(\$123.52 Million)



AIAS FY2022 Annual Operating Costs and Debt Service**
(\$122.45 Million)



Operating, passenger facility charges, and interest revenues – Does not include capital grant receipts, FAA Pandemic Relief funds, or Unaudited Loss on Investments (2.52M)

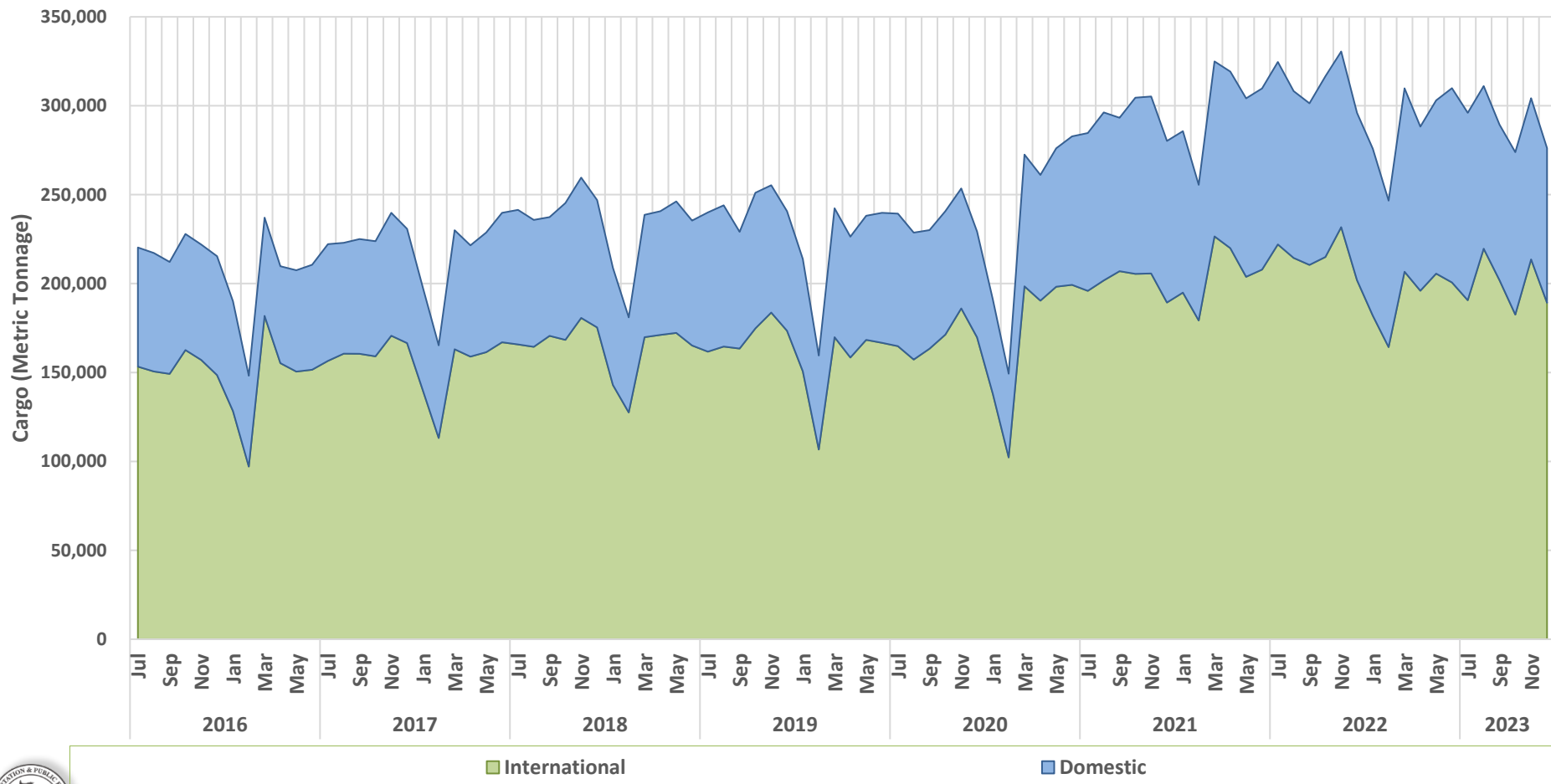
*** Expense does not include rates & fees funded capital costs or depreciation.*





CARGO TONNAGE

AIAS Monthly Cargo in Metric Tonnes Domestic & International FY16 - FY23 YTD (Dec '22)





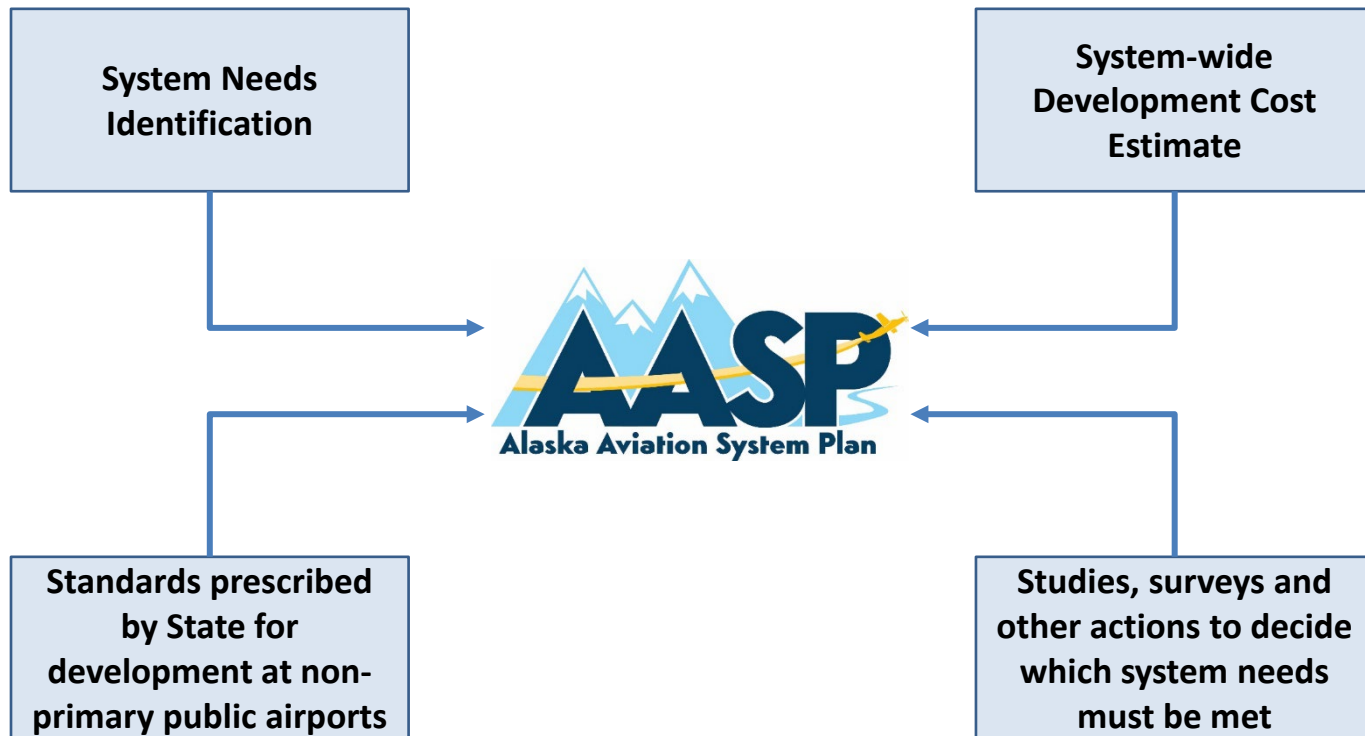
ALASKA AVIATION SYSTEM PLAN (AASP)



AVIATION SYSTEM PLANNING

Why?

- Required through FAA Advisory Circular 150/5070-7 The Airport System Planning Process
- Primary purpose is to determine the type, extent, location, timing, and cost of the airport development needed in a state or metropolitan area to establish a viable system of airports.
- Plan includes all public airports across Alaska and is funded through annual AIP grants.

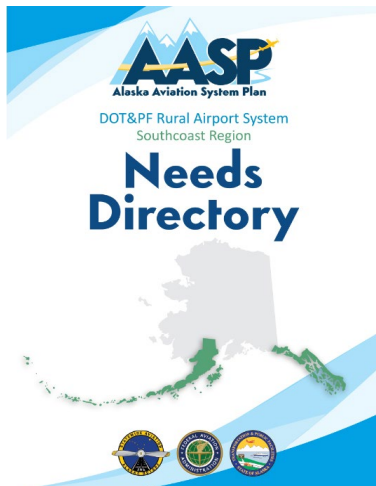


CONTINUOUS AVIATION SYSTEM PLANNING

Phase I

2008 - 2013

- Continuous Planning Process
- Website & CIMP Establishment
- Videos: Lifeline and Counting the Cost



Phase II

2014 - 2019

- Needs Collection
- Capital Projects Database
- Digital Project Evaluation Process
- CIMP Application Development
- Needs Directory & Reporting Tools
- Economic Impact
- Rural Lighting Analysis

Phase III

2020 - 2025

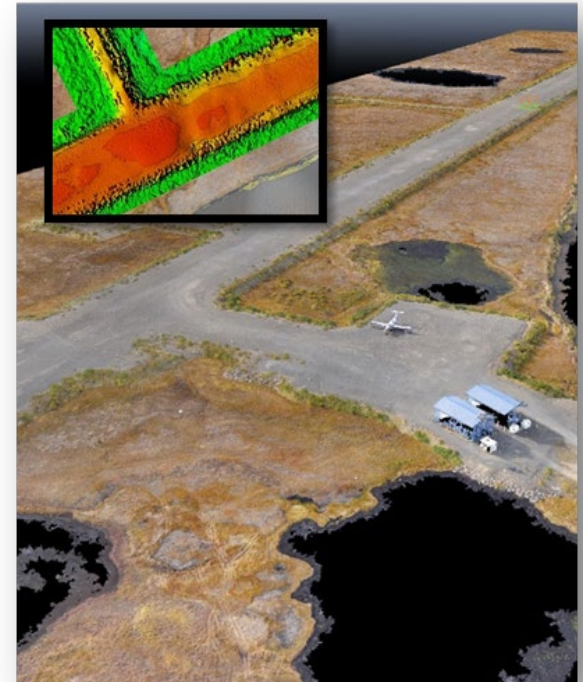
- Performance Measures
- Digital Capital Improvement Plan
- Capital Inspection Process Update
- Data Connections
- Air Carrier Outreach & Comment Map
- Airport Resiliency Study
- Other Special Studies



SYSTEM CHALLENGES

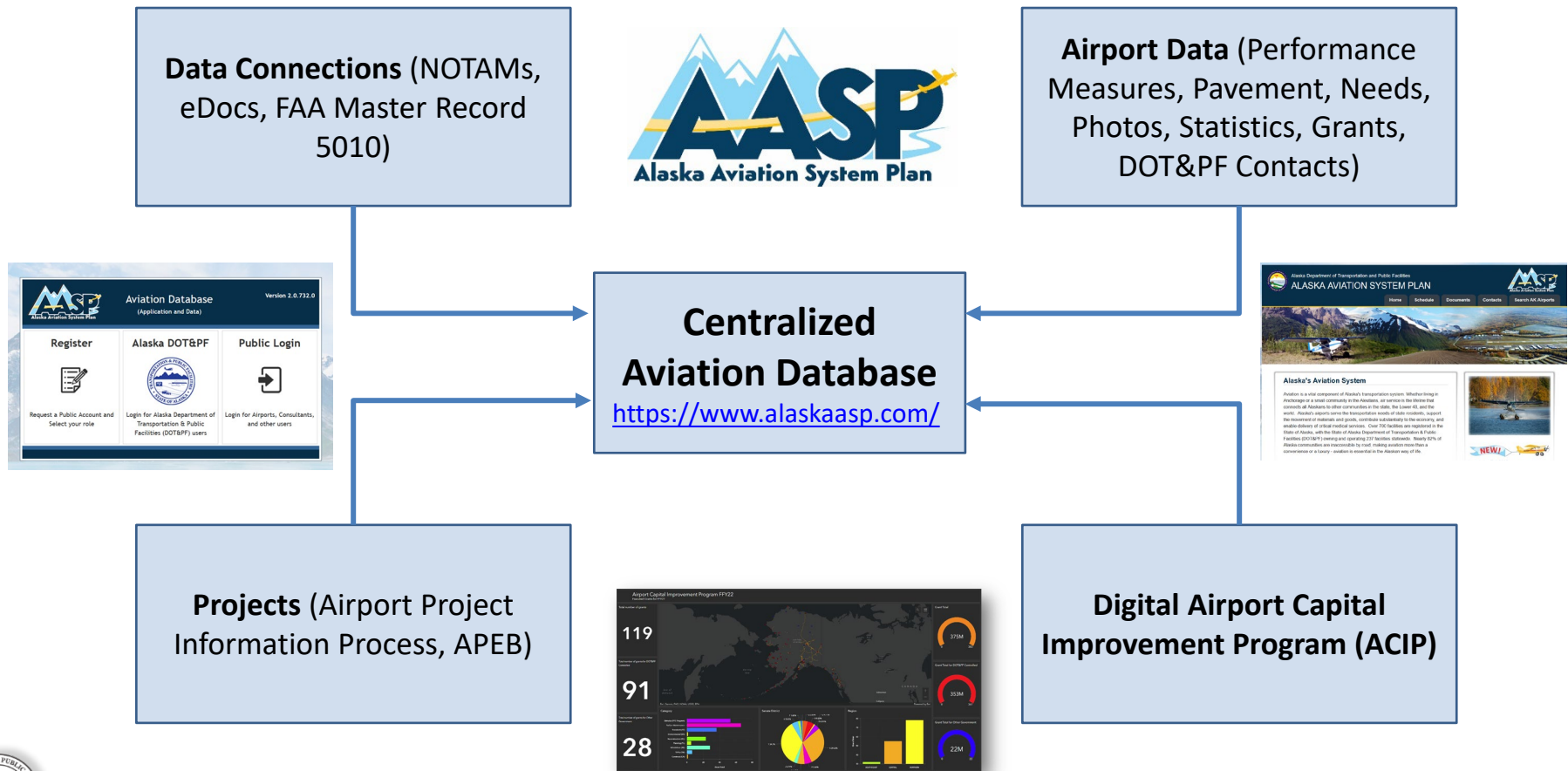
- **Hearing our customers** – the AASP team is currently creating a comment map to report airport related issues directly to DOT&PF staff.
- **Accurately capturing needs across the system:**
 - An estimated 3,500 airport needs exist totaling over \$4B – from runway resurfacing to wind cone replacement to crack sealing.
- **So much data** – collecting it and making it available!
- **How to tell Alaska's story** – Upcoming videos
- **Community relocations and airport resiliency**

taxiway weather
helipad runway new leasing
maintenance airport apron road
transportation ground
buildings fencing lighting base
equipment seaplane access



CENTRALIZED AVIATION DATABASE

Goal: To create a centralized database for all airport information. This website continues to grow and expand data connections and information.



An aerial photograph showing a wide river flowing through a landscape of green fields and forests. In the center, an airport runway and taxiway are visible, surrounded by some buildings and parking areas. The background shows rolling hills and mountains under a clear sky.

CAPITAL IMPROVEMENT & MAINTENANCE PROGRAM (CIMP)

CAPITAL IMPROVEMENT & MAINTENANCE PROGRAM(CIMP)

An airport inspection program that:

- Captures capital needs
- Collects discreet data for system analysis (lighting/instrument systems, surface condition, etc.)
- Facilitates stakeholder outreach

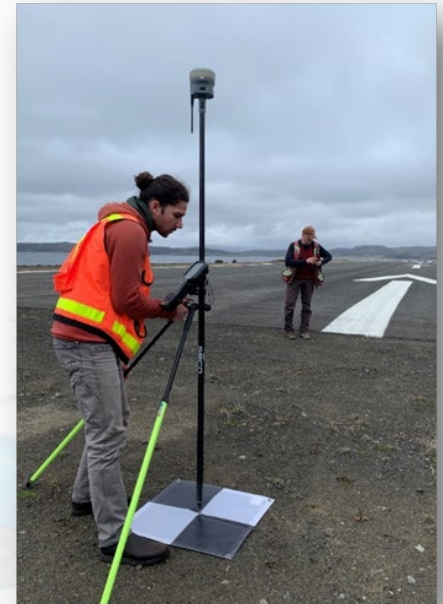
Application-based for mobile devices

- Reduces airfield experience requirements

Time & travel intensive

- Goal: to conduct inspections that capture needs, to then be developed into capital projects through the AIP program.

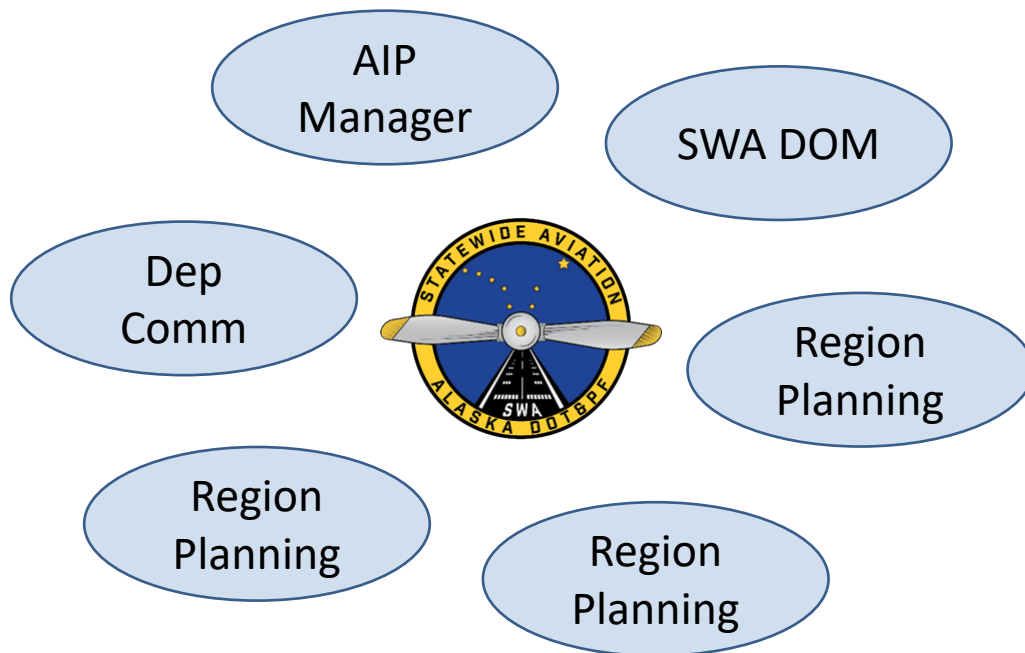
Note: Supplements the FAA's 5010 Airport Master Record Inspections conducted on triennial cycle





AVIATION PROJECT EVALUATION BOARD (APEB)

AVIATION PROJECT EVALUATION BOARD (APEB)



Buildings (8 Criterion)

Existing Structure Safety
 Facility Need
 Project Conditions
 Structure Condition
 Weather Conditions
 Airfield Safety
 Land Ownership Status
 Other

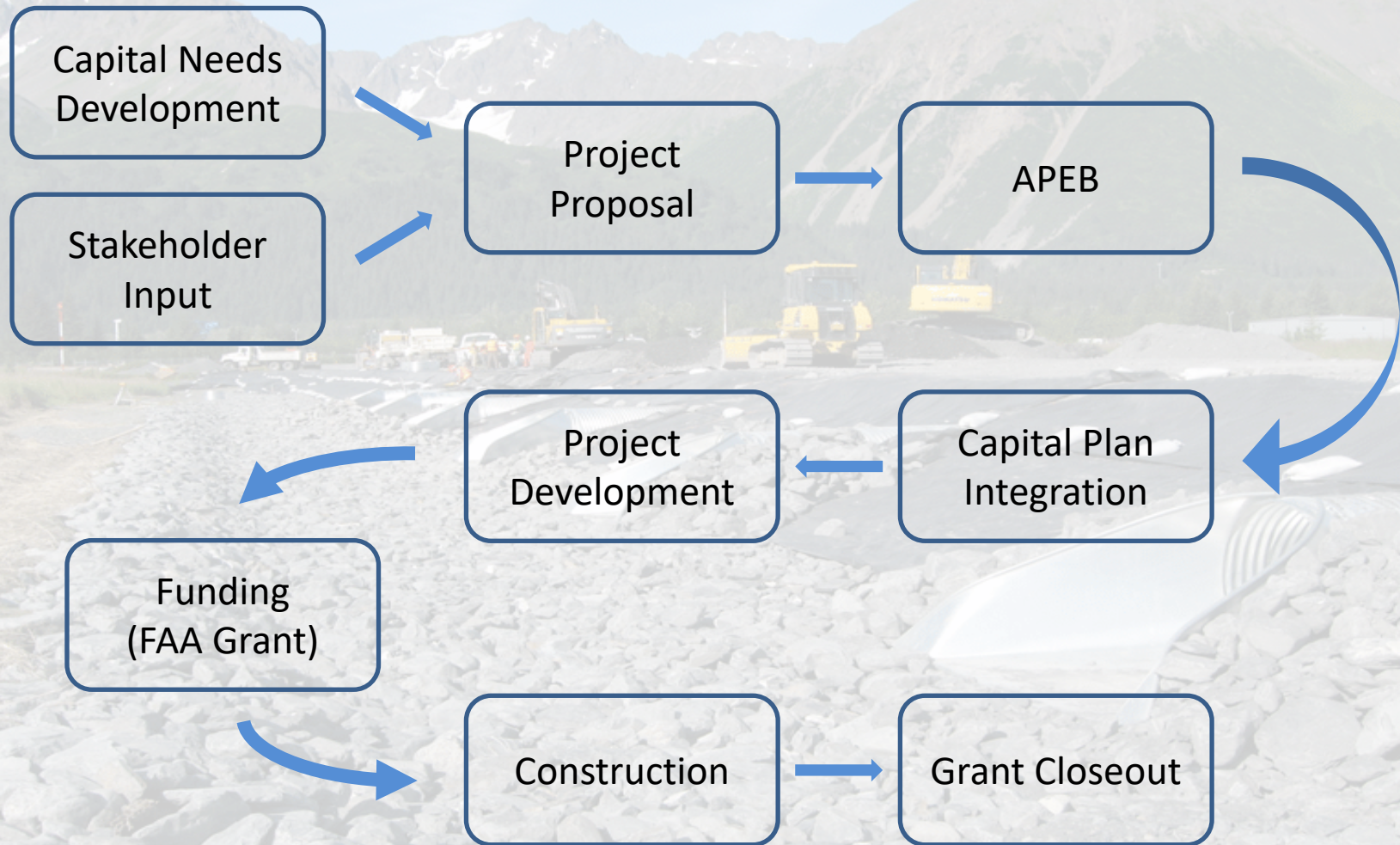
Airfield (16 Criterion)

Safety
 Alternatives
 Community Support
 Runway Surface Condition
 Maintenance & Operations

Security / Certification
 Economic Benefits
 Runway Length
 Local Capital Contribution
 Erosion / Flooding

Health / Quality of Life Aviation
 Local Transportation Alternatives
 Community M&O Contribution
 Aviation Hazards
 Other
 Population

AVIATION PROJECT DEVELOPMENT





AIRPORT IMPROVEMENT PROGRAM (AIP)



AIRPORT IMPROVEMENT PROGRAM (AIP) FOR DOT&PF AIRPORTS IN FFY 2022

FAA AIP airport capital improvement project funding for DOT&PF programs (~\$256M)

Cargo Entitlements (\$4.5M)

- Earned by airports with more than 100 million pounds landed weight

Primary Passenger Entitlement (\$36.1M)

- Earned by airports with more than 10,000 enplaned passengers and scheduled commercial service

Non-Primary Passenger Entitlement (\$27.7M)

- Earned by airports with fewer than 10,000 enplaned passengers annually

State Apportionment (\$19.4M)

- An area/population formula used after cargo/passenger entitlements calculated

Alaska Supplemental (\$19.0M)

- Congressional amount based on 1980 amounts

Discretionary (\$134M)

- What remains – divided among 50 states
- FAA Airport Environmental Mitigation PFAS Pilot (\$1.2M)

Supplemental Discretionary grants (\$19.6M)

- Special additional federal GF appropriation – Projects Selected by FAA
- Kongiganak SREB (\$3.7M)



AIP RURAL SYSTEM CAPITAL FUNDING

FFY 2016 THROUGH FFY 2022

Federal Capital Funding

- Rural System AIP annual average FFY 2016 - 2019 = \$132.9M
- FFY 2020 AIP = ~\$198.9M
- FFY 2021 AIP = ~\$184.2M
- FFY 2022 AIP = ~\$236.4M
- FFY 2022 BIL = ~\$19.6M

Rural Airport System State Match Required

- Generally, 6.25% of project eligible costs
- A few Essential Air Service (EAS) airports in designated economically distressed communities qualify for a 5% match of project eligible costs



AIRPORT IMPROVEMENT PROGRAM (AIP) FOR DOT&PF AIRPORTS IN FFY 2022

Airport Capital Improvement Program FFY22

Executed Grants for FFY22

Total number of grants

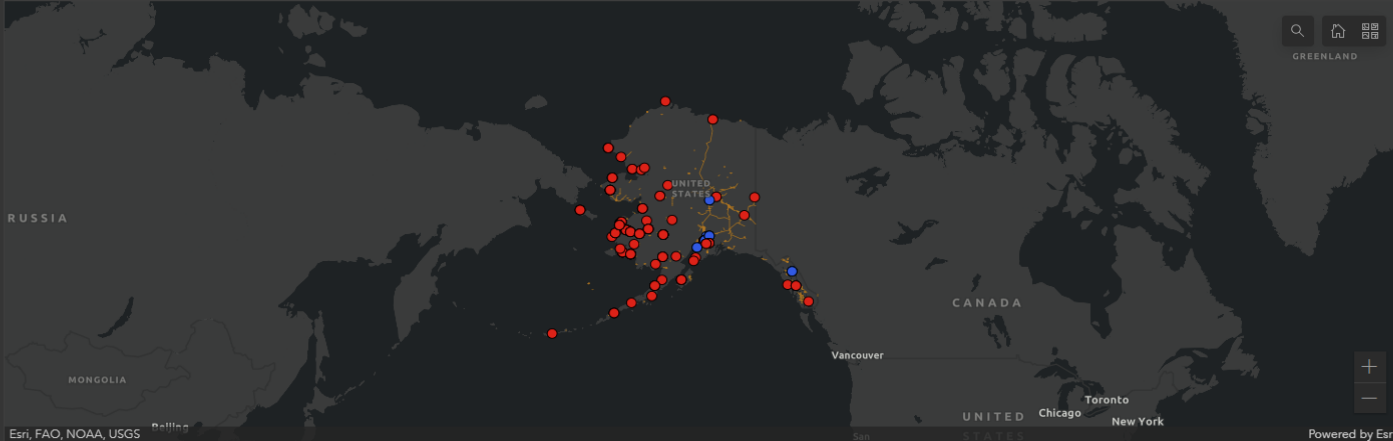
72

Total number of grants for
DOT&PF Controlled

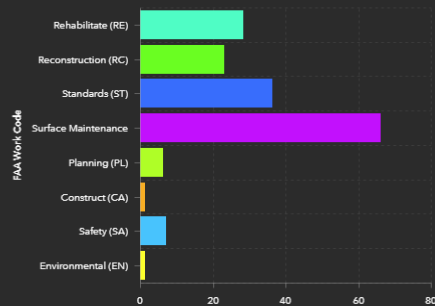
63

Total number of grants for Other
Government

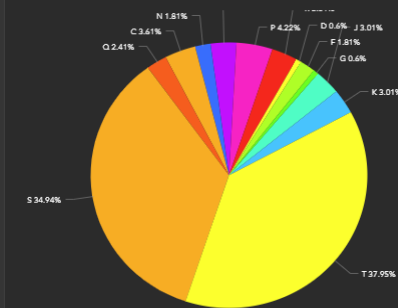
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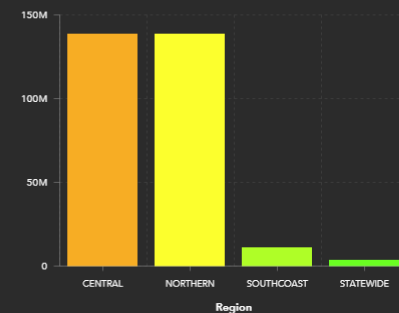
Grant Total per FAA Work Code



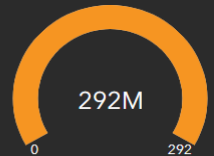
Senate District



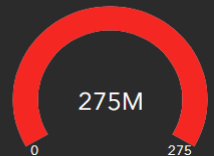
Grant Total per Region



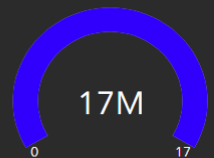
Grant Total



Grant Total for DOT&PF
Controlled



Grant Total for Other Government



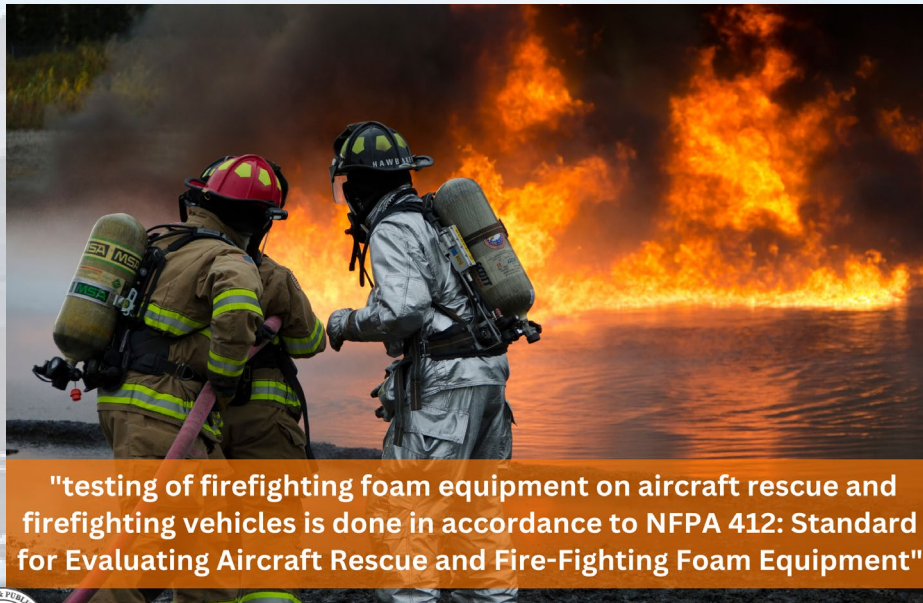
An aerial photograph showing a coastal region. On the left, a river flows through a dense forest. To the right of the river is a residential area with several houses. Further right is a large, flat, light-colored area that appears to be a former industrial or military site, possibly a runway or airfield, with some structures and parking lots. In the background, there are mountains under a cloudy sky.

PER/POLY-FLUOROALKYL SUBSTANCES (PFAS)

PFAS: AIRPORTS

What is PFAS?

- Family of chemicals
- Do not break down easily
- Widespread



"testing of firefighting foam equipment on aircraft rescue and firefighting vehicles is done in accordance to NFPA 412: Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment"



NFPA 412: Simplified

Foams shall be flowed annually to ensure expansion ratio and drainage criteria are met.

Products & Sources

- Aqueous Film Forming Foam (AFFF)
- Consumer Products with non-stick and stain-resistant

PFAS: WORK TO DATE

Funding

Total Contracted

\$7.3M

Total Invoiced

\$4.96M

Statewide Sampling

Total Wells

632

Above Action Level

144





PFAS: WHAT'S NEXT?

Aircraft Rescue & Fire Fighting

AFFF Transition to Fluorine-Free Foam (F3) and ARFF Equipment
Clean-Out/Replacement - RFP Summer '23

PFAS Mitigation

- Long-term Solution Implementation
- Site Characterization
- Development Projects

Challenges

- Funding
- No industry guidance for transition (clean-out)
- F3 Inventory
- Evolving Regulatory Guidance
- Development Projects

THANK YOU. QUESTIONS?

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