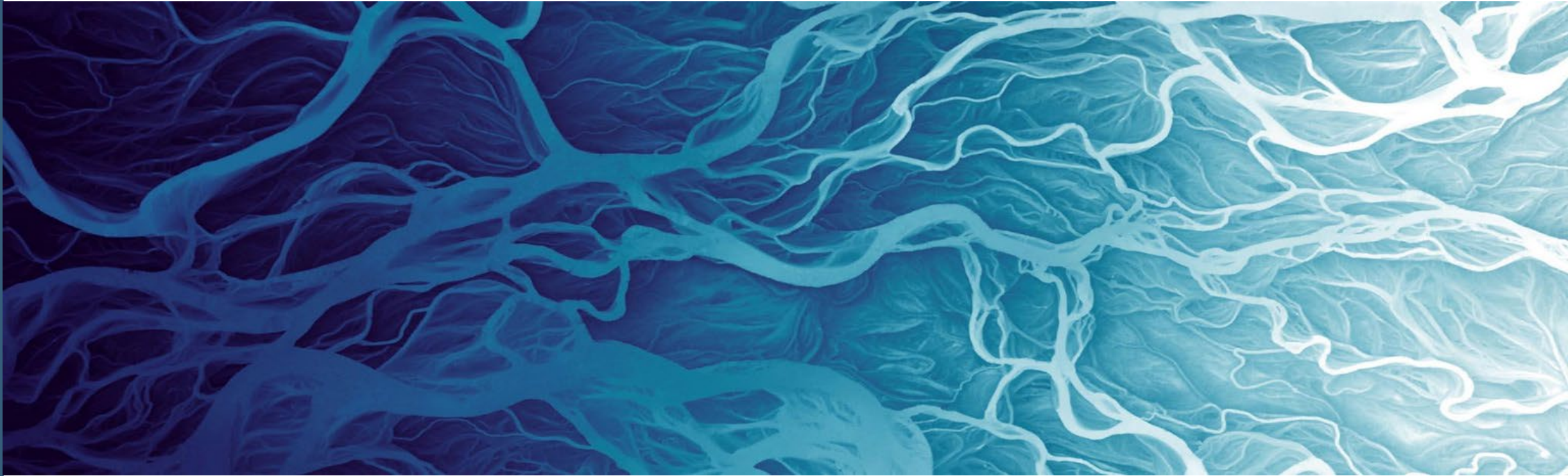


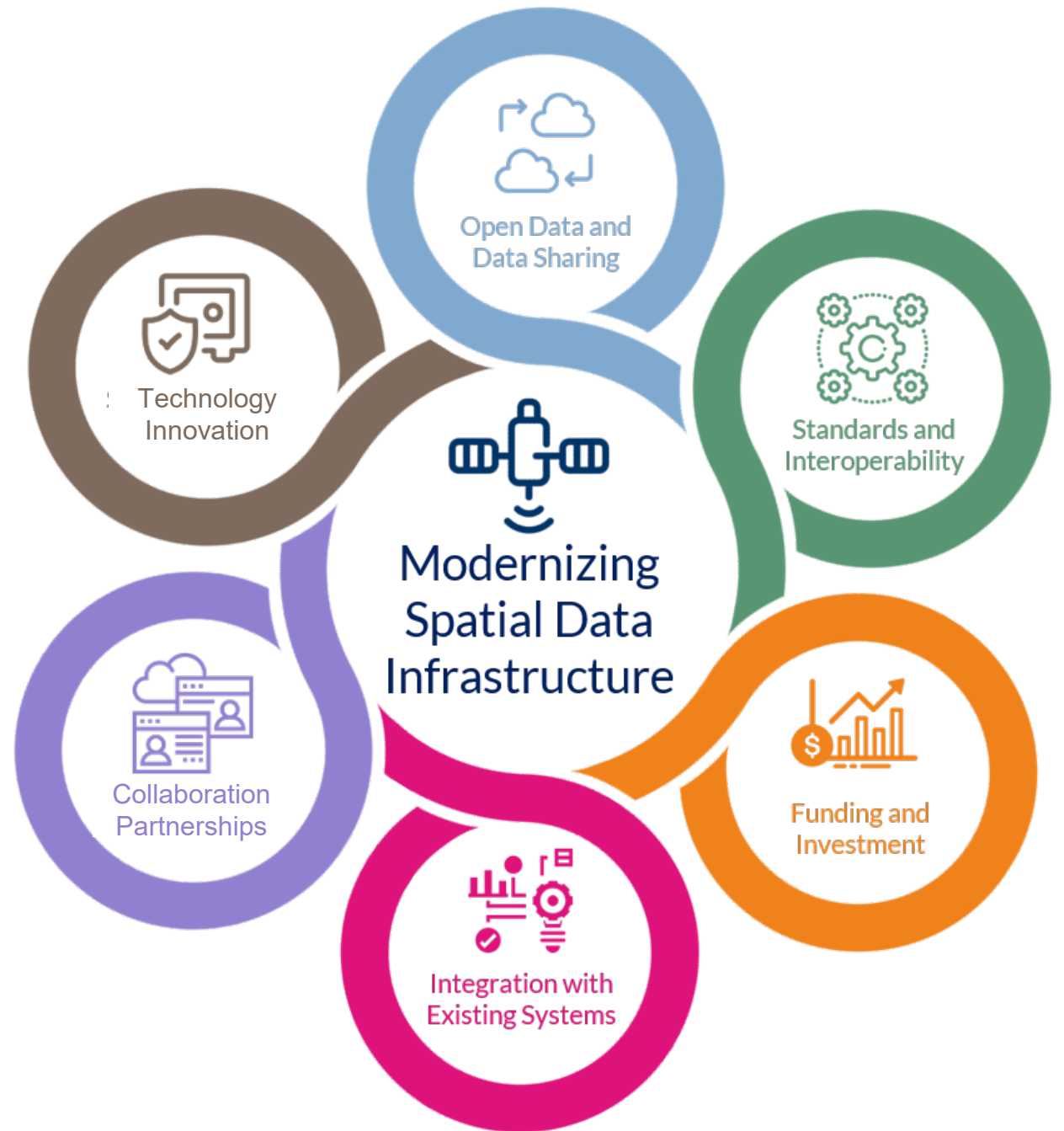
# Powering Alaska's Digital Atlas



Leslie Jones, PhD  
State of Alaska  
Geospatial Information Officer



# Modernizing Alaska's Spatial Data Infrastructure (SDI)



# Road to Modernizing Alaska's SDI

## Supporting role of Alaska Geospatial Office

Statewide Mapping Updates

Implementing Governance Strategies

Data Access and Integration Priorities

What's on the horizon

## Building the Geospatial Future Together— The NSDI Strategic Plan 2025–2035



# National Geospatial Data Infrastructure (NSDI)

## GEOSPATIAL DATA ACT OF 2018

Home / Geospatial Data Act 2018

The Geospatial Data Act of 2018 (GDA) was signed into law by the President on October 5, 2018. The GDA was included as a component of the FAA Reauthorization Act (H.R. 302, P.L. 115-254). The GDA is now in [U.S. Code, Title 43 – Public Lands, Chapter 46: GEOSPATIAL DATA](#). See the section cross-reference table below for a quick section mapping between the H.R. and U.S.C. versions. Note that documents provided here prior to September 2020 contained the HR section references.

Resources, updates, and information about the GDA will be posted on this page as we work with partners to implement the Act.

- [Geospatial Data Act of 2018 - U.S. Code \(pdf\)](#)
- [Geospatial Data Act of 2018 - H.R. 302 Final Text \(pdf\)](#)
- [Geospatial Data Act of 2018 - H.R. 302 Final Text Web/Online Version](#)
- [GDA Section-by-Section Summary \(pdf\)](#)

### Resources

- [GDA Plans](#)
- [GDA Reports](#)
- [GDA Fact Sheet - May 2019 \(pdf\)](#)
- [FGDC Statement on Passage of the Geospatial Data Act of 2018](#)
- [Congressional Research Service Report on the Geospatial Data Act of 2018 \(pdf\)](#)
- [GDA Tiger Team](#)
- [NSDI Strategic Plan](#)

### National Geospatial Advisory Committee (NGAC) Activities

- [NGAC Initial Comments on GDA Implementation \(May 2019\) \(pdf\)](#)
- [5-8-2019 NGAC Meeting - FGDC Update Presentation on GDA \(pdf\)](#)

### Section cross-walk between H.R. and U.S.C. versions of GDA

43 USC Ch. 46	Section Title	H.R. 302, PL 115-254
2801	Short Title; Findings	751
2801	Definitions	752
2802	Federal Geographic Data Committee	753
2803	National Geospatial Advisory Committee	754
2804	National Spatial Data Infrastructure	755
2805	National Geospatial Data Asset Data Themes	756
2806	Geospatial Data Standards	757
2807	GeoPlatform	758
2808	Covered Agency Responsibilities	759
2809	Limitation On Use of Federal Funds	759A
2810	Savings Provision	759B
2811	Private Sector	759C

Member of National Geospatial  
Advisory Committee (NGAC)

# Federal Mapping Responsibilities



HOME WHO WE ARE WHAT WE DO INITIATIVES ORGANIZATION RESOURCES Q

## OMB CIRCULAR A-16 AND SUPPLEMENTAL GUIDANCE

Home / Policy & Planning / OMB Circular A-16

### OMB Circular A-16

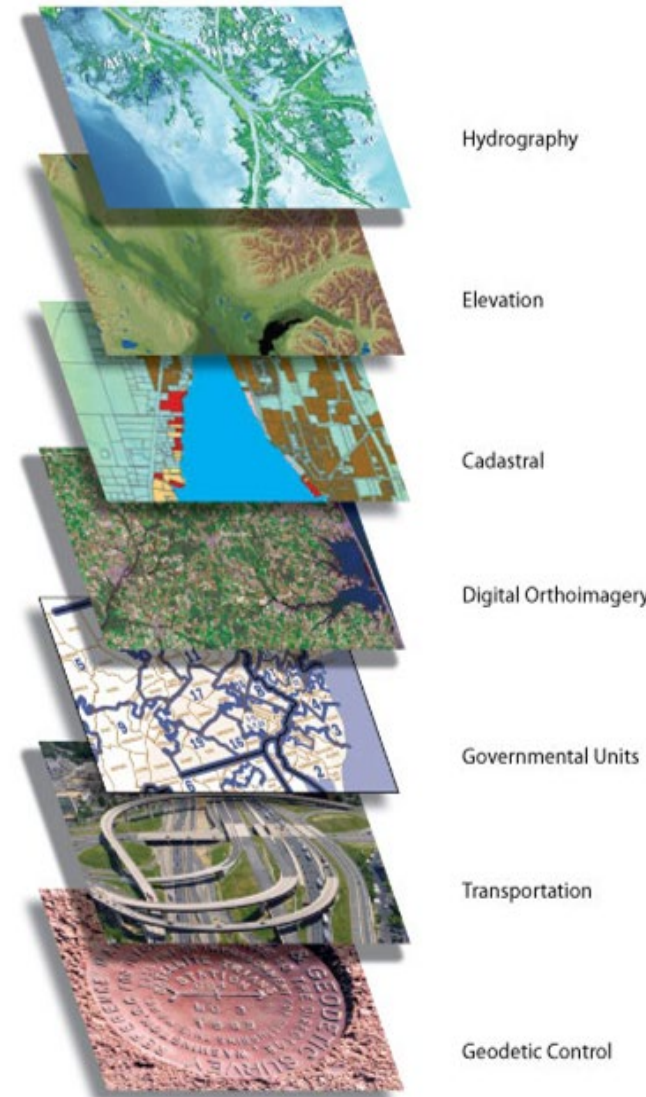
**Note:** This Circular is pending an update per the Geospatial Data Act of 2018.

The Circular provides direction for federal agencies that produce, maintain, or use spatial data either directly or indirectly in the fulfillment of their mission and provides for improvements in the coordination and use of spatial data. The Circular also describes effective and economical use and management of spatial data assets in the digital environment for the benefit of the Federal Government and the Nation. The Circular establishes a coordinated approach to electronically develop the National Spatial Data Infrastructure and establishes the Federal Geographic Data Committee (FGDC).

Version/Date: August 19, 2002 revised

[Read online](#) or [Download](#) (pdf, 1.8MB) OMB Circular A-16 and Supplemental Guidance.

Geospatial Data Act – NGDA Data themes, Definitions & Lead Agencies



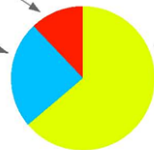
- Address
- Biodiversity and Ecosystems
- **Cadastral**
- Climate & Weather
- Cultural Resources
- **Elevation**
- **Geodetic Control**
- Geology
- **Governmental Units**
- **Imagery**
- International Boundaries
- Land Use – Land Cover
- Real Property
- Soils
- **Transportation**
- **Utilities**
- **Water – Inland**
- **Water – Oceans & Coasts**

# Who Owns/Manages Alaska?

**Private Ownership - 12.1%**  
45.2 million acres

**State of Alaska - 24.1%**  
89.8 million acres

**U.S. Government - 63.8%**  
237.8 million acres



Russian traders arrived in Alaska in the mid-1700's and established small, scattered trading posts and settlements. Alaska Natives (the Eskimo, Indian, and Aleut peoples) continued as the primary landowners during this period of Russian occupation. On October 18, 1867, Russia sold Alaska to the United States government. As a result, the federal government owned the Alaska Territory, approximately 373 million acres - about one-fifth the size of the rest of the U.S.



**State of Alaska - 89.8 million acres**

Under the terms of the Alaska Statehood Act of 1959, the federal government granted the new state 28% ownership of its total area. Approximately 103,350,000 acres were to be elected under three types of grants:

- 1) Community - 400,000 acres
- 2) National Forest Community - 400,000 acres
- 3) General - 102,550,000 acres

Additional territorial grants for schools, university and mental health trust lands, totaling 1.2 million acres were confirmed with statehood.

All grants combined gave the State of Alaska approximately 105 million acres. To date, 89.9 million acres has been granted with the balance expected to be granted by 2009.

**ANCSA Native Corporation (Private)**  
39.3 million acres

On December 18, 1971, P.L. 92-203, the Alaska Native Claims Settlement Act was signed into law. The purpose of ANCSA was to legislate the terms by which Alaska Natives could acquire title to their lands. This claim had been unresolved for more than 100 years since the United States purchased Alaska from Russia in 1867.

Native lands are private lands. ANCSA mandated the creation of regional and village Native corporations to manage 44 million acres and payment of one billion dollars. Thirteen regional corporations were created for the distribution of ANCSA land and money. Twelve of those shared in selection of 16 million acres, the thirteenth corporation, based in Seattle, received a cash settlement only. 224 village corporations, of 25 or more residents, shared 26 million acres. The remaining acres, which include historical sites and existing Native-owned lands, went into a land pool to provide land to small villages of less than 25 people. To date, 39.3 million acres have been transferred to ANCSA corporations.

**Non-ANCSA Private & Local Government - 5.9 million acres**

Land in private ownership (other than Native land) comprises less than one percent of the total land in Alaska. Much of the best land for development around Alaska's communities is, or will be, privately owned. Private land development meets people's needs by providing places to live, work, shop and recreate. It also provides a tax base for cities and communities to help support public services.

Because local governments in Alaska have individual methods of transferring land into private ownership, land currently owned by them is grouped into this category.

Alaska is one-fifth the size of the conterminous 48 states.



**Bureau of Land Management - 82.5 million acres**

In Alaska, BLM's focus is conveying land, wildland fire management, overseeing the Joint Pipeline Office (a partnership with the state and other federal agencies with oversight responsibility of the Trans-Alaska Pipeline), and responding to the public demand for use of the land they manage.

**U.S. Fish & Wildlife Service - 78.8 million acres**

The USFWS manages 16 wildlife refuges in Alaska. The two largest are the Yukon Delta National Wildlife Refuge and much storied Arctic National Wildlife Refuge (ANWR), both of which are approximately 19 million acres.

**National Park Service - 52.4 million acres**

There are eight national parks in Alaska, including the five largest in the national park system:

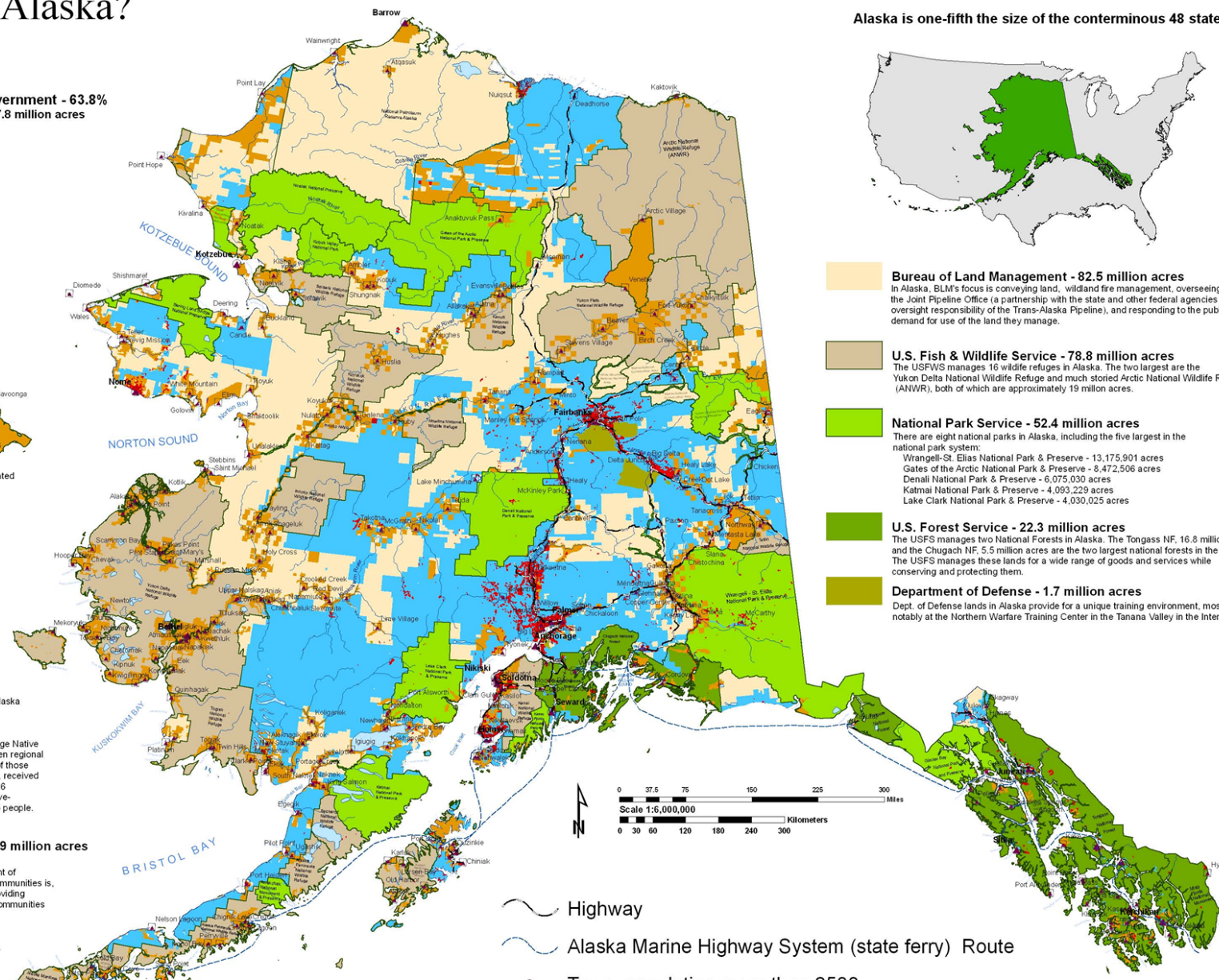
- Wrangell-St. Elias National Park & Preserve - 13,175,901 acres
- Gates of the Arctic National Park & Preserve - 8,472,506 acres
- Denali National Park & Preserve - 6,075,030 acres
- Katmai National Park & Preserve - 4,093,229 acres
- Lake Clark National Park & Preserve - 4,030,025 acres

**U.S. Forest Service - 22.3 million acres**

The USFS manages two National Forests in Alaska. The Tongass NF, 16.8 million acres, and the Chugach NF, 5.5 million acres are the two largest national forests in the U.S. The USFS manages these lands for a wide range of goods and services while conserving and protecting them.

**Department of Defense - 1.7 million acres**

Dept. of Defense lands in Alaska provide for a unique training environment, most notably at the Northern Warfare Training Center in the Tanana Valley in the Interior.



- Highway
- Alaska Marine Highway System (state ferry) Route
- Town, population more than 2500
- Town, population less than 2500

Collaborate - Share - Innovate

2011:

# AK Congressional Delegation letter requesting increased coordination in mapping Alaska

## Congress of the United States

Washington, DC 20510

March 8, 2011

The Honorable Jacob Lew  
Director  
The Office of Management and Budget  
725 17<sup>th</sup> Street, NW  
Washington, DC 20503

Dear Director Lew:

We are writing to you regarding a critical project for our home state that will require the coordination and cooperation of numerous federal agencies.

Alaska is the only state in the United States that has not been digitally mapped on a statewide basis. Most states have completed or are refreshing their existing data. Alaska is lagging behind other states that are in some cases 20 years ahead of Alaska.

Currently, the US Geological Survey (USGS) topographical maps of Alaska are over 40 years old, inaccuracies of up to a quarter mile or more are commonplace and these maps do not meet National Map Accuracy Standards. A reliable base map is critical to control incoming layers of Geographical Information Systems used across all disciplines both public and private. None of the modern disaster preparedness and emergency management systems being deployed elsewhere in the nation will work in Alaska until the need for an accurate base map is resolved. Geospatial information is spread across many levels of government, but lacks means of organization. As a result, the economic benefits, disaster recovery initiatives, and government efficiencies go largely unrealized.

To rectify this, The State of Alaska began a Statewide Digital Mapping Initiative (SDMI) several years ago and has now realized the first collection of elevation data (representing about 10% of the State) to this goal. Our immediate problem is the cost of the initiative and the scope and diversity of federal agencies that need and would benefit from this data collection. The State of Alaska has made a great initial effort to pull together approximately six million in funding to begin this initiative but the overall cost of the project will be closer to \$48 million.

Current Alaska mapping priorities include, but are not limited to:

- Aviation safety
- Coastal resources and Alaska Coastal Management Program and spill response shore zone mapping
- Emergency response
- Fire hazard mapping for critical and high value protection areas
- Forest resource mapping in southeast, northern, and south central regions
- Gas line routing and permit support
- Global warming studies and response planning

Director Lew  
March 8, 2011  
Page 2

- Land cover and terrain for major state parks
- Land planning; corridor analysis and statewide land sales program
- Land use permit authorizations with commercial recreation permits
- Oil and gas infrastructure management and monitoring
- Coastal erosion monitoring

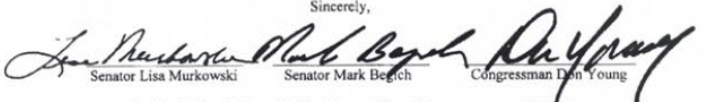
In addition to the USGS, the other federal agencies that are stakeholders in this initiative include the Bureau of Land Management, the Bureau of Indian Affairs, the Bureau of Reclamation, the National Park Service and other Department of Interior agencies; the U.S. Forest Service, Natural Resources and Conservation Service, other agencies within the Department of Agriculture; National Oceanic and Atmospheric Administration; the Federal Aviation Administration and other agencies within the Department of Transportation; NorthCom and other Department of Defense interests; various agencies within the Department of Homeland Security; and National Aeronautics and Space Administration, among others.

At the State level the agencies most directly in need of these maps include the Departments of Transportation, Public Safety, Fish and Game, Environmental Conservation, Commerce, Community, and Economic Development, Labor, Health and Social Services, and any other department using location based services to meet its mission. The State of Alaska has already provided six million for its share of this data collection and has pledged matching funds representing its 27% interest in State of Alaska lands under state control.

The only way we will coordinate the efforts of all federal agencies is to have the White House convene a meeting of all federal stakeholders and develop a strategy by which each agency contributes a portion of the overall cost. No single agency has sufficient funds to finance this program. Quite simply, we need the leadership and support of the White House to develop a plan that provides for the funding needed for this initiative and with a data set that meets the requirements of every federal agency.

We urge you to convene a meeting of representatives of every affected agency at the White House. We hope that you will be able to coordinate the efforts and assist in identifying discretionary funding within each agency that can help cover the cost of this critical initiative. We thank you for your attention to this issue and hope that we can work together for a successful outcome.

Sincerely,

  
Senator Lisa Murkowski      Senator Mark Begich      Congressman Don Young

cc: Cecilia Muñoz, Director, White House Office of Intergovernmental Affairs  
Letitia Long, Director, National Geospatial-Intelligence Agency  
The Honorable Marcia McNutt, Director, U.S. Geological Survey

“Mars is better mapped than Alaska”

2012:

The Alaska Mapping Executive Committee (AMEC) was formed by the Department of the Interior's Assistant Secretary for Water and Science



# Federal-State Coordination for Mapping Alaska



- Align state and federal priorities
- Cost-share towards common goal

## AMEC Executive Membership

### National Oceanic and Atmospheric Administration Co-Chair

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Ocean Energy Management
- Department of Defense
- Department of the Interior
- Environmental Protection Agency
- Federal Aviation Administration
- Federal Emergency Management Agency
- National Geospatial Intelligence Agency

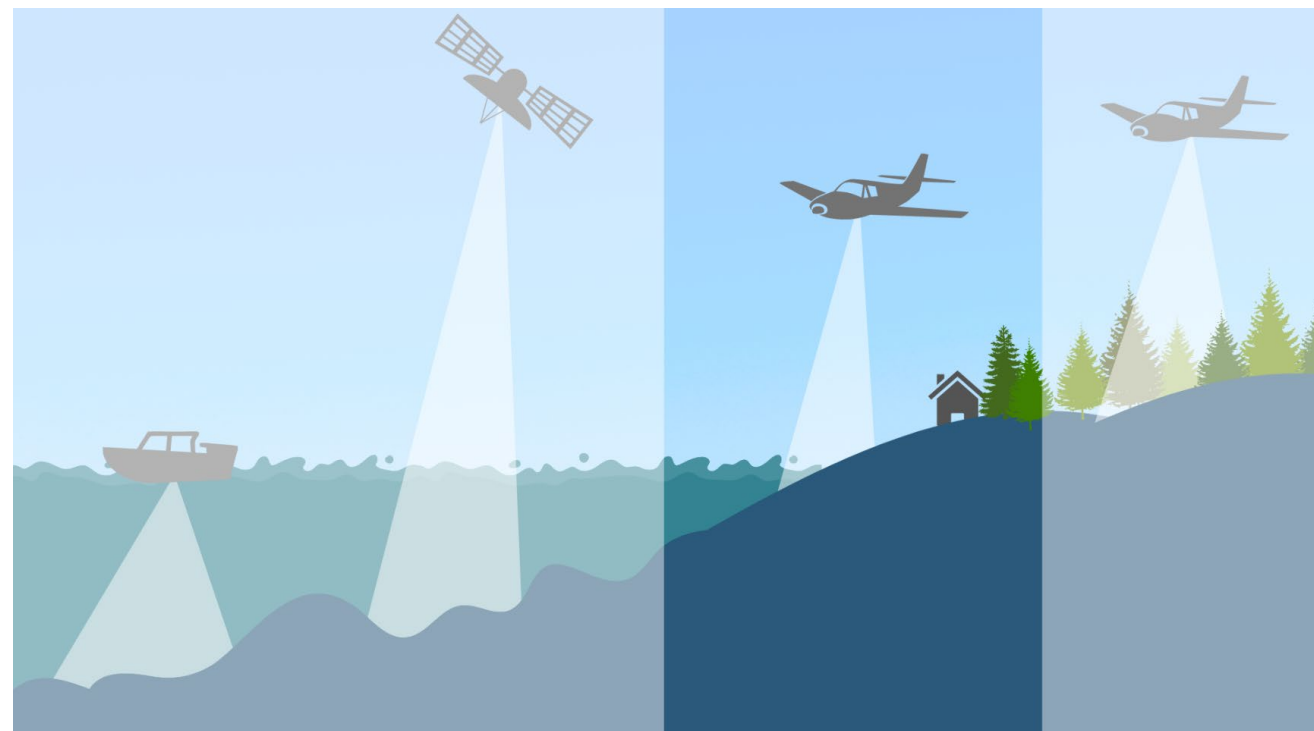
### U.S. Geological Survey Co-Chair

- National Park Service
- National Reconnaissance Office
- Natural Resources Conservation Service
- Office of Management and Budget
- State of Alaska
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. Senate

# Alaska Mapping Executive Committee

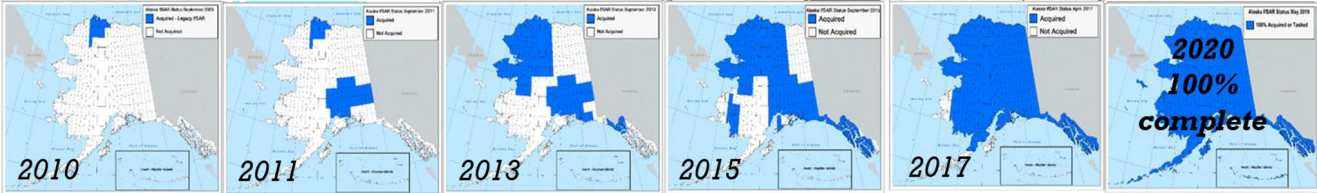
## Statewide Mapping Priorities

- Elevation (Lidar)
- Imagery
- Wetlands
- Vegetation
- Terrestrial Hydrography
- Shoreline
- Grav-D
- Coastal Topography/Bathymetry



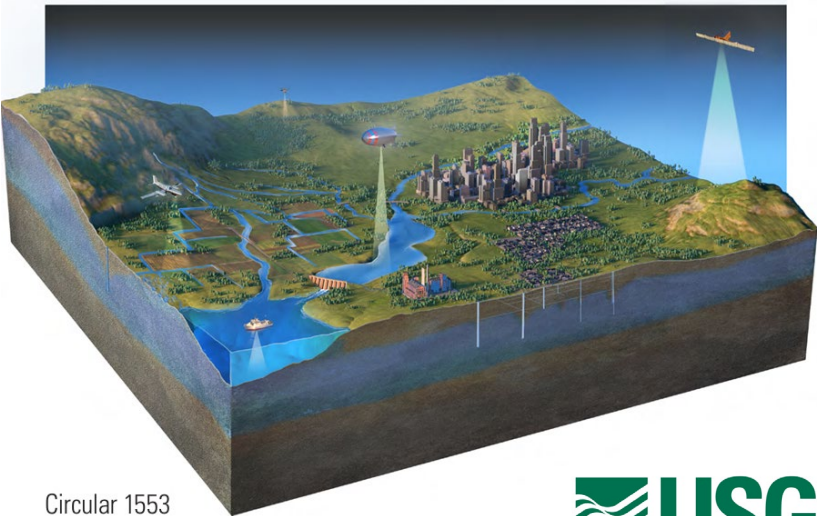
# Elevation: IFSAR to Lidar

First statewide elevation product complete in 2020

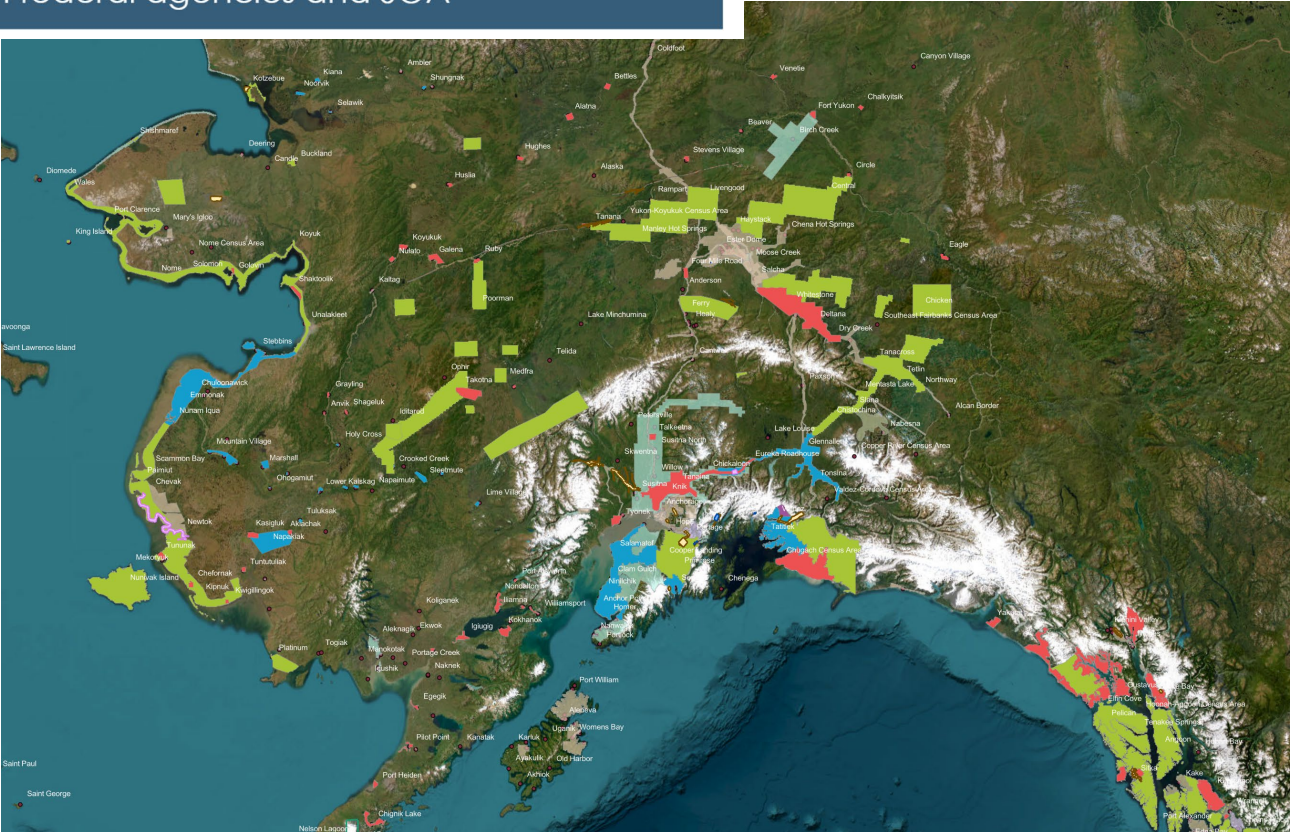


10-year / \$68M project  
Cost-shared between federal agencies and SOA

## The 3D National Topography Model Call for Action— Part 2: The Next Generation 3D Elevation Program

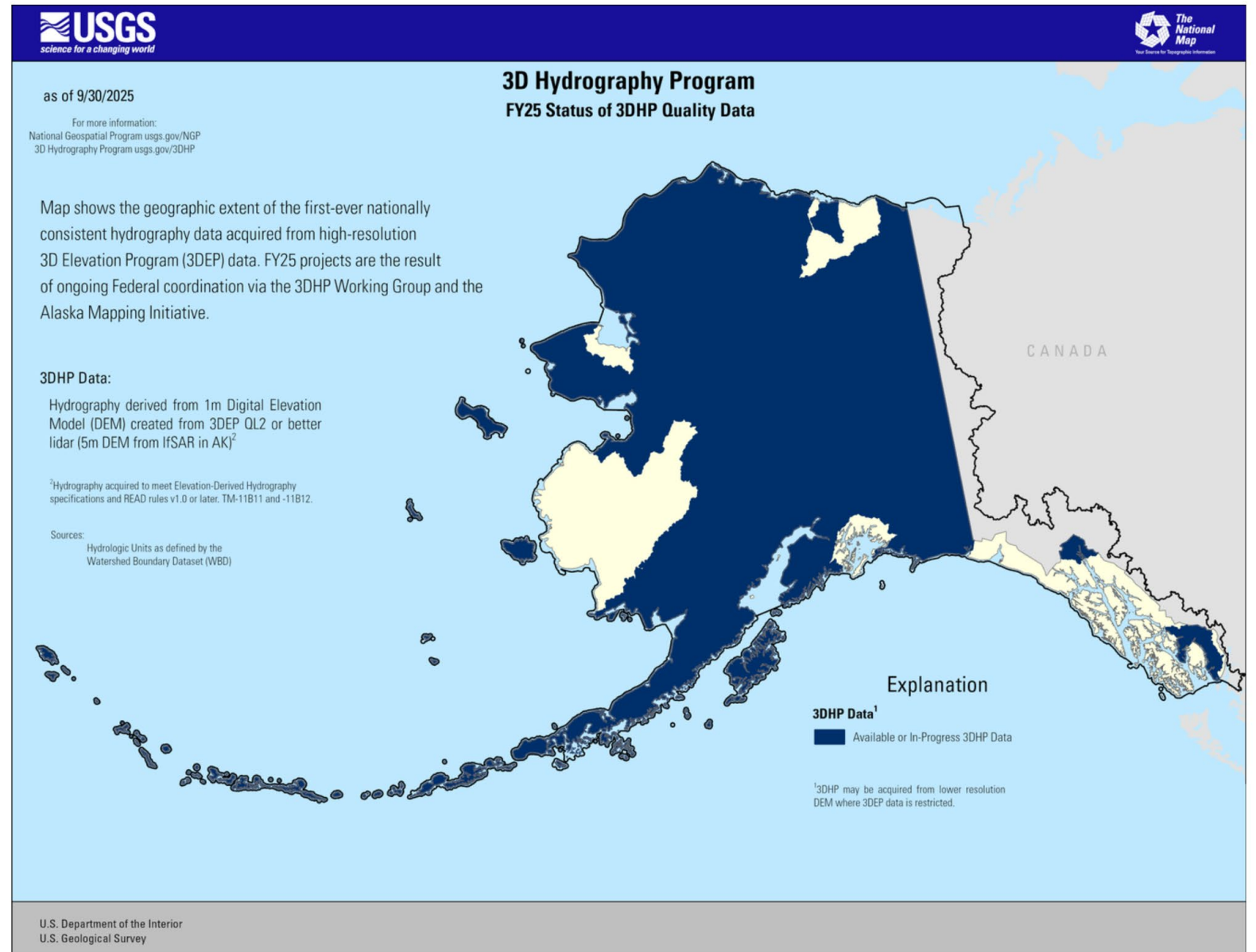


Circular 1553  
Version 1.1, July 2025



# USGS Alaska 3D Hydrography Program

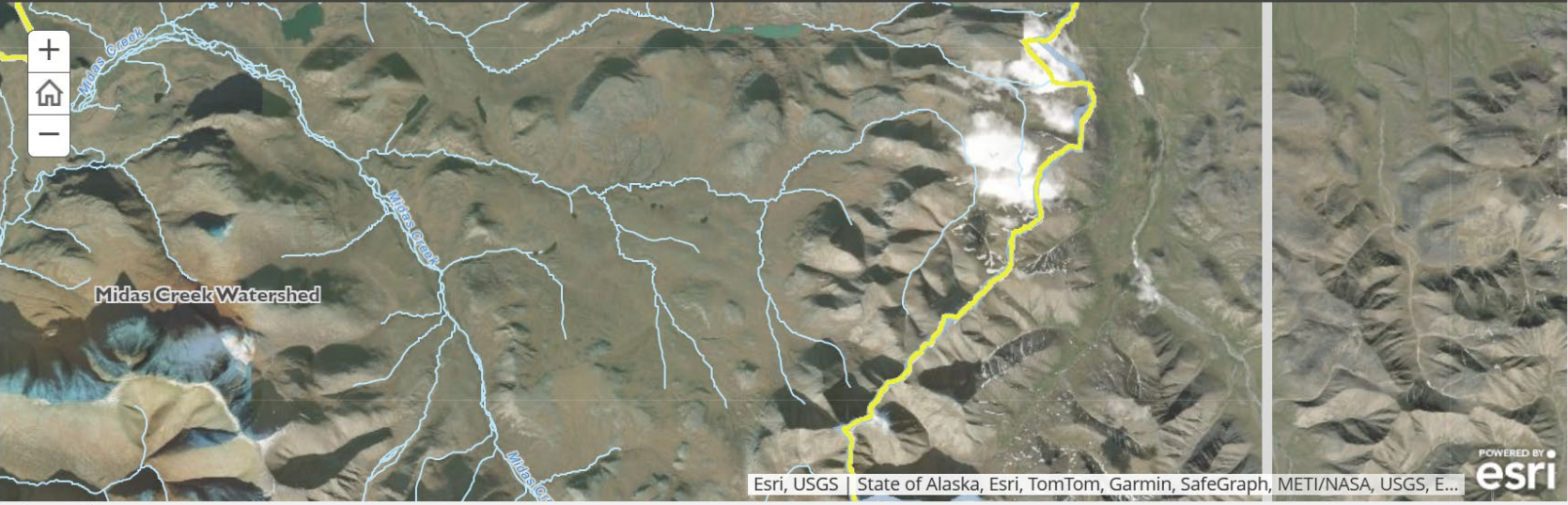
- IfSAR derived



# USGS Alaska 3D Hydrography Program

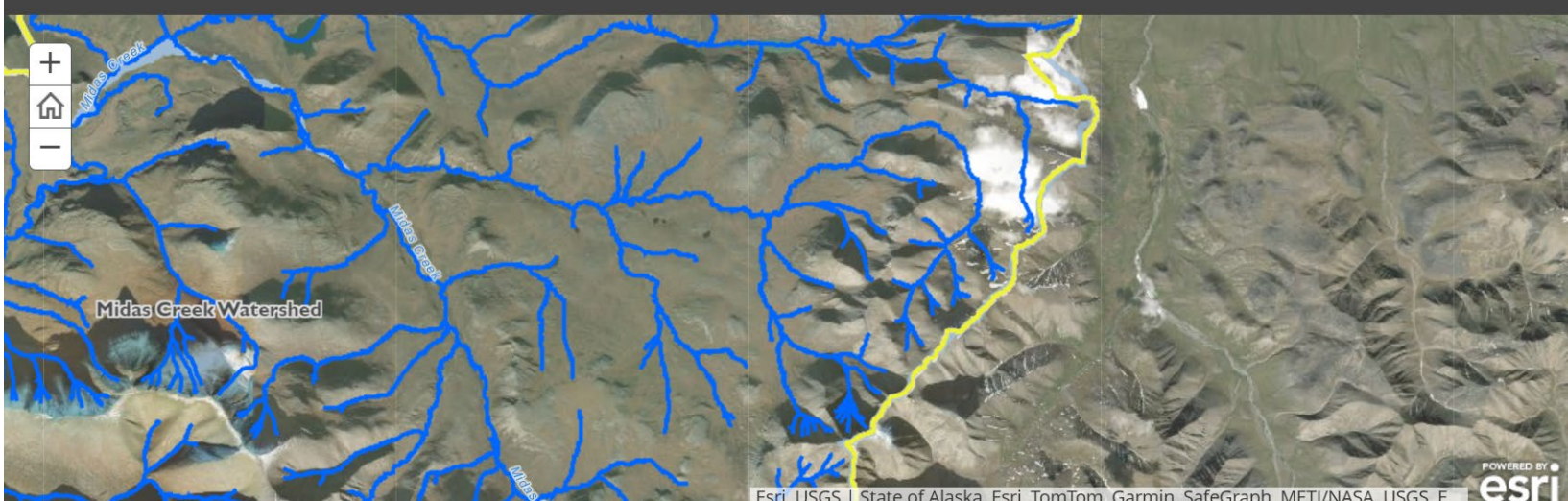
## Hydrography NHD Update Swipe Tool

Use the slider bar to compare NHD hydrography, old (light blue) and new (dark blue), in the Midas Creek watershed (HUC 12) of the upper Noatak River drainage.



shed (HUC 12) of the upper Noatak River

<https://apps.nationalmap.gov/downloader/>



Esri, USGS | State of Alaska, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, E... esri



# Historic Satellite Imagery Mosaics

<https://gis.data.alaska.gov/pages/imagery>



SPOT 5 – 2.5m (2009)



Maxar – 50cm (2020)

**ALASKA  
MAPPING**  
Executive Committee

# Statewide Imagery Mosaics

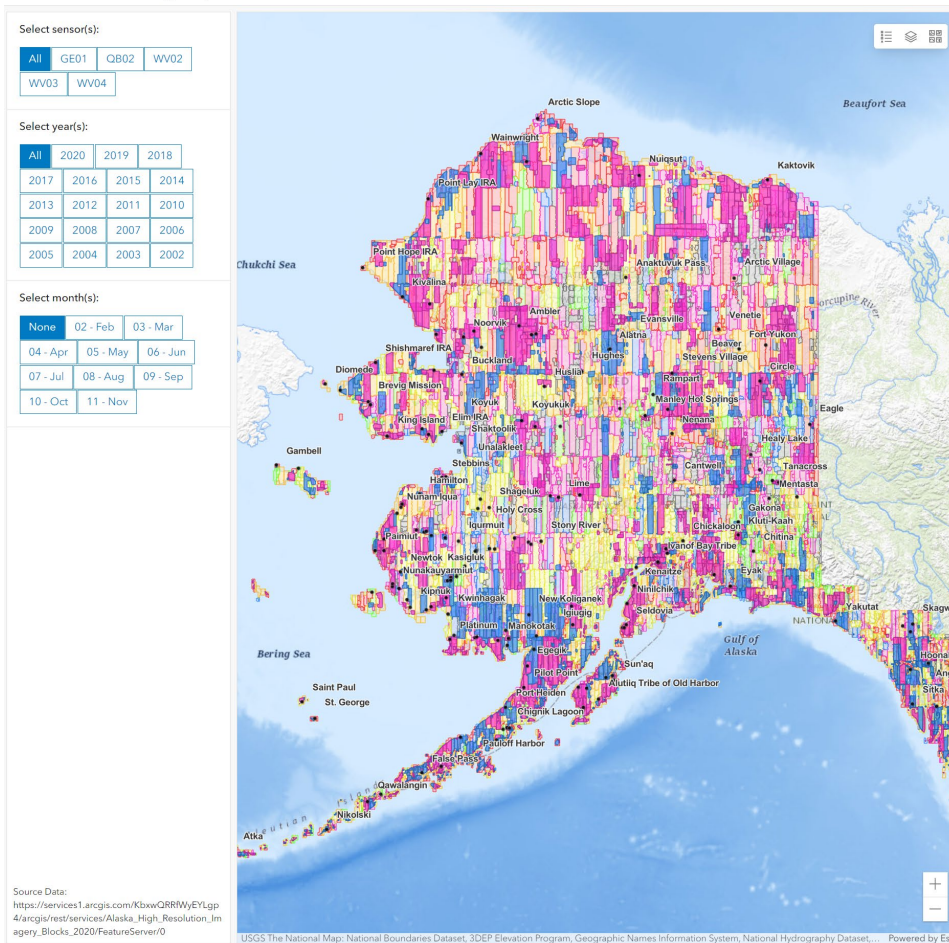
20% Refresh each year

August 2025

13,552 unique users

14M Data requests

Alaska High Resolution Imagery (OIM) Status  
Bureau of Land Management, Alaska



% of State	<b>100%</b>
# of Unique Scenes	<b>5,016</b>
# of Unique Features	<b>7,696</b>

	Unique Scenes	Unique Features
	<b>5,016</b>	<b>7,696</b>
Year	# of Unique Scenes	% of State
2020	876	18%
2019	964	23%
2018	832	19%
2017	381	6%
2016	369	7%
2015-2013	1,066	20%
2012-2002	528	8%

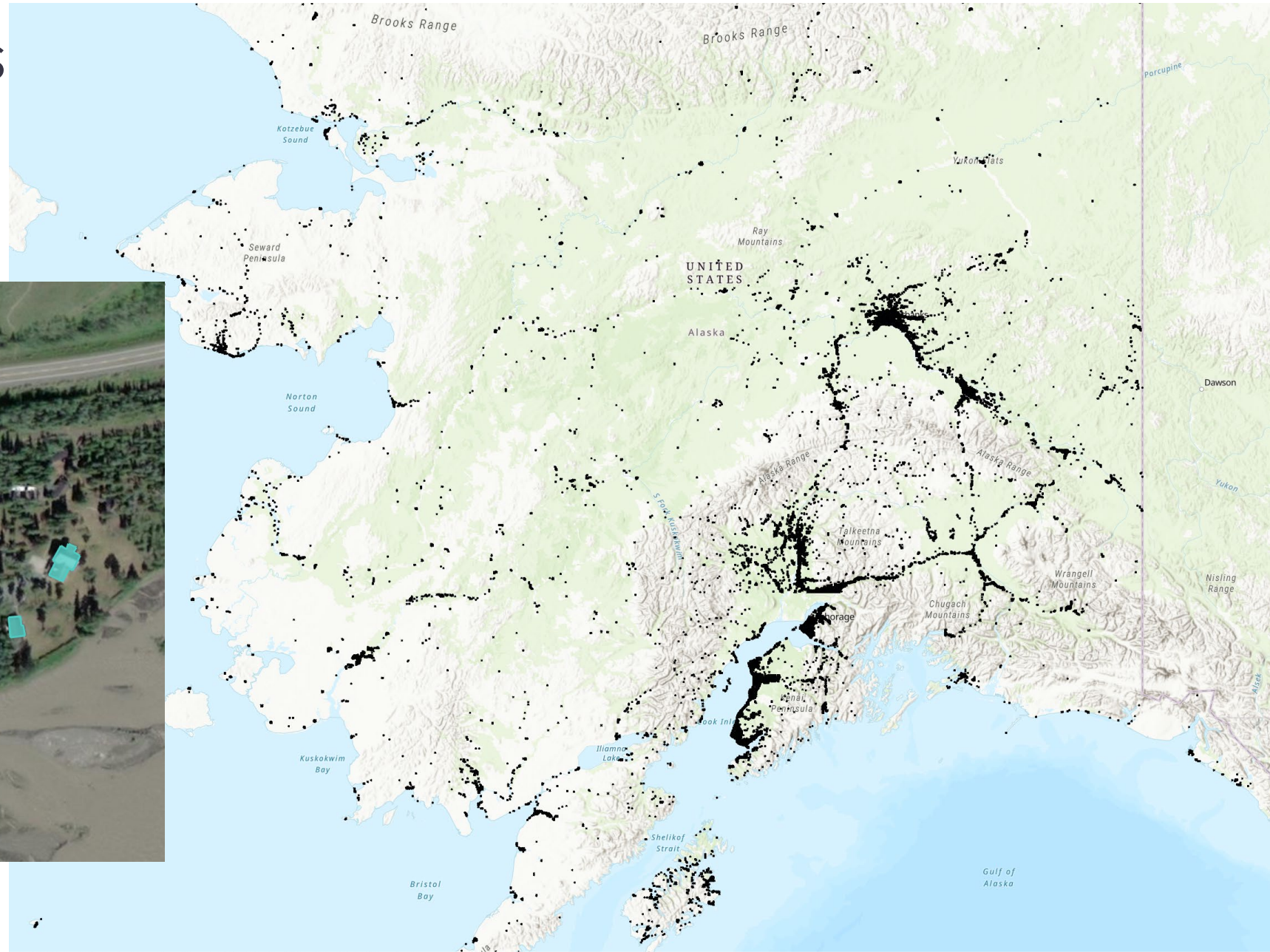
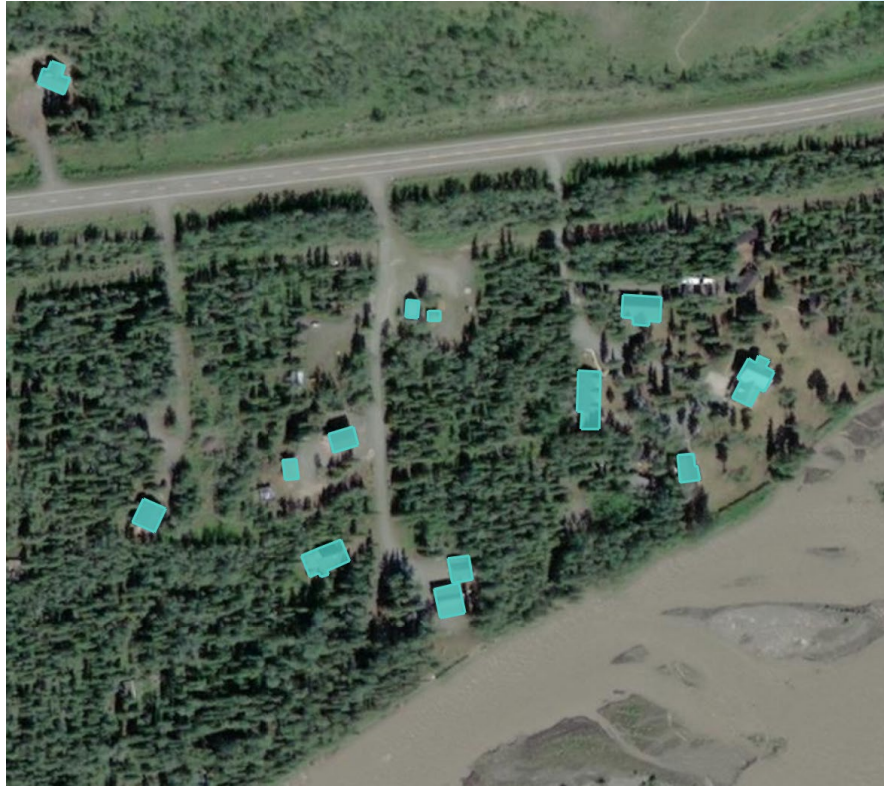
# 2023 Satellite Imagery Mosaic - Coming in 2026

Will be hosted by USDA NRCS

- *4-band image service*
  - *Publicly available once published*
- *Two services will be available:*
  - *Image service*
  - *Metadata footprints*
  
- [https://nrcsgeoservices.sc.egov.usda.gov/arcgis/rest/services/ortho\\_imagery/](https://nrcsgeoservices.sc.egov.usda.gov/arcgis/rest/services/ortho_imagery/)

# Building Footprints

Collaborate – Share – Innovate



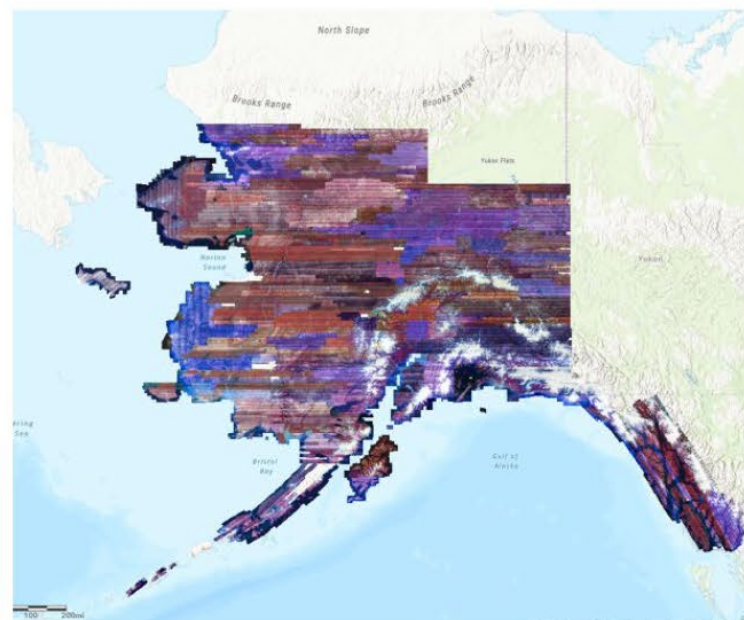
# Historic Imagery

**USDA is producing ortho-rectified imagery of aerial photography acquired 1978-1986  
(valuable tool for analyzing landscape change)**

 Natural Resources Conservation Service  
U.S. DEPARTMENT OF AGRICULTURE

## AHAP – Alaska High-Altitude Photography

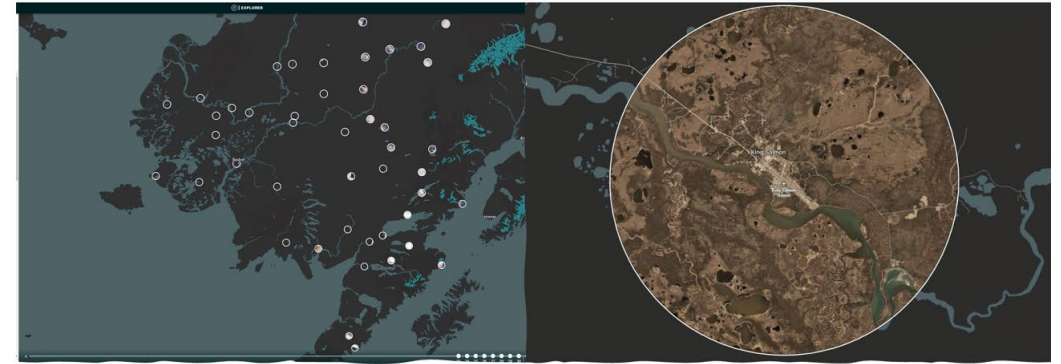
- [https://nrcsgeoservices.sc.egov.usda.gov/arcgis/rest/services/ortho\\_imagery/ahap/ImageServer](https://nrcsgeoservices.sc.egov.usda.gov/arcgis/rest/services/ortho_imagery/ahap/ImageServer)
- *Ortho-rectified*
- *Original color infrared photography taken between 1978-1986*
- *Three services available:*
  - *AHAP*
  - *Metadata footprints*
  - *Color-balanced*



**ALASKA  
MAPPING**  
Executive Committee

# Commercial Satellite Uses

## Tracking Mining Activity using SkySat



Determining Snow Free Day for Weather and Fire Fuels Modeling



## Construction and Design Phases (DOT)



## Daily Fire Perimeter Updates

This was where we realized the greatest benefit for the Fire Protection Branch



UNCLASSIFIED

# Civil Applications Committee – the Triple Junction

- Provides oversight and facilitation of Federal Civil agency use of IC and DoD remote sensing data, tools, applications, and other capabilities
- Coordinates with Federal Civil Principals and leverages DoD/Intel community for disaster response/hazard tasking through the National Civil Applications Center (a USGS Science Center in Reston, VA and Lakewood, CO)
- CAC is Chaired by the USGS Director (Organization is chartered by Secretary of Interior and the Director of National Intelligence)
  - USGS provides CAC Secretariat, imagery acquisition and analysis staff via the NCAC
  - Two interagency CAC Vice Chairs (currently from National Oceanic and Atmospheric Administration’s National Geodetic Survey and US Department of Agriculture’s Office of Homeland Security)



UNCLASSIFIED

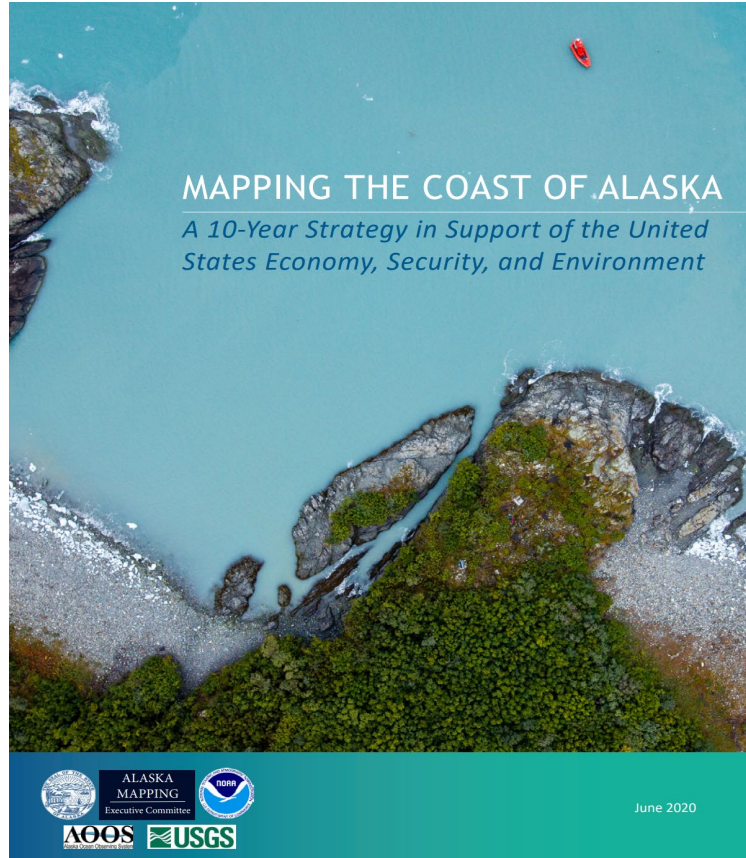
Civil Applications Committee Membership Roundtable

Principal	Associate



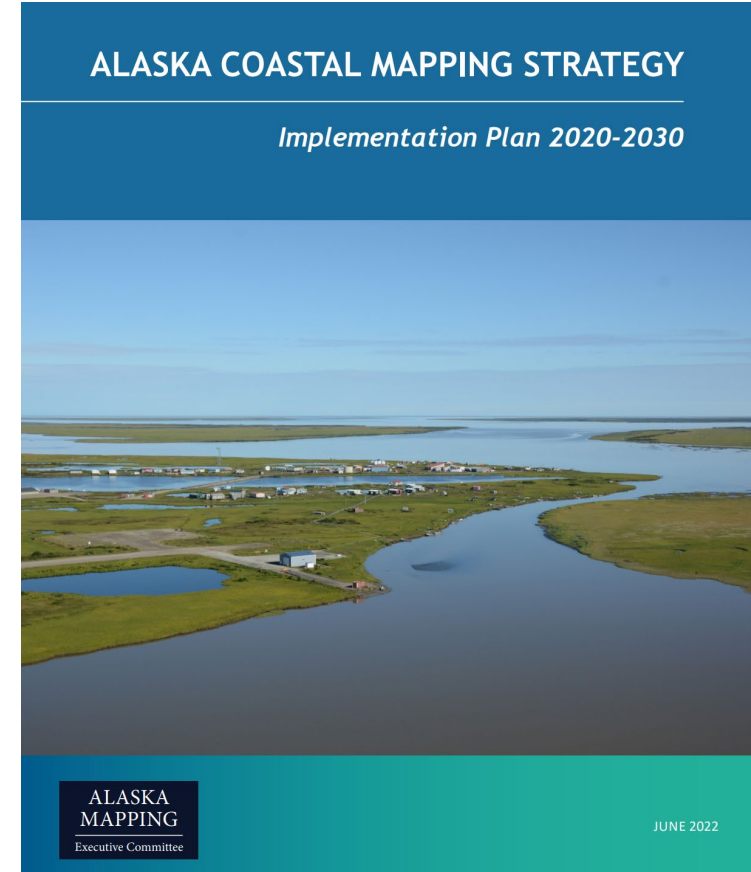
UNCLASSIFIED

# Alaska's Coastal Mapping Strategy



2020 Alaska Coastal Mapping Strategy

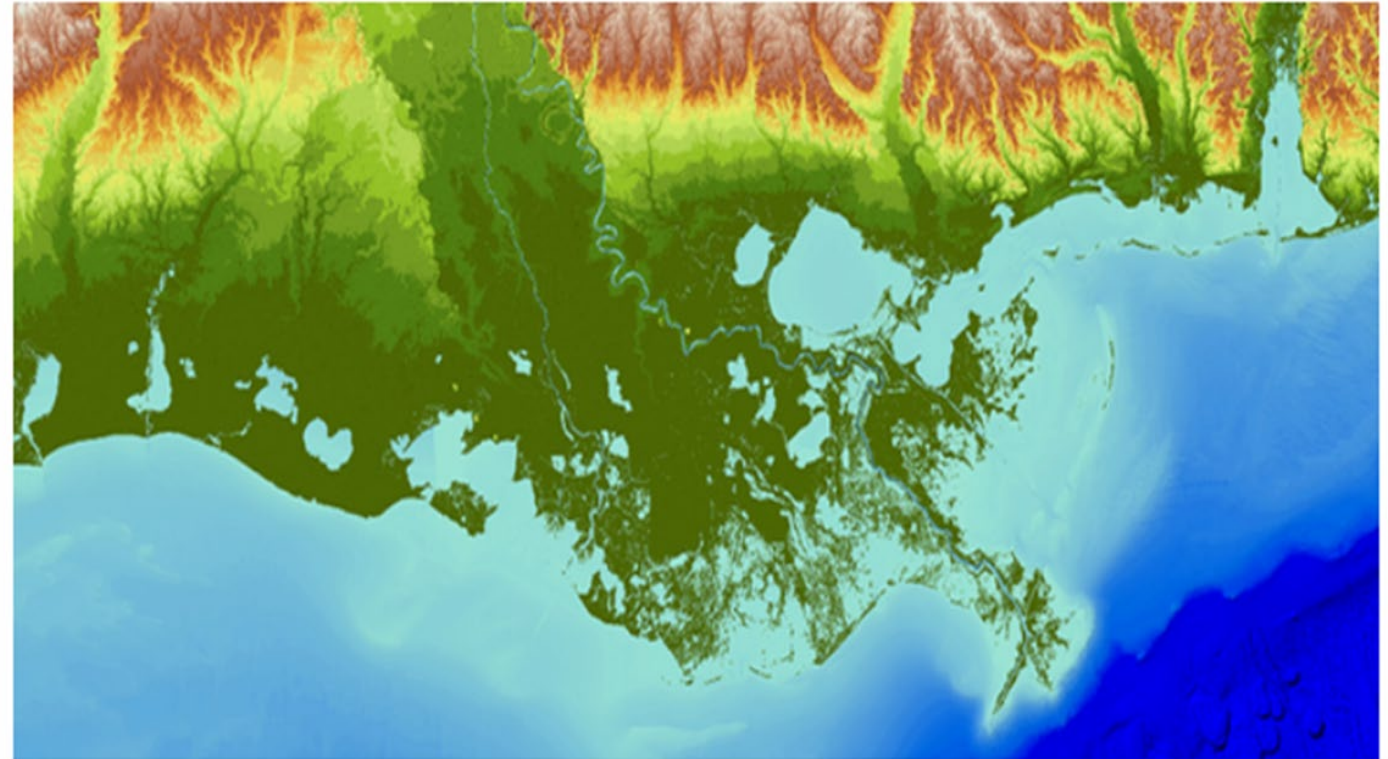
**ALASKA  
MAPPING**  
Executive Committee



2022 Alaska Coastal Mapping Strategy - Implementation Plan

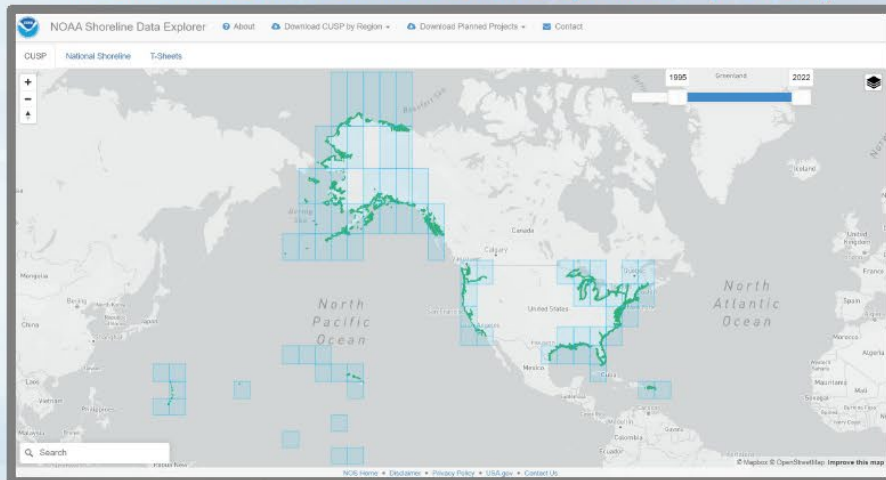
# Envisions Seamless Topobathy

- Imagery
- Lidar (22% of coastline)
- VDatum
- Topobathymetric Lidar
- Satellite Derived Bathymetry
- Multi-beam Sonar

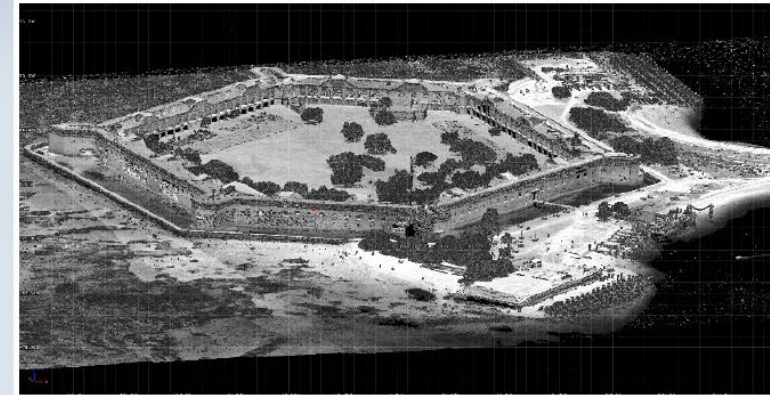


# Accessing NOAA's Alaska Coastal Shoreline, Oblique Imagery, and Topographic/Bathymetric Data

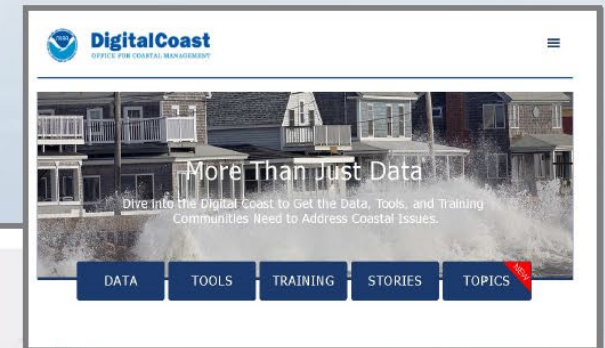
## National Shoreline Data Explorer (NSDE)



(<https://nsde.ngs.noaa.gov/>)



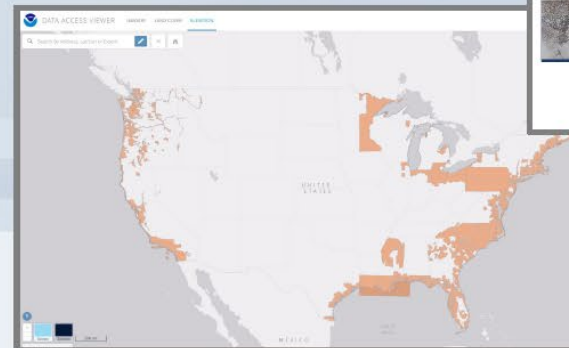
## Digital Coast (Lidar and Imagery)



<https://coast.noaa.gov/digitalcoast/>



National Oceanic and Atmospheric Administration



# Accessing Alaska Gravity Data

GRAV-D Data Products

GRAV-D Blocks

Search...

- AN01
- AN02
- AN03
- AN04
- AN05
- AN06
- AN07
- AN08
- AN09
- AS01
- AS02
- AS03
- AS04
- AS05
- AS06
- AS07
- AS08
- AS09
- AS10
- CN01
- CN02

Access GRAV-D data by zooming in to find the name of the data block you are interested in. Then search for it and/or click on it in the block list on the left. Once you click on the block in the list, the map will zoom to the block and metadata and a data download link will be available on the right hand side. For questions or concerns, contact [ngs.gravd@noaa.gov](mailto:ngs.gravd@noaa.gov).

Names and boundary representation are not necessarily authoritative.

GRAV-D Data Block

If the data has been published (released), you may download it by clicking 'View' below.

Block Status	
Year Completed	
Surveys	

Click 'View' for data download

**How to Cite These Data:**  
The following citations should be used in all presentations or publications that reference the GRAV-D work. Please replace the DATE tag in the following references with the date you downloaded the data or reports from the NGS website.

To reference the data file, reference the download link:

To reference the block and survey details, reference the block user manual:

To reference the general GRAV-D project operations, reference the General User Manual:

GRAV-D Team (2017). "GRAV-D General Airborne Gravity Data User Manual." Theresa Damiani

## NGS GRAV-D Data Products

Please contact [ngs.gravd@noaa.gov](mailto:ngs.gravd@noaa.gov) with any questions.

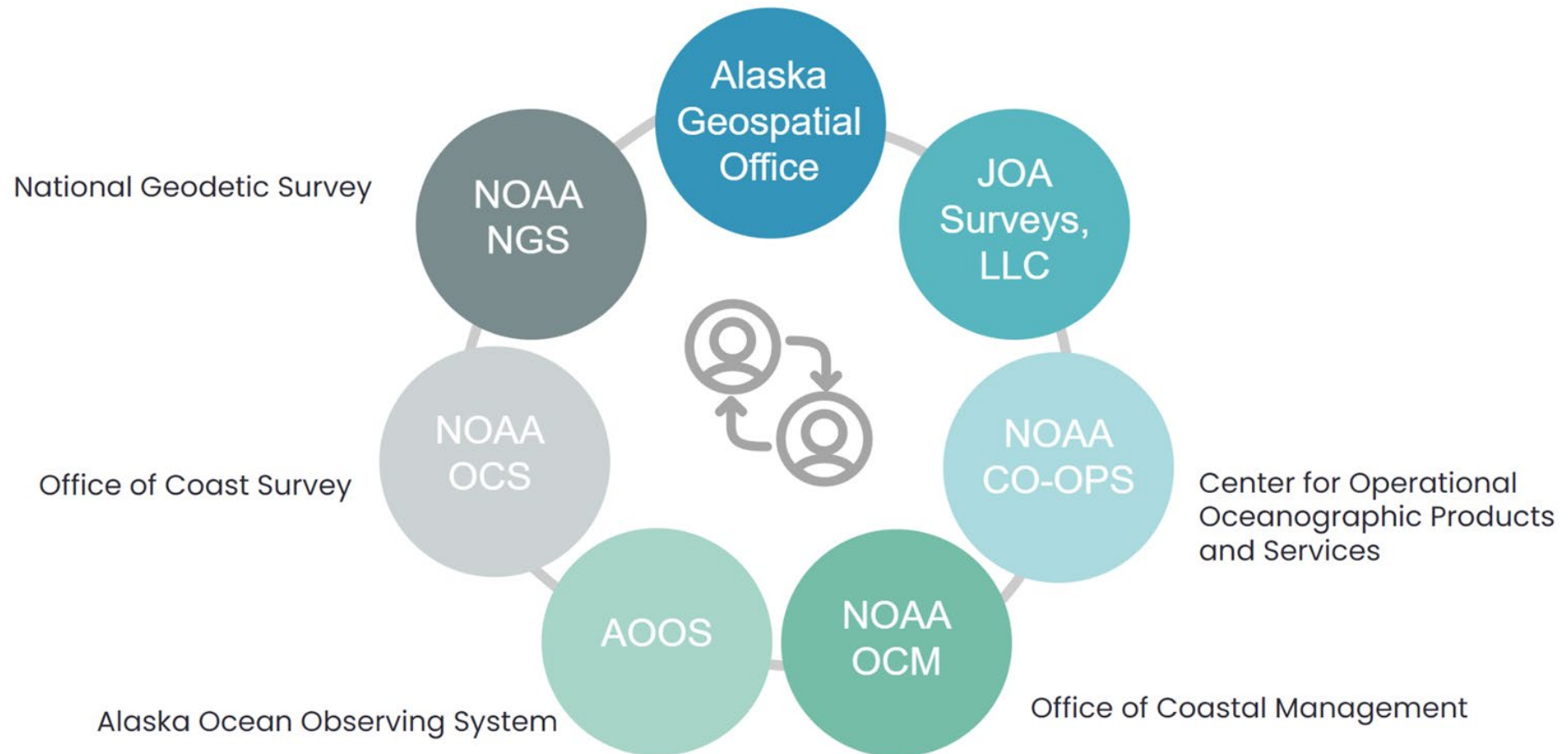
# 100% Complete for Alaska

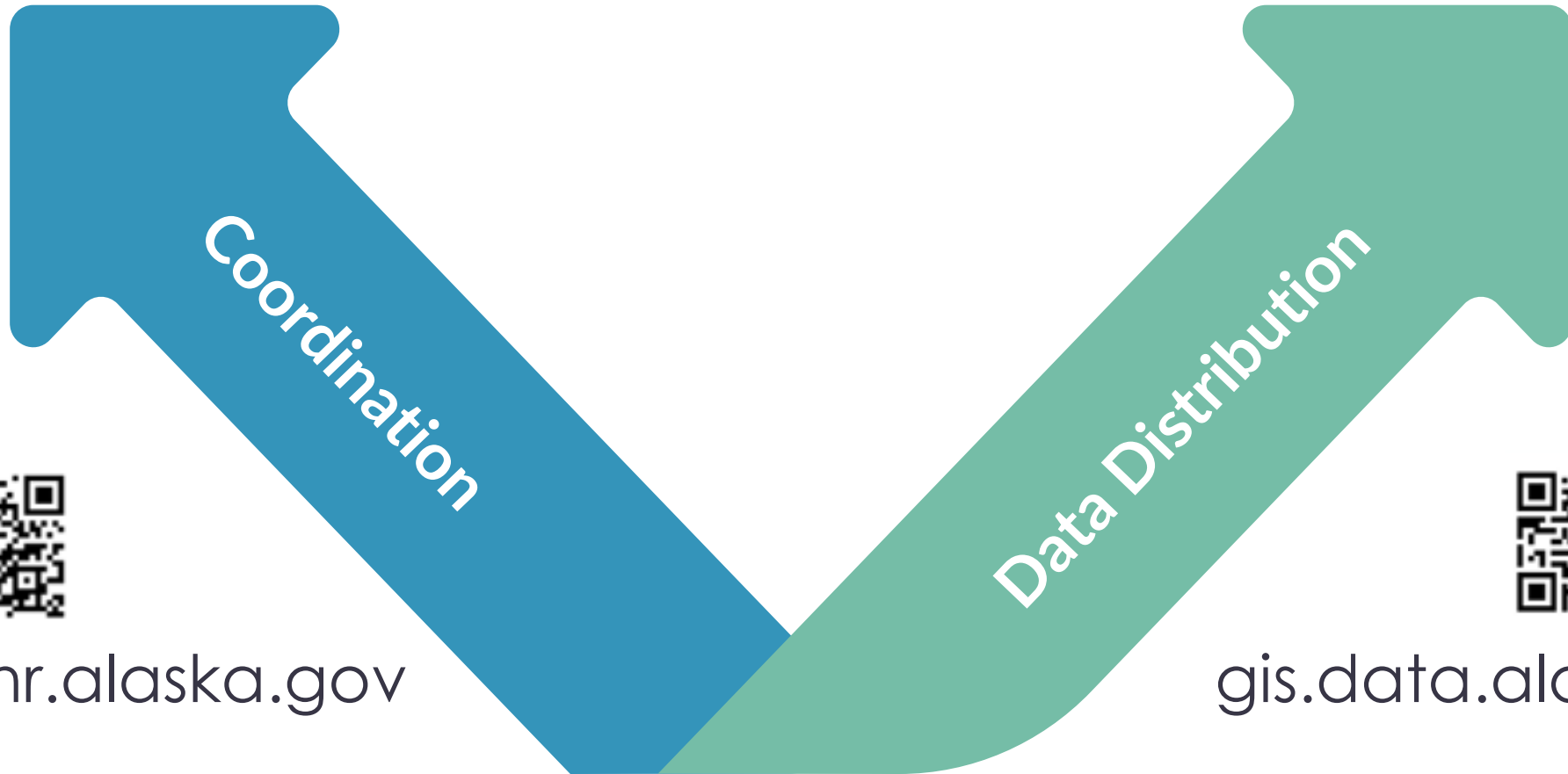
<https://www.arcgis.com/apps/mapviewer/index.html?webmap=b298d7df7f334ccca53855c69846d93b>

# Statewide VDatum

First ever model expected by NOAA early 2026

## V DATUM COLLABORATIVE PARTNERSHIP





[agc.dnr.alaska.gov](http://agc.dnr.alaska.gov)



[gis.data.alaska.gov](http://gis.data.alaska.gov)



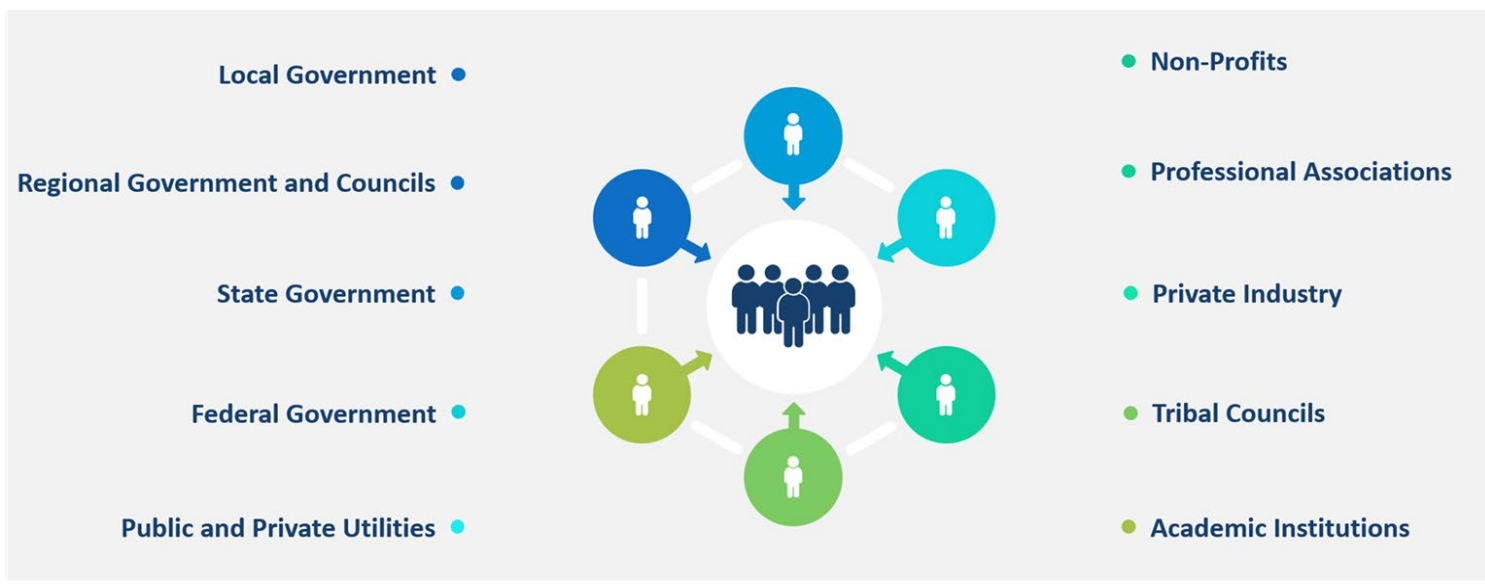
# Alaska Geospatial Council

## Alaska Geospatial Council

Coordinating across agencies to provide public access to geospatial data and maps critical to decision-making  
Supporting economic development and the public safety and well-being of Alaskans



## Administered by Alaska Geospatial Office



 Coastal & Ocean Working Group <a href="#">Learn More</a>	 Wetlands Working Group <a href="#">Learn More</a>	 Geodetic Working Group <a href="#">Learn More</a>
 Vegetation Working Group <a href="#">Learn More</a>	 Enterprise GIS Working Group <a href="#">Learn More</a>	 Transportation Working Group <a href="#">Learn More</a>
 Cadastral Working Group <a href="#">Learn More</a>	 Imagery and Elevation Working Group <a href="#">Learn More</a>	 Hydrography Working Group <a href="#">Learn More</a>
 Soils Working Group <a href="#">Learn More</a>	 Food Security Working Group <a href="#">Learn More</a>	 UAS Policy Working Group <a href="#">Learn More</a>

# Vegetation Working Group

Setting Standards to Facilitate & Coordinate Vegetation Mapping Across Alaska



Alaska  
Geospatial  
Council

The Alaska Geospatial Council provides inter-agency coordination between local, state, federal, tribal, academic and private organizations on geospatial initiatives. Through effective collaboration the council aims to improve the availability and quality of geospatial information and ensure it is publicly available to support data driven decisions.

# Alaska Vegetation Strategy & Implementation Plan

## Alaska Vegetation Mapping Strategy and Implementation Plan



### Alaska Vegetation Mapping Strategy & Implementation Plan v1.0

The S&IP provides an overview of the process for the development of a high-resolution,...



### Field Data Collection Protocol for the Alaska Vegetation Map v1.0

The Field Protocol describes the methods by which plant community composition and...



### Field Data Sheets for Alaska Vegetation Map v1.0

Field data sheets provide a set of printable data sheets for use in recording data while i...

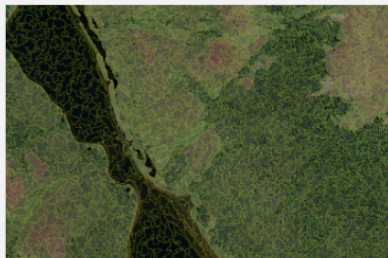
## Alaska Vegetation Mapping Standards

The Alaska Vegetation Mapping Standards documents facilitate the coordination of vegetation data collection and mapping activities across the state to ensure compatibility and are informative to the goal of producing a consistent, high-resolution, and ecologically detailed vegetation map for Alaska, the Alaska Vegetation Mapping Standards are intended to supplement, rather than replace, the vegetation standard produced by the Federal Geographic Data Committee.



### Minimum Standards for Field Observation of Vegetation and...

These standards help ensure that vegetation observation data collected as part of...



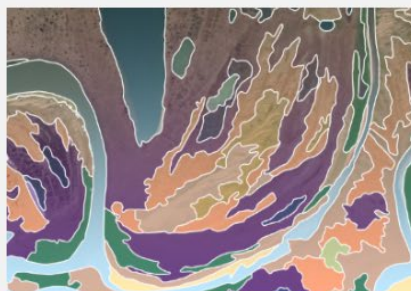
### Standards for Mapping Vegetation in Alaska v1.1

These standards promote consistency among independently produced local, regional, an...



### Standards for Production of Alaska Vegetation Map v1.1

Technical goals for the production of a vegetation map that consistently covers all o...



### Methods for the Production of the Alaska Vegetation Map v1.0

The Methods describes technical processes by which we will develop the Alaska Vegetation...



### Data Management Plan for the Alaska Vegetation Map v1.0

The Data Management Plan describes the management, storage, versioning, serving,...



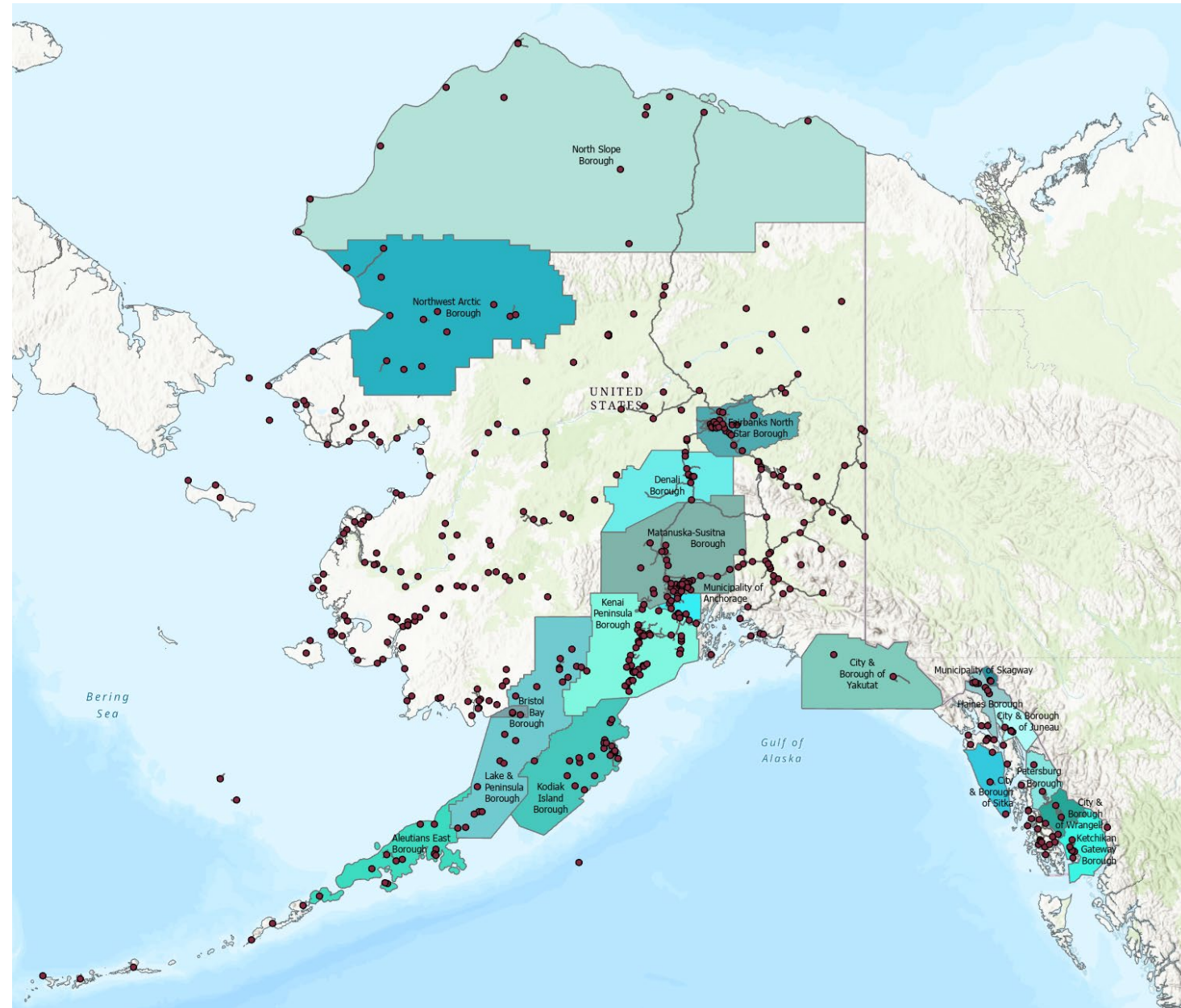
### Appendices for Data Management Plan for the Alaska Vegetation Ma...

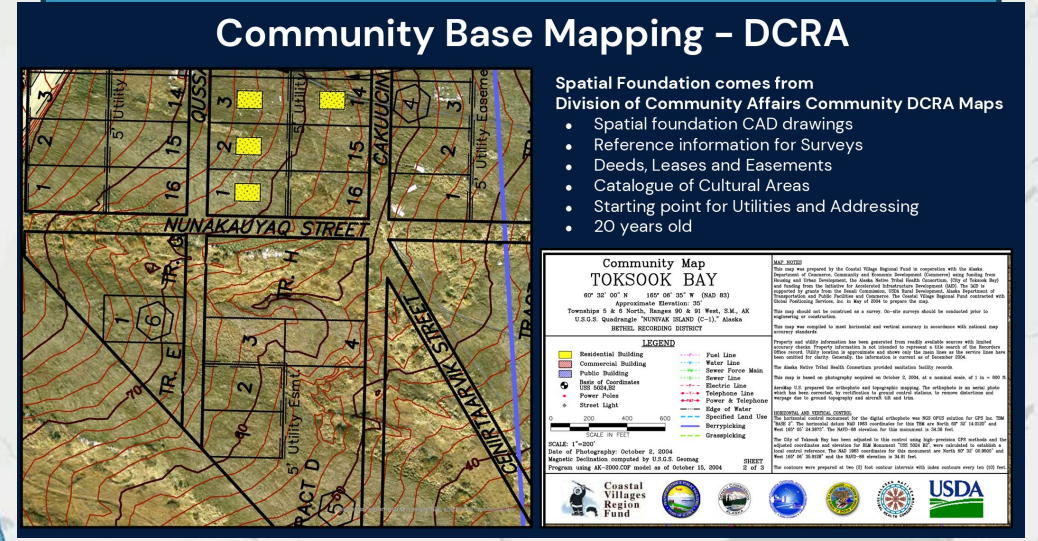
Appendices provide the database schema and database dictionary for the AKVEG Databas...

# Local Government – Unorganized Borough Challenges

## Community Mapping Gaps

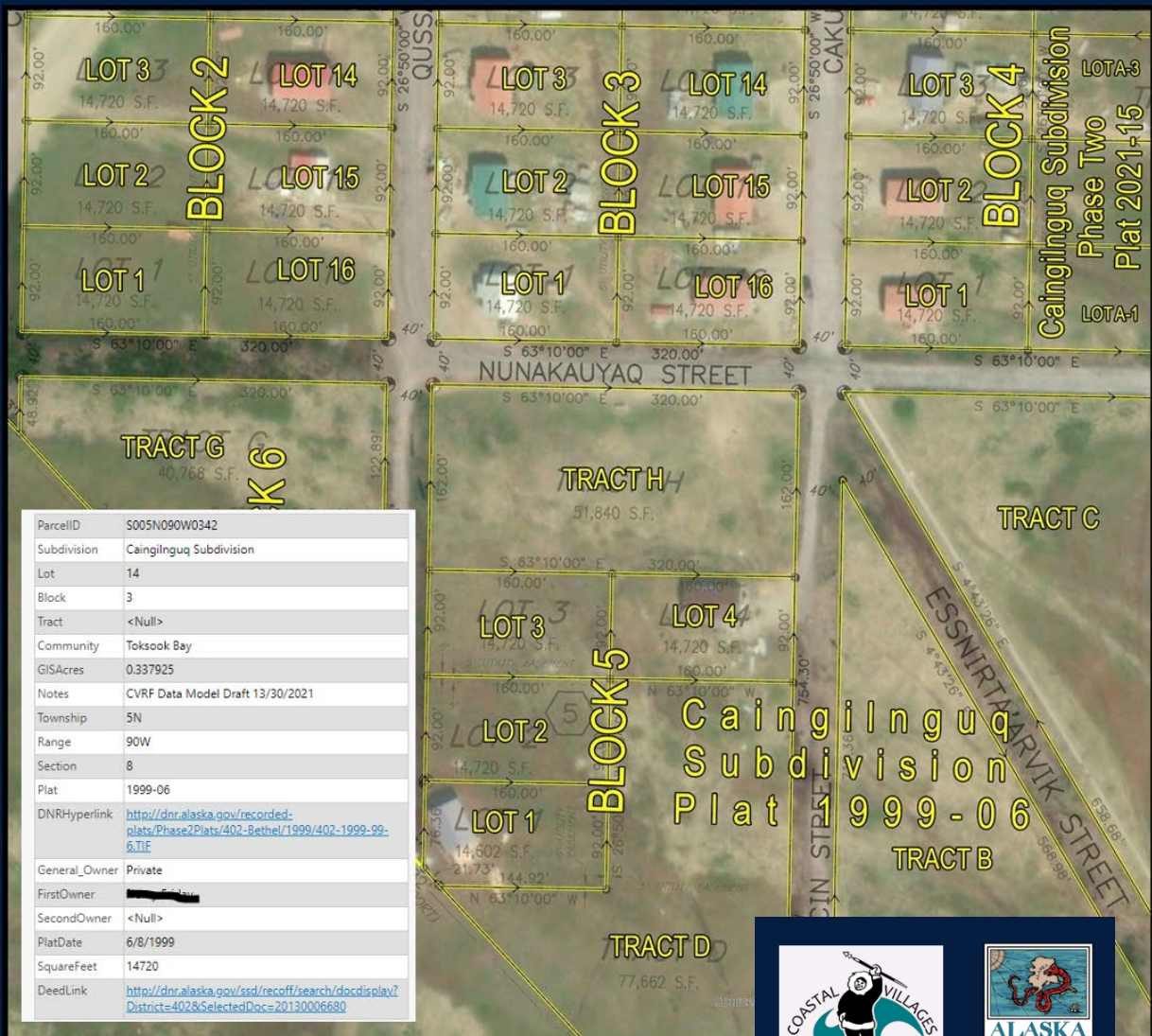
- Parcel database
- Addressing
- Road networks
- Utility networks
- Critical Infrastructure





# Community Mapping Cadastral

Collaborate – Share – Innovate



## Parcels

- Foundational layer providing spatial referenced for other layers
- Data model reflects commonly used layers and fields currently working for several communities
- Links to Plats, Deeds, Leases and Easements

Recorder's Office - Document Display

Document: 2000-001906-0 [See Image](#)

District: 402 - Bethel  
 Document Year: 2000 Number: 001906  
 Date and Time Recorded: 08/24/2000 09:38 AM  
 Book: 89  
 Pages: 1  
 Associated Document: 2000-001906-0  
 Index: D - DEEDS  
 Description: STAT WARRANTY DEED

**Parties**

TYPE	NAME
Grantor	NUNAKAJIAK YUPIK CORPORATION
Grantee	NUNAKAJIYAK TRADITIONAL COUNCIL

**Legal Descriptions**

Lot: 1	Block: 3
Plat: 99-6	
Lot: 2	Block: 3
Plat: 99-6	
Lot: 3	Block: 3
Plat: 99-6	

Recorder's Office - Document Display

Document: 1999-001032-0 [See Plat Image](#)

District: 402 - Bethel  
 Document Year: 1999 Number: 001032 Suffix: 0  
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 Pages: 1  
 Associated Document: 1999-001032-0  
 Index: PL - PLAT  
 Description: PLAT  
 Associated Plat: 99-6 [Search for Plat](#) [View Plat Image](#)

**Parties**

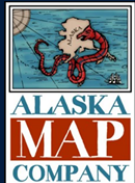
TYPE	NAME
Grantor	NUNAKAJIAK YUPIK CORPORATION
Grantee	CAINGILNGUQ SUBDIVISION

**Legal Descriptions**

Lot: 1	Block: 1
Plat: 99-6	
Lot: 2	Block: 1
Plat: 99-6	
Lot: 3	Block: 1
Plat: 99-6	

[Search for Plat Legal](#)





# Community Mapping – Addressing

## NENA Standard Addresses

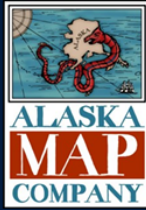
- Dependent on parcels
- Dependent on plats for legal street naming
- Developed to NENA standards
- Includes State and federal functional class information



Addressing  
 Addresses  
 Accesses

	FullAddress	AddressNumber	Prefix	RoadName	Suffix	Unit	Community
1	2007 Caku'ucin St	2007	<Null>	Caku'ucin	St	<Null>	Toksook Bay
2	2001 Caku'ucin St	2001	<Null>	Caku'ucin	St	<Null>	Toksook Bay
3	2003 Caku'ucin St	2003	<Null>	Caku'ucin	St	<Null>	Toksook Bay
4	2005 Caku'ucin St	2005	<Null>	Caku'ucin	St	<Null>	Toksook Bay
5	2004 Caku'ucin St	2004	<Null>	Caku'ucin	St	<Null>	Toksook Bay
6	2002 Caku'ucin St	2002	<Null>	Caku'ucin	St	<Null>	Toksook Bay
7	2000 Caku'ucin St	2000	<Null>	Caku'ucin	St	<Null>	Toksook Bay
8	3006 Qussauyaq St	3006	<Null>	Qussauyaq	St	<Null>	Toksook Bay
9	3004 Qussauyaq St	3004	<Null>	Qussauyaq	St	<Null>	Toksook Bay
10	3002 Qussauyaq St	3002	<Null>	Qussauyaq	St	<Null>	Toksook Bay
11	3005 Qussauyaq St	3005	<Null>	Qussauyaq	St	<Null>	Toksook Bay
12	1006 Caku'ucin St	1006	<Null>	Caku'ucin	St	<Null>	Toksook Bay

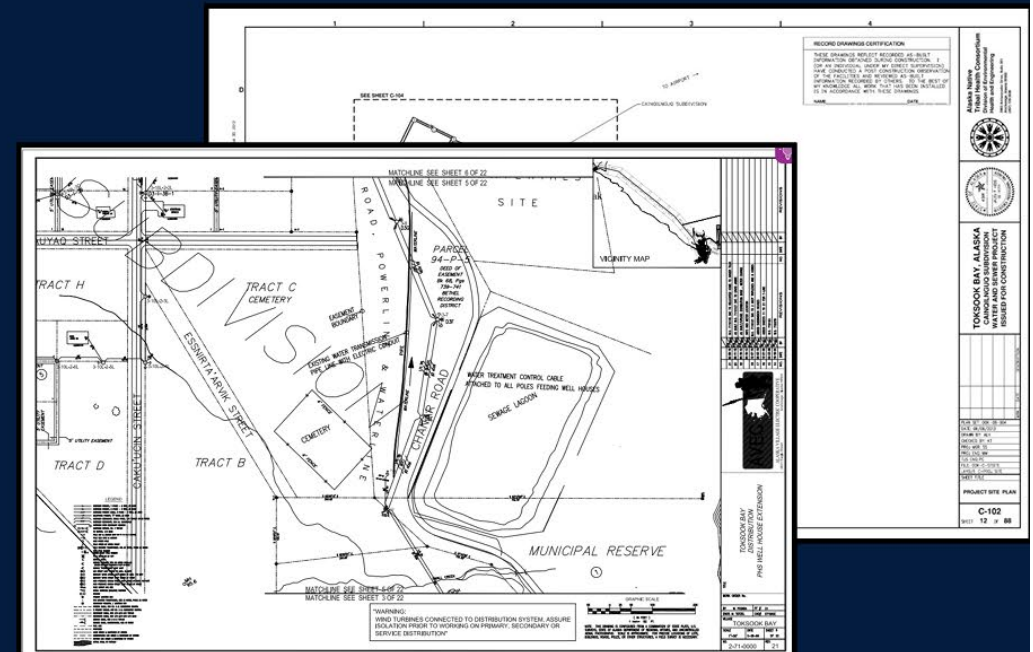
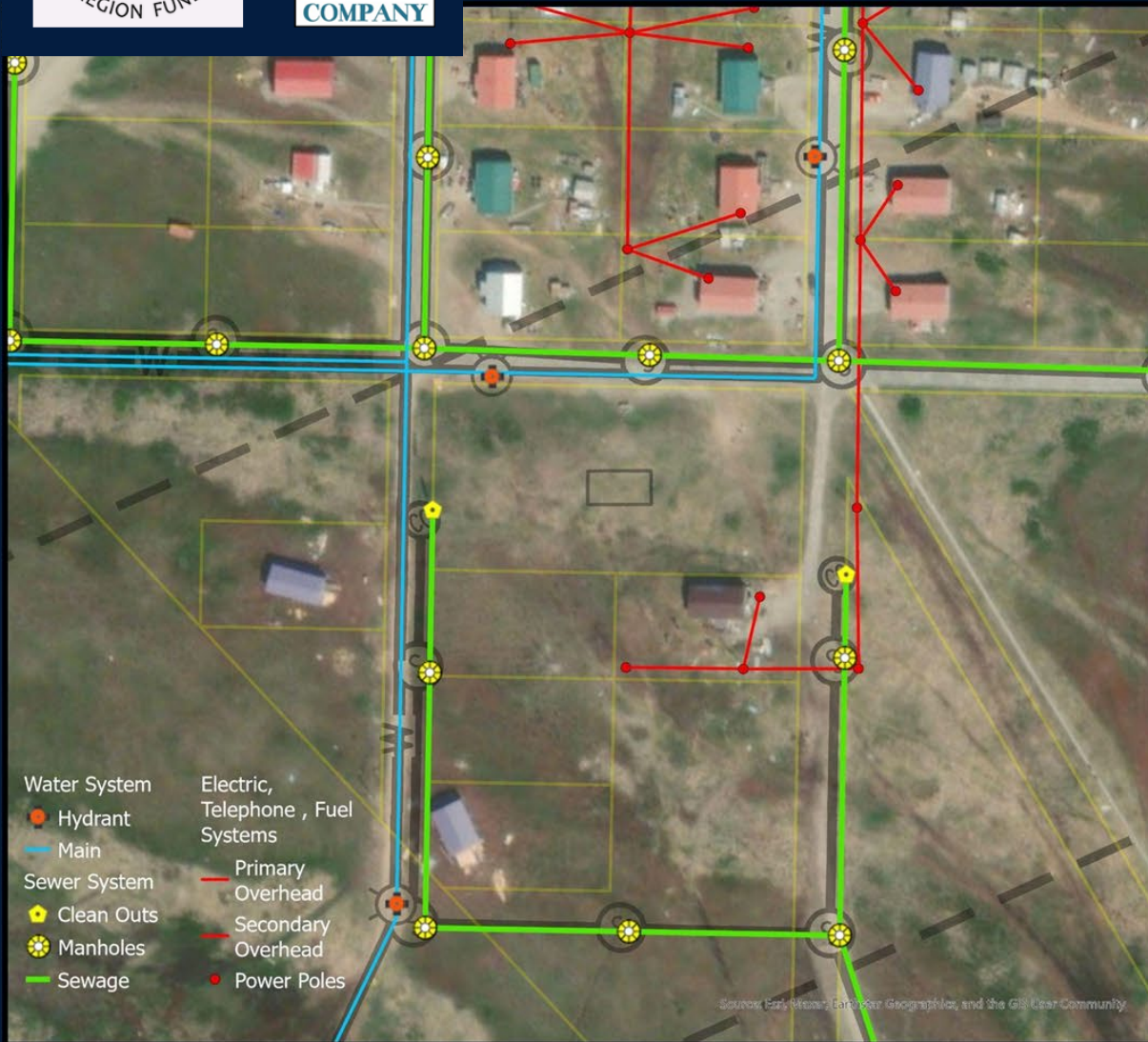
FullRoadName	FromLeft	ToLeft	FromRight	ToRight	Prefix	Name	Suffix	Community	MTFCC	SOAFunctionalClass
Caku'ucin St	2001	2015	2000	2016	<Null>	Caku'ucin	St	Toksook Bay	S1400	Minor Collector
Qussauyaq St	3001	3015	3002	3016	<Null>	Qussauyaq	St	Toksook Bay	S1400	Minor Collector



# Community Mapping – Utilities

## Local Government Information Model Standard

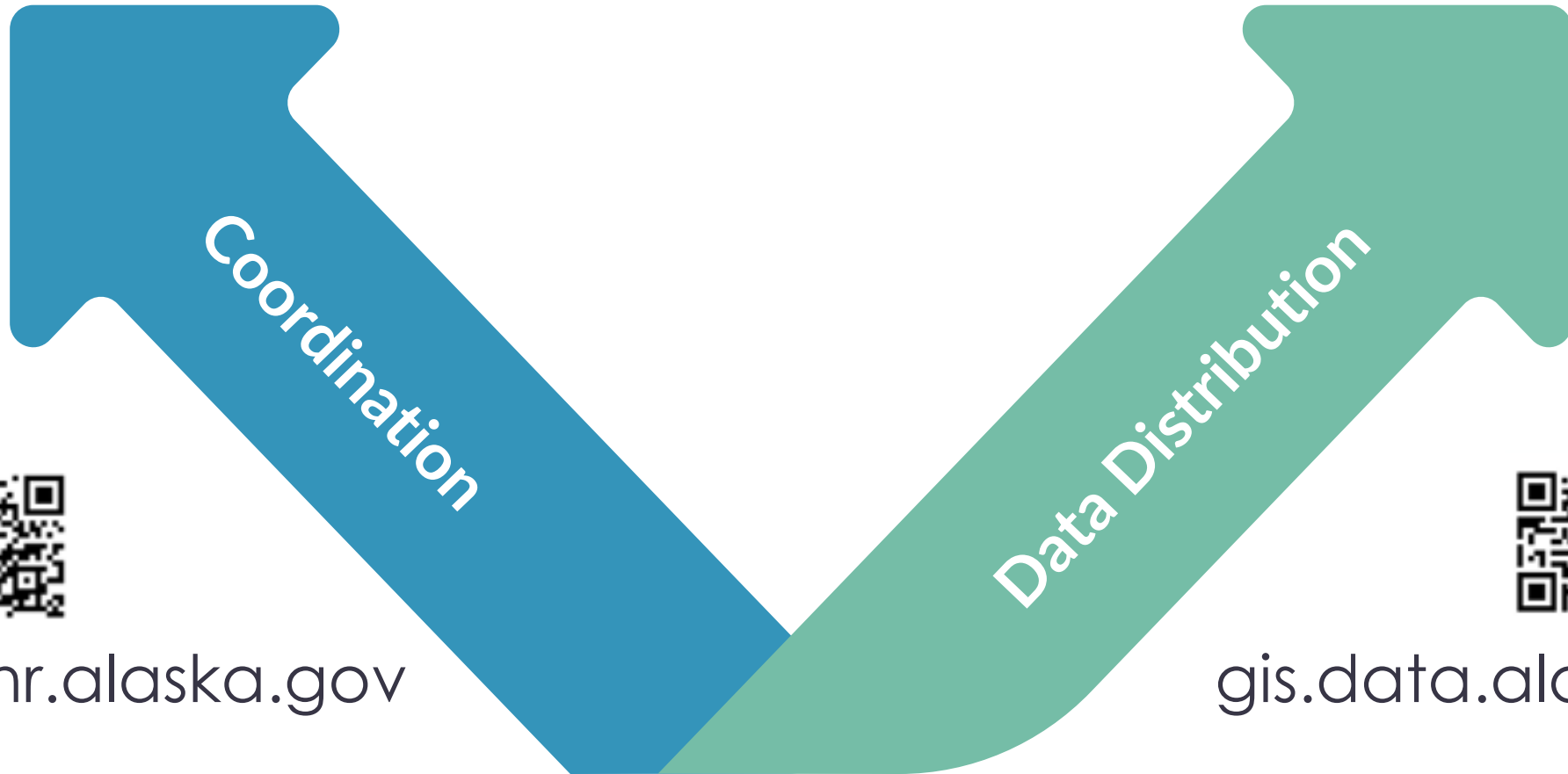
- Dependant on Parcels
- Common industry standard symbology layers
- Developed from ANTHC, Public Works and Village Electric Corps Record Drawings
- Provide links to pdfs when completed



# NOAA OCM Community Mapping Project



Map by Steve Eberman, Senior Geospatial Analyst, Ocmberly



[agc.dnr.alaska.gov](http://agc.dnr.alaska.gov)



[gis.data.alaska.gov](http://gis.data.alaska.gov)

# Data Discovery and Access

Collaborate – Share – Innovate

## Framework Datasets



[gis.data.alaska.gov](https://gis.data.alaska.gov)

Local

State

Federal

Other Agencies

Data pipelines and life-cycles are supported by standards and governance



# AK Digital Atlas – (Geoportal 2.0) – Coming in 2026

\* Governance \* Data Quality Checks \* Common Operating Picture

OneMap

Explore topics ▾

Access data ▾

OneMap Atlas

Learn more

**Add layer** [Close]

Select a layer to add to the map view. Search for layers or click the "i" icon to view the layer's description. [Search]

- USGS Topo Basemap** ⓘ  
USGS Topo is a tile cache base map service that combines the most current data in The National Map (TNM), and other public-domain data, into a multi-scale topographic reference map. Data themes included are Boundaries, Geographic Names, Transportation, Contours, Hydrography, Land Cover, Shaded Relief, and Bathymetry. This service is designed to provide a seamless view of TNM data in a geographic information system (GIS) accessible format.
- National Ocean Service Hydrographic Surveys Collection** ⓘ  
This feature layer, utilizing National Geospatial Data Asset (NGDA) data from the National Oceanic and Atmospheric Administration (NOAA), displays National Ocean Service (NOS) Hydrographic Surveys. This layer is checked weekly for updates.
- TopoBathy - Elevation Tinted Hillshade** ⓘ  
This layer displays elevation tinted hillshade representation of world elevation TopoBathy, which is a multi-resolution layer compiled from many authoritative sources. It is updated quarterly.

**Categories** [Refresh]

- Biota
- Boundaries
- Climatology, meteorology, and atmosphere
- Economy
- Elevation**
- Environment
- Farming
- Geoscientific information
- Health
- Imagery, basemaps, and Earth cover

Basemaps | Map layers | **Add layer** | Legend | Sketch | Save

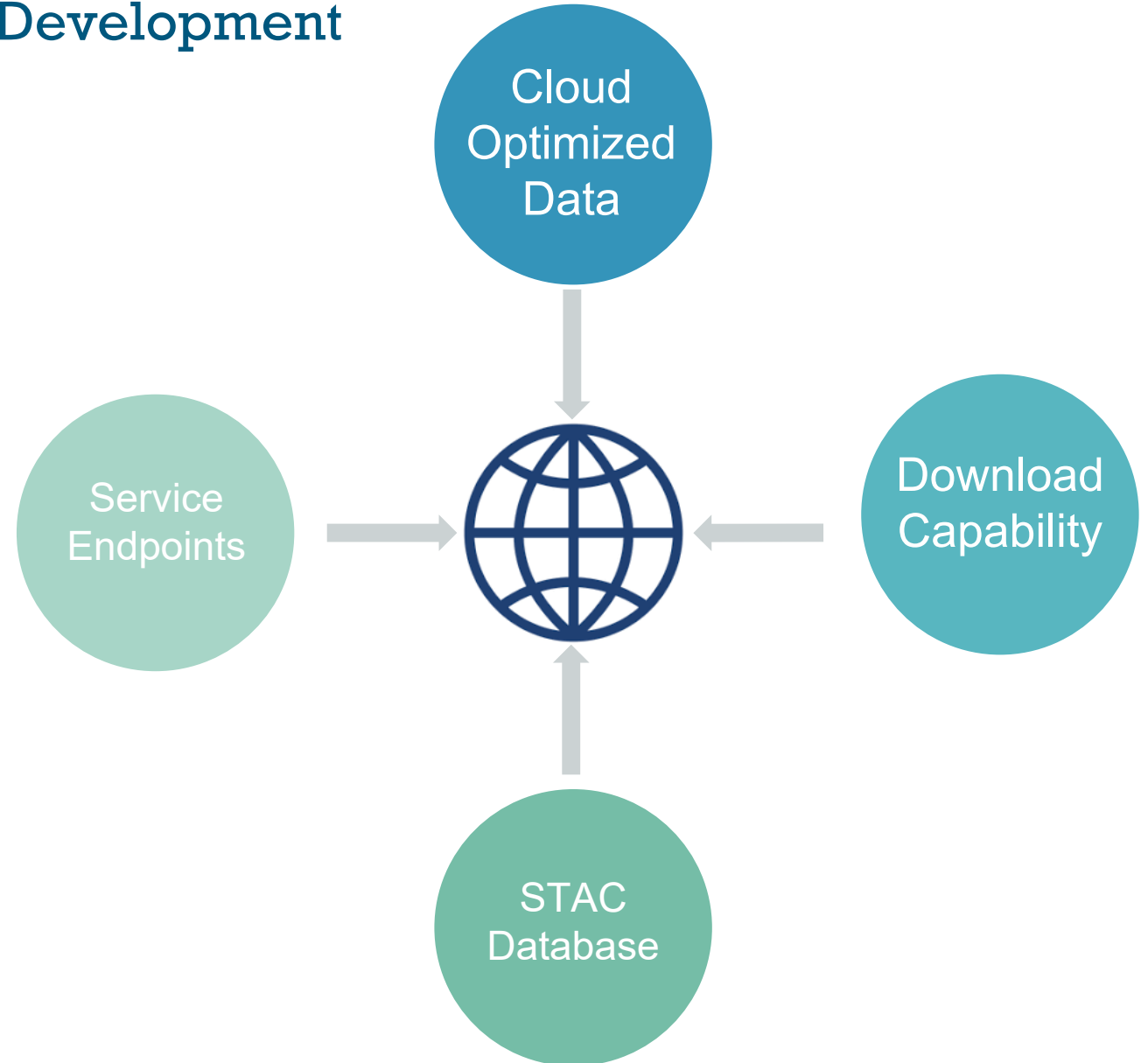
# AK Skyhub - 2026

## New Lidar and Imagery Portal in Development

### Platform for discovery of remotely sensed data

- Meet a range of technical users
- Technology agnostic formats
- ESRI formats
- Machine - readable

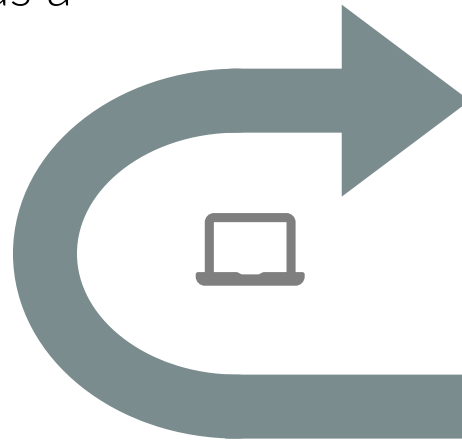
**BIG DATA**



# Enabling GeoAI

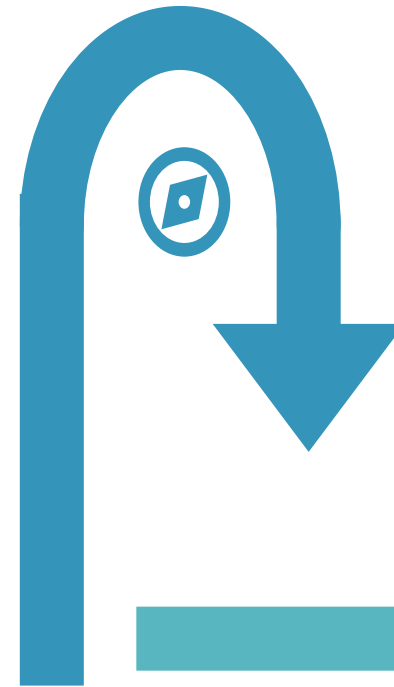
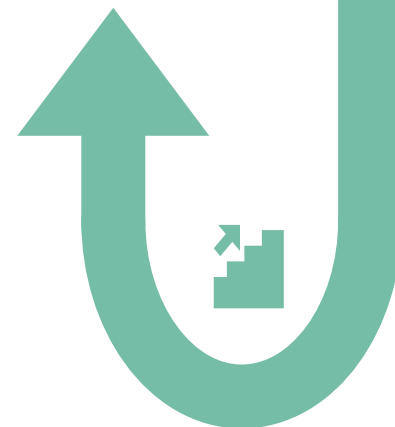
## Machine Readable

Publishing data as a service.



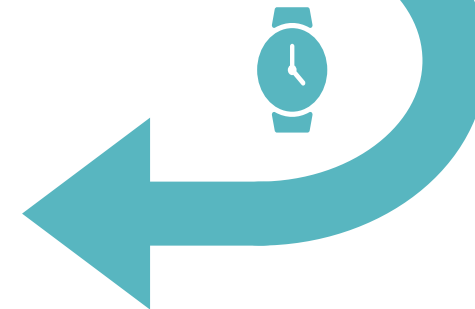
## Structured and Cloud Optimized Data

Standardized metadata – knowledge graphs – technology agnostic formats.



## Metadata

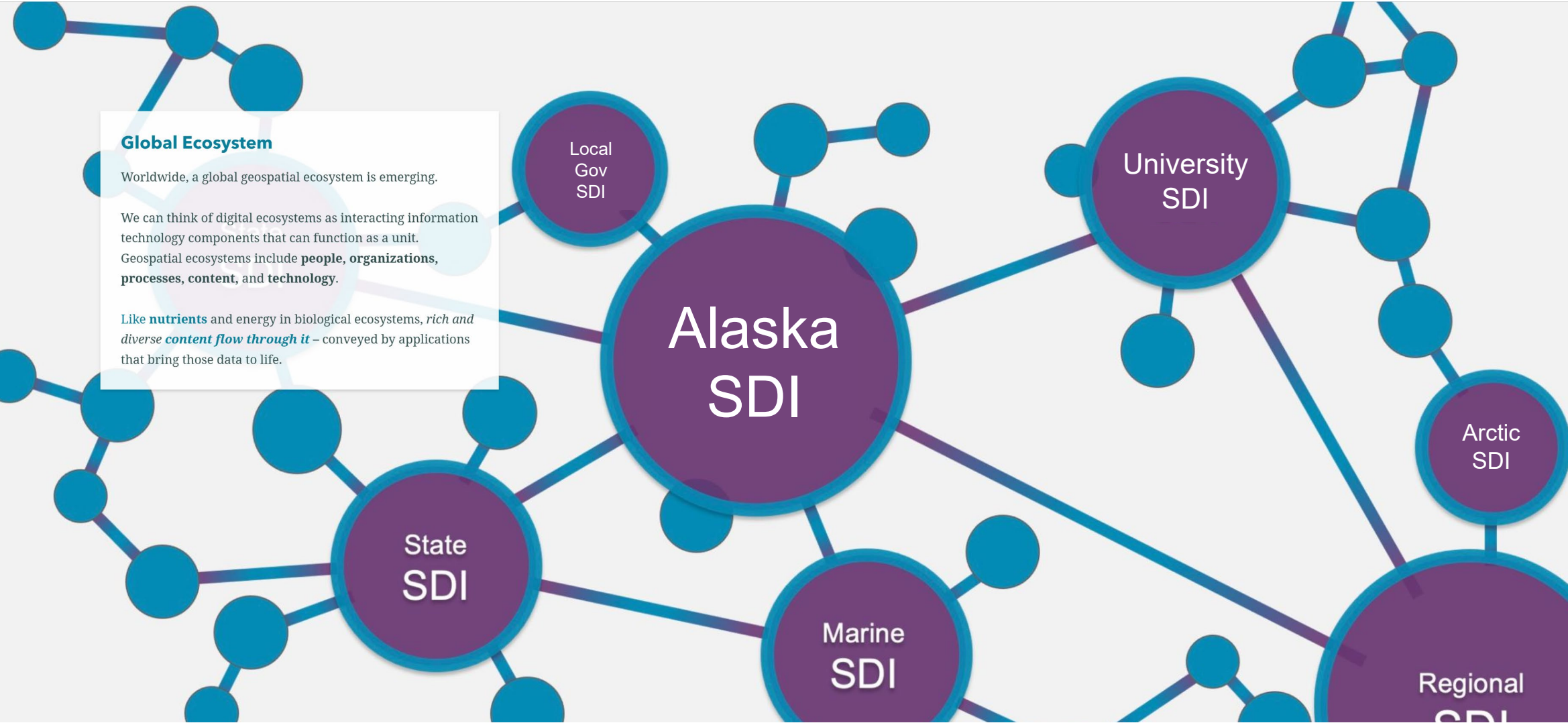
Importance of complete and accurate description of the data for quality and fit for use assessments.



## Real-time Access

Importance of data stewards and managers.

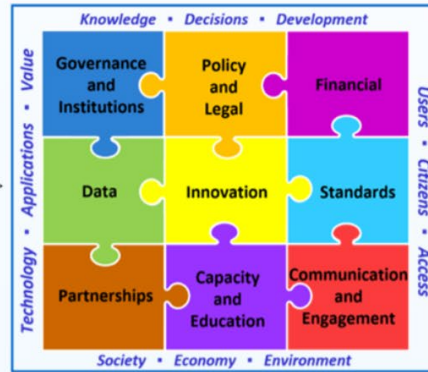
# Alaska's SDI: Opportunities for Collaboration



# Future Geospatial Information Network

## Spatial Data Infrastructure (SDI)

- Data Centric
- Centralized System
- Desktop/Web portal
- 2D representation
- Supply-centric
- Limited Data Range
- Professional users only
- Linear Search
- No analysis/No modelling
- Government
- Web 1.0 – Static Web



## Geospatial Knowledge Infrastructure

- Knowledge-centric (applied intelligence)
- Distributed System
- Distributed Cloud-based Spatial Computing
- 4D/5D Representation
- Demand Centric (Value Impact)
- Dynamic data with wide range of data (crowdsourced, mobile, IoT)
- Includes Machines
- Intelligent Search
- Advanced Augmented Analytics / Prescriptive Analytics
- Broader Stakeholder Group (including users, economics and statistics, etc.)
- Web 3.0 Semantic Web
- Network of Integrated Ecosystems of Ecosystems

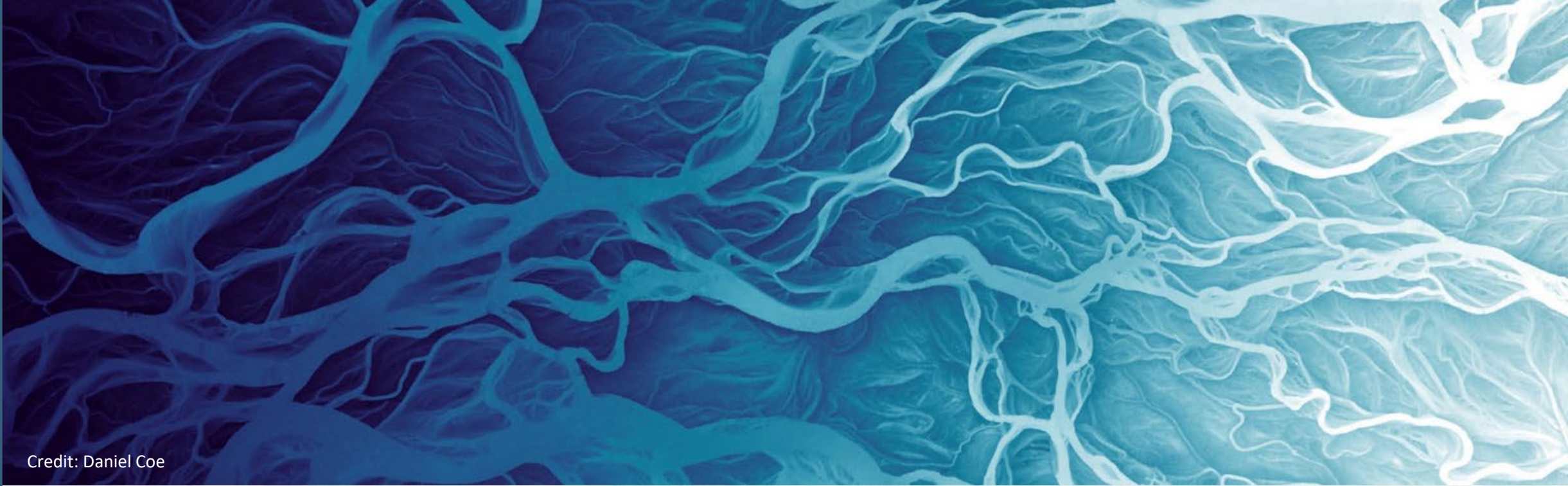
<b>Enablers and Facilitators</b>	Commercialization and Industrialization		Public Private Partnership		Resilience	Geopolitics and World Order		Sovereign Assets
<b>Technologies</b>	AI/ML	Spatial Computing	Internet of Things (IoT)	5G and Advanced Connectivity	Blockchain	Digital Twin Enterprises	Open Data Platforms & APIS	

Moving up the Value Chain towards the Future Geospatial Ecosystem

# How to get Involved and grow your Alaska Network



2026 dates will be announced soon



Credit: Daniel Coe

Dr. Leslie Jones  
State of Alaska  
Geospatial Information Officer  
[leslie.jones2@alaska.gov](mailto:leslie.jones2@alaska.gov)

