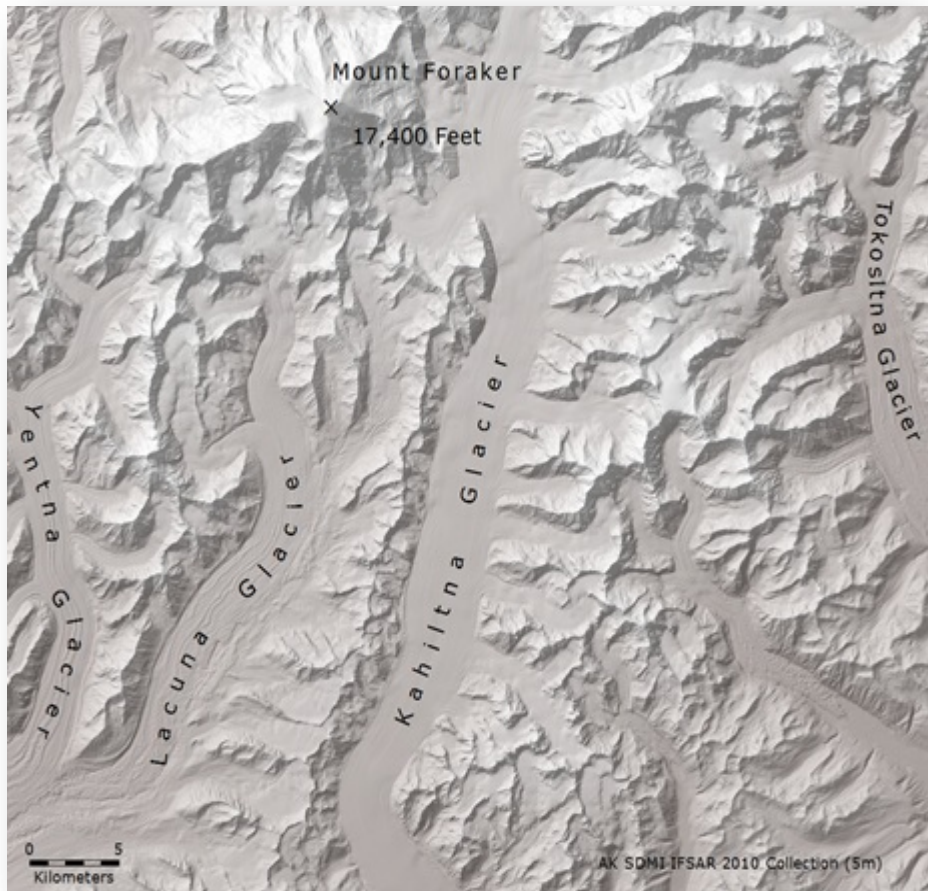




# Alaska Mapping Executive Committee (AMEC) – Washington, D.C.

April 25, 2018

# Agenda

- *Welcome and introductions - Tim Petty, DOI and Tim Gallaudet, DOC*
- *AMEC history, objectives and status report - Kevin Gallagher, USGS*
- *Alaska IfSAR completion plan - Mike Tischler , USGS*
- *State of Alaska status report - Steve Masterman, State of Alaska*
- *NOAA GRAV-D and shoreline mapping update - Juliana Blackwell, NOAA*
- *3DNation update and Alaska Coastal Mapping Summit review - Ashley Chappell, NOAA*
- *Alaska geologic mapping and use of geophysics - Steve Masterman, State of Alaska*
- *Alaska imagery collection update - Chris Noyles, BLM*
- *Open Discussion: Post-IfSAR transition to other priority themes – Steve Masterman, State of Alaska and Kevin Gallagher, USGS, facilitators*
- *Schedule and promote next meeting: August 29, 2018 in Juneau, aligned with NOAA HSRP – Juliana Blackwell, NOAA*
- *Review actions and next steps - Co-Chairs, Tim Petty, DOI and Tim Gallaudet, DOC*
- *Adjourn*

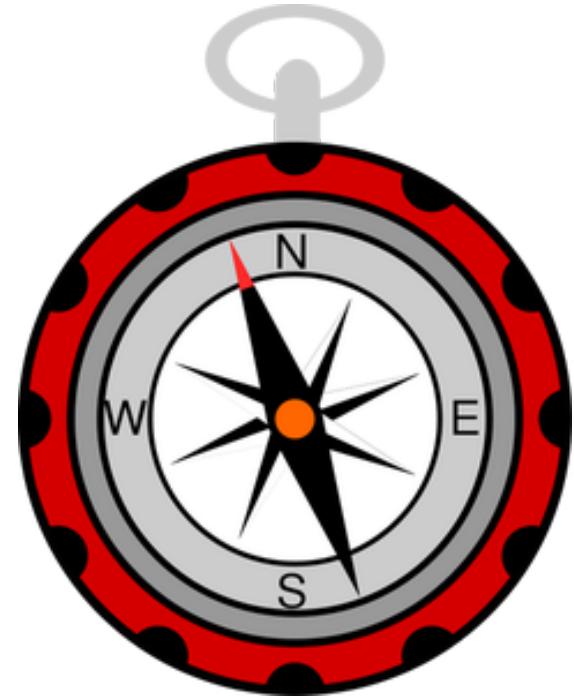
# AMEC History

- In 2008 some would argue that the planet of Mars was better mapped than Alaska.
- The Alaska Mapping Roundtable convened June, 2012 to review the need to improve the state of mapping in Alaska.
- The Alaska Mapping Executive Committee (AMEC) was formed as an outcome of the Roundtable.
- AMEC held its first meeting in November, 2012.
- AMEC is chartered and meets twice annually to coordinate Alaska mapping priorities.



# AMEC Charter and 18-Month Tactical Plan: Updated

- Both documents were approved on March 30, 2018.
- Documents will guide AMEC strategic direction and near-term tasking to reach priority objectives.
- Thanks to all agencies for participating in the updates.



# AMEC Charter: Updated

- New AMEC charter runs 2018 through 2022.
- Guiding Principles:
  - Use enterprise approaches to achieve efficiencies.
  - Maximize Federal and State coordination.
  - Leverage existing efforts.
  - Implement FGDC best practices.
- Scope of the charter expanded to include potential mapping themes beyond topographic mapping such as:
  - imagery
  - coastal zone mapping
  - bathymetric mapping
  - targeted lidar acquisitions
  - enhanced hydrography
  - geologic mapping
  - geophysical surveys
  - land classification

# Example: 3DEEP

## THREE DIMENSIONAL MAPPING

### ECONOMIC EMPOWERMENT PROGRAM

- Executive Order calls for 3D mapping of the Nation to identify mineral resources within our borders in order to:
  - Strengthen national security,
  - Create jobs, and
  - Generate economic and social benefits.
- **Topographic Mapping (3DEP Lidar)**: High-density, high-accuracy 3D elevation data.
- **Airborne Geophysics**: Surveys of the geology beneath the Earth's surface.
- **Geological Mapping**: 2D and 3D geologic models and maps.



- New tactical plan covers April 1, 2018 to September 30, 2019.
- Provides guidance for:
  - Completing IfSAR coverage of the Alaska mainland and other priority areas
  - Accelerating US Topo and Alaska National Hydrography Dataset production
  - Advancing GRAV-D, ground control, and coastal mapping goals
  - Evaluating alternatives for elevation data acquisition over the Aleutian Islands and implementing a program plan for acquisition
  - Establishing an acquisition strategy for high-resolution lidar elevation data for select areas in Alaska (coastlines, areas of mineral potential, etc.)
  - Identifying a methodology, and developing a technical and program plan for next-generation high-resolution imagery data in Alaska
  - Developing and implementing a communications strategy
  - Renewing the priorities of the AMEC

# AMEC Activity Since October Meeting

## Major Actions Completed

- New co-chairs were established.
- The updated AMEC Charter was finalized and approved.
- The updated 18-Month Tactical Plan was finalized and approved.
- 69,000 square miles of IfSAR data were published for public download.
- \$4,200,000 was tasked toward 2018 IfSAR acquisition, and includes coverage for Nunivak Island, the Yukon-Kuskokwim Delta, and portions of the Alaska Peninsula.
- The Prince of Wales Island Phase 2 lidar acquisition project was approved for funding by the 3DEP BAA review team.
- Transportation and Hydrography updates from multiple AMEC partners were ingested by USGS for use in 2018 US Topo map production.
- Alaska IfSAR data was delivered to the FAA for use in their aeronautical charting program.



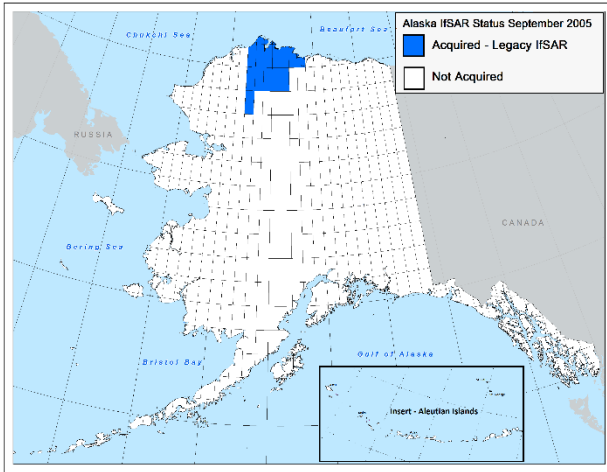
# Data Acquisition Accomplishments

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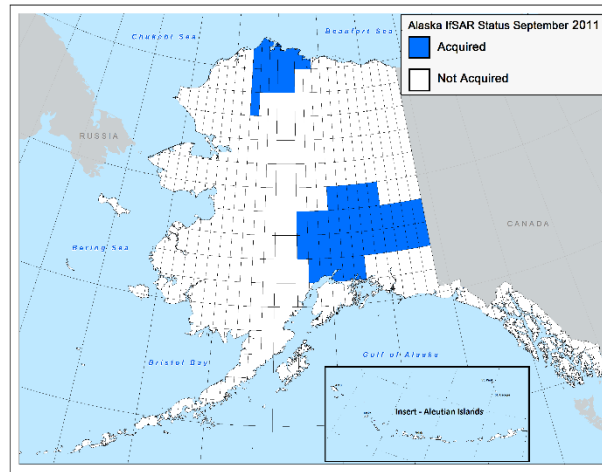
| Theme           | Metric                                      | 2013 Goal                                                                   | April 2018 Status                  |
|-----------------|---------------------------------------------|-----------------------------------------------------------------------------|------------------------------------|
| Elevation       | % IFSAR acquired                            | Complete in 4 years                                                         | 96% statewide coverage achieved    |
| Hydrography     | % NHD updated                               | Complete in 6 years                                                         | 20% updated                        |
| Transportation  | % of State completed and publicly available | Complete in 5 years                                                         | 100% complete; ongoing maintenance |
| GRAV-D          | % GRAV-D acquired                           | Complete in 2019                                                            | 78.4%                              |
| Coastal Mapping | % AK shoreline updated                      | Complete in 5 years with budget increase, longer term if no budget increase | 48.5%                              |

# Alaska IfSAR Coverage Growth 2005-2017

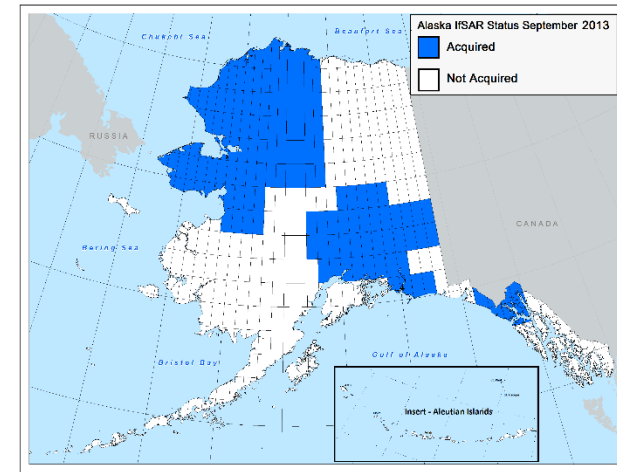
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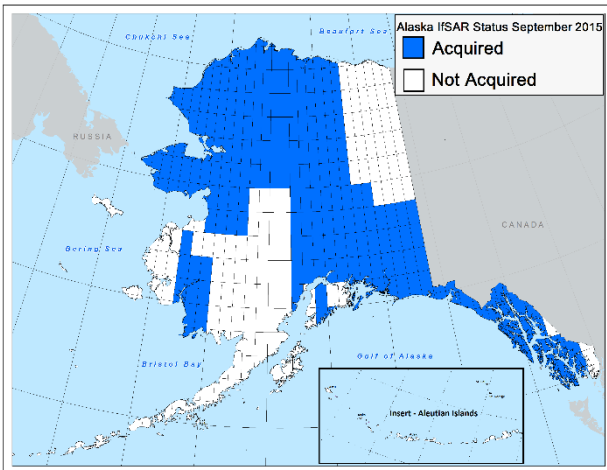
2005



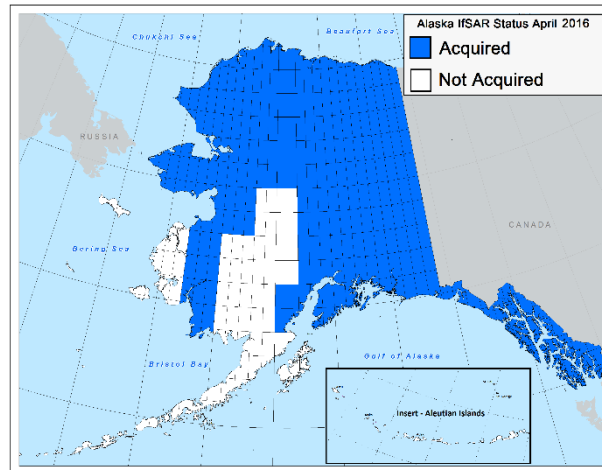
2011



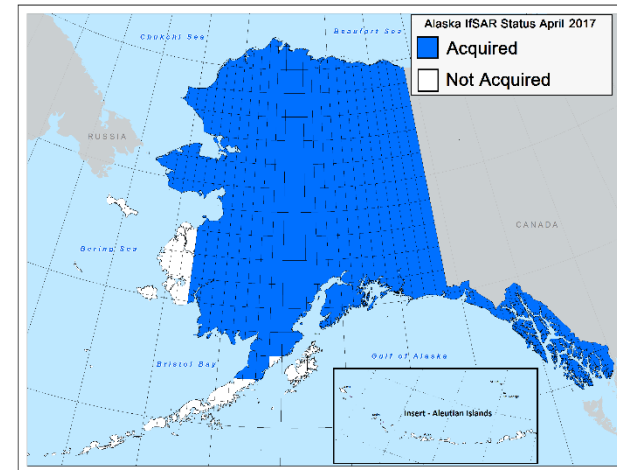
2013



2015



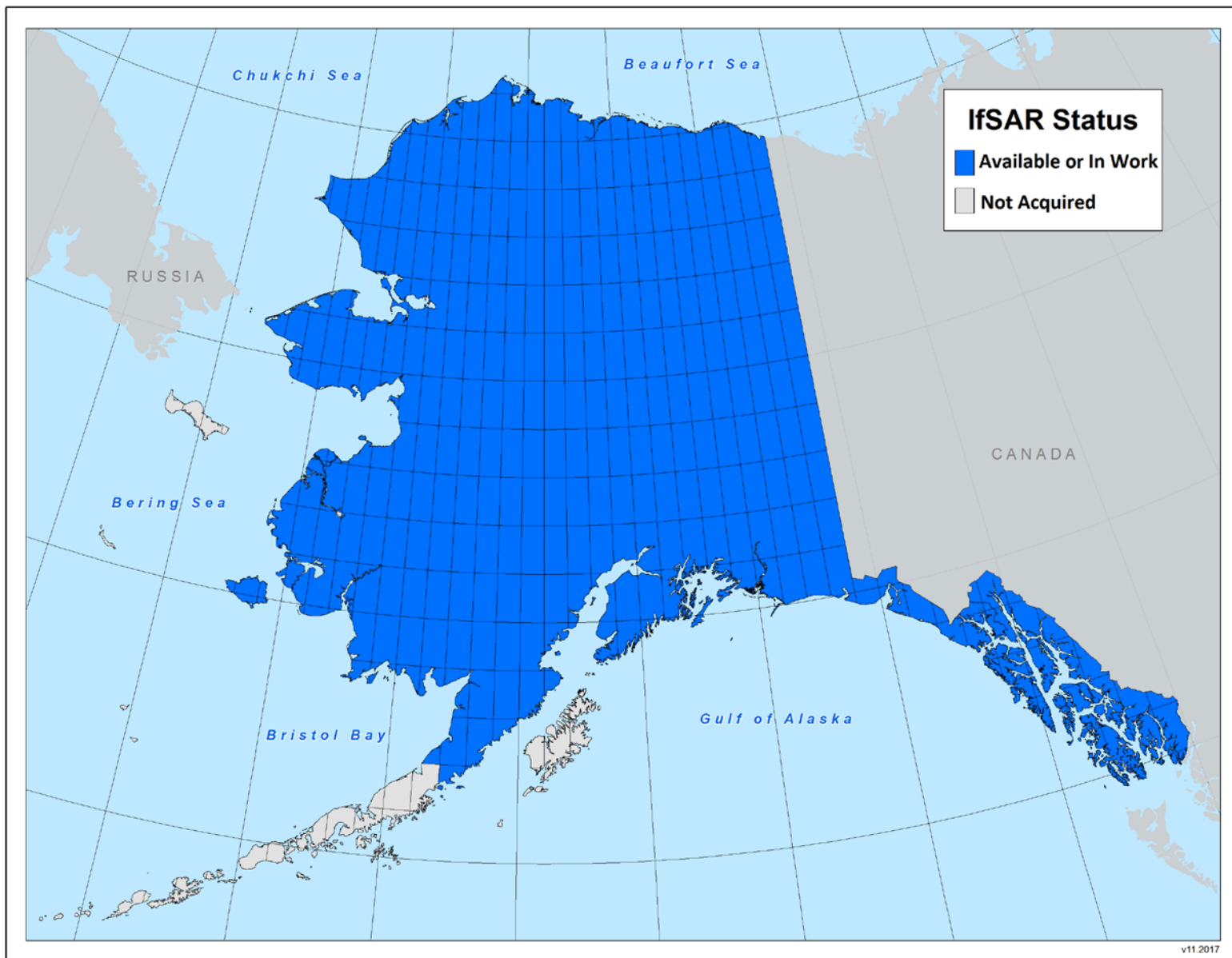
2016



2017

# Alaska IfSAR Status April 2018

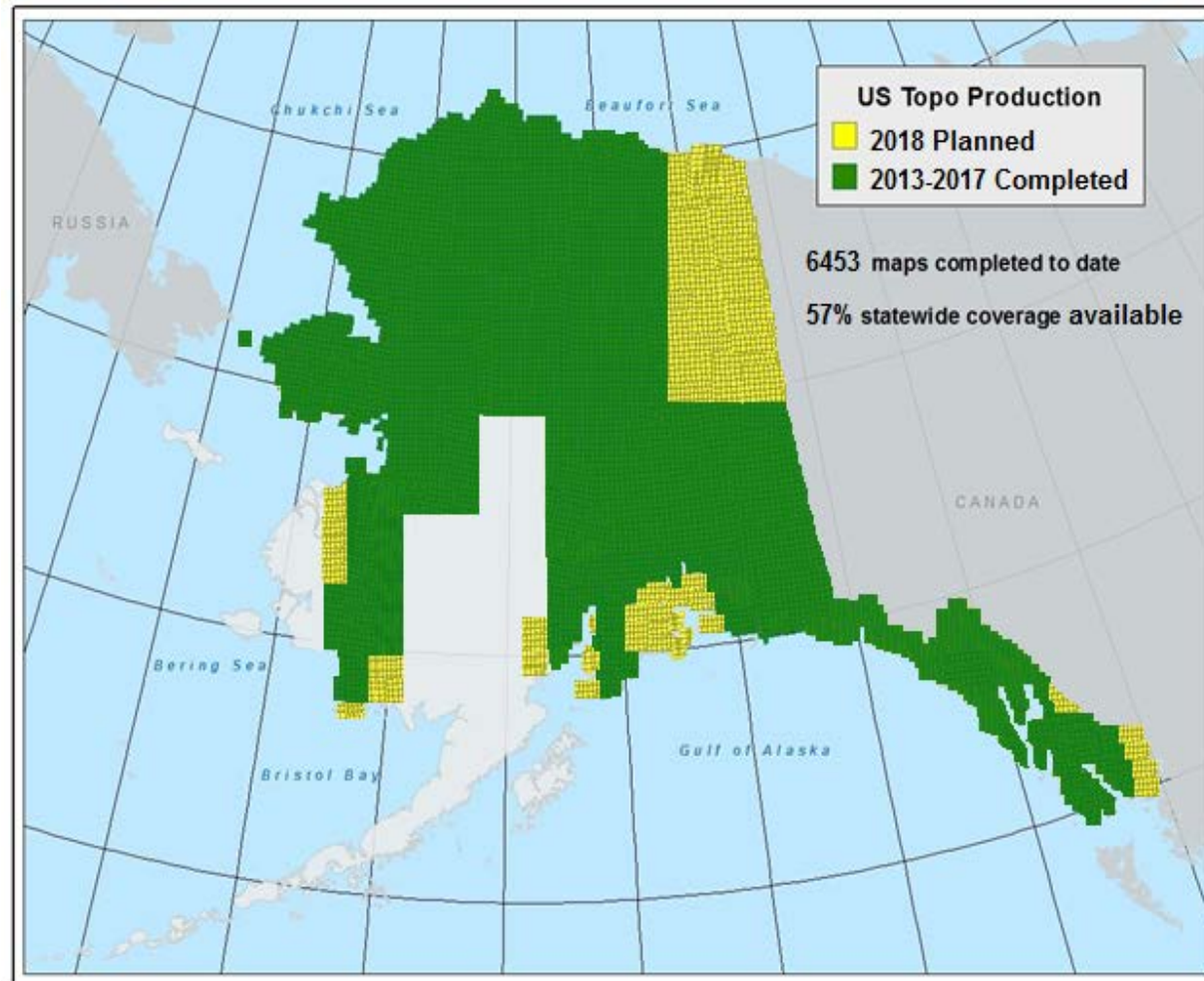
- 96% now fully funded.



# US Topo Map Production Status

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- Map production follows IfSAR delivery.
- 11,275 total maps cover Alaska at 1:25,000 scale.
- 6453 AK US Topo maps are published
- 1860 maps planned for FY18 production.
- 57% complete
- 70% expected by September 30, 2018.



# IfSAR Completion Plan

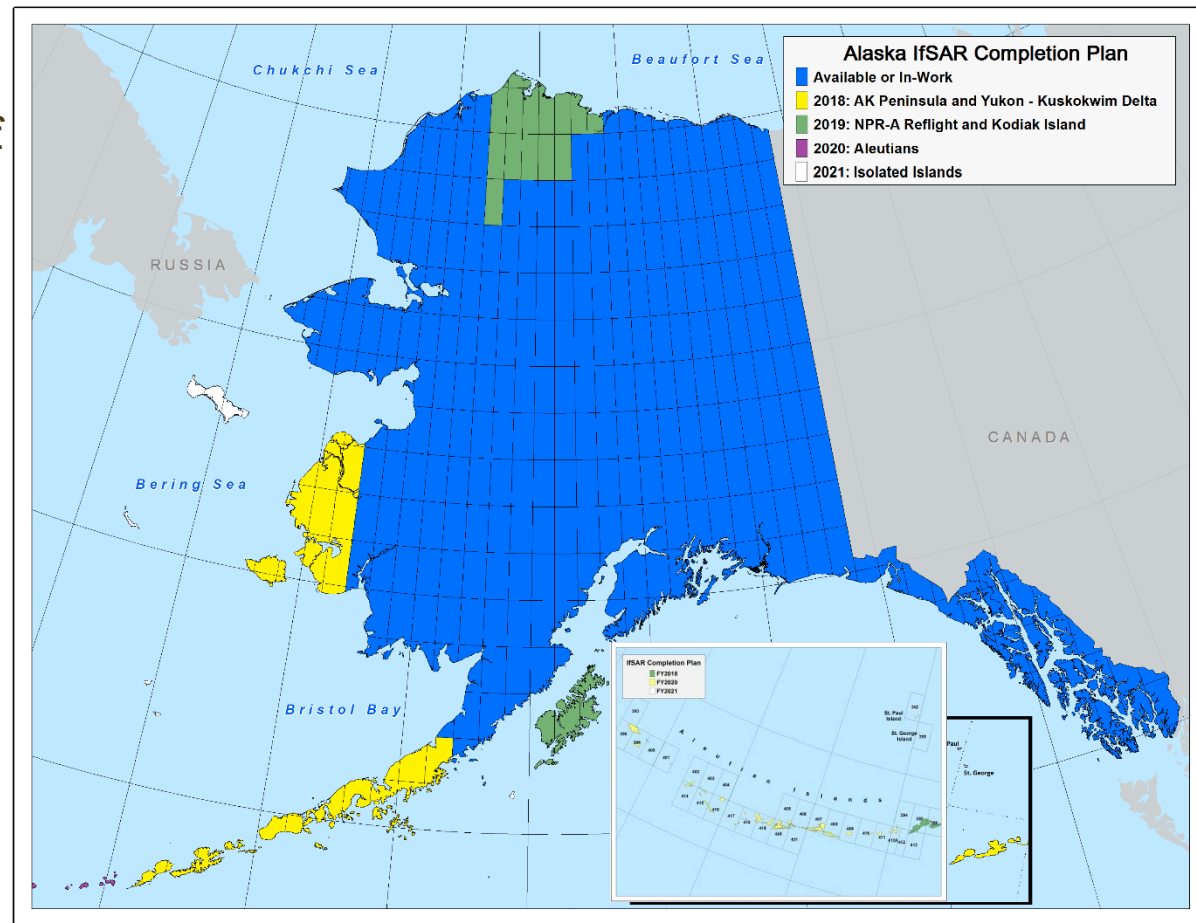
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FY2018: Alaska Peninsula and Yukon-Kuskokwim Delta (\$4.25M – seeking \$600,000 EOY to fund final processing of AK Peninsula cells).

FY2019: NPR-A re-flight and Kodiak Island (\$3.8M estimate, BLM seeking support funding for NPR-A).

FY2020: Complete Western Aleutian Islands (\$3.5M est.).

FY2021: Complete Isolated Islands - St. Lawrence, St. Matthew, St. Paul, St. George, Chirikof, Middleton (\$1.6M estimate).



# State of Alaska AGC Update



# NOAA GRAV-D and Shoreline Mapping

# 3DNation Update and Alaska Coastal Mapping Summit Review

# Alaska Geologic Mapping and Geophysics

# NGA Statewide Imagery Collection Status

- Anticipate completing IfSAR in 2021.
- Many Alaska mapping requirements will remain and are noted in the updated charter, including:
  - Complete GRAV-D (likely complete by 2021).
  - Complete statewide NHD/WBD/NHD+ and Shoreline updates.
  - Continuously improve transportation layer.
  - Acquire updated imagery layer – 1m resolution or better.
  - Targeted high-resolution lidar elevation acquisitions.
  - Geophysical data and geological mapping for critical areas in the State.
  - Land characterization data.
- Consider Committee processes for gathering background information and establishing future priorities.
- Consider funding mechanisms to support themes beyond basic topographic mapping.
- Consider strategies for promoting the new AMEC priorities.

- Align with NOAA HSRP (Hydrographic Services Review Panel) meeting scheduled in Juneau, Alaska, August 28-30, 2018.
- NOAA description of HSRP objectives and potential attendees.
- AMEC meeting is tentatively scheduled Wednesday afternoon August 29, from 1-4 P.M.
- Conflicts with a NOAA facility tour, but AMEC planners feel it is a better option than holding the meeting on Monday (travel day) or Friday (before Labor Day Monday).
- Potential opportunity to engage State of Alaska political and State Agency leadership in Juneau.
- If approved, will send out a Save-the-Date to AMEC members, Alaska Region Federal executives, and State of Alaska executives.

# Actions, Next Steps

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- Reminder: Seeking \$600,000 EOY funds to fund final processing of Alaska Peninsula IfSAR to reach 98% coverage.
- Several partners are investigating acquisition of lidar for Kodiak Island in 2019 – will keep Committee apprised of findings.
- August 29 Save-the-Date notice will be sent out.
- Actions from meeting...

