

# **National Goals for** Topographic Mapping in Alaska

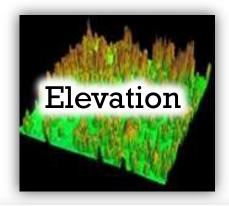


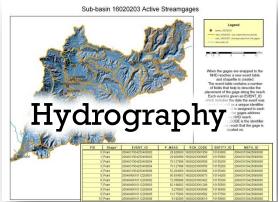
Kevin T. Gallagher **USGS Associate Director Core Science Systems** 

# + National Geospatial Program: The National Map

Topographic Maps and Data for the 21st Century

#### **National Leadership**



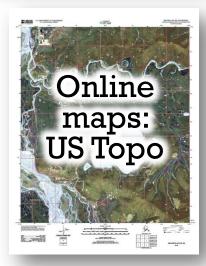


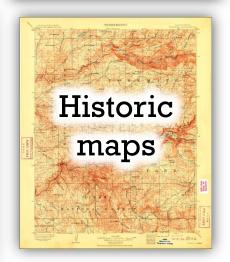


#### **Products and Services**









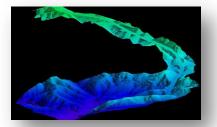
# +3D Elevation Program

#### (3DEP)

- The National Enhanced Elevation Assessment demonstrated the potential to generate \$1.2 billion to \$13 billion new benefits annually
- Based on the findings, we are developing a cooperatively funded national enhanced elevation program executed by USGS
- We will acquire high resolution LiDAR data for 49 states, IfSAR in Alaska
- The goal is to achieve an 8-year acquisition cycle
- Provide bare earth elevation, point cloud and other data derivatives



Hazards Mitigation



Land Navigation and Safety



Flood Risk Mitigation



Infrastructure Management



**Precision Farming** 

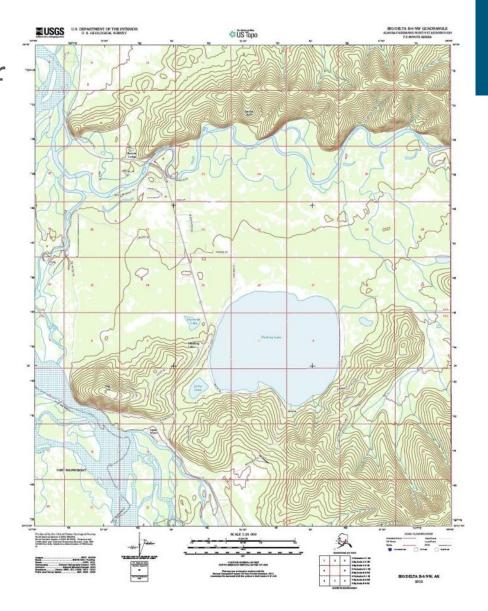


**Natural Resources Conservation** 



## \* 3DEP Starts with Alaska

- 3DEP includes IfSAR for Alaska – urgent needs make Alaska our highest priority
- Progress is being made, but additional investment is critical



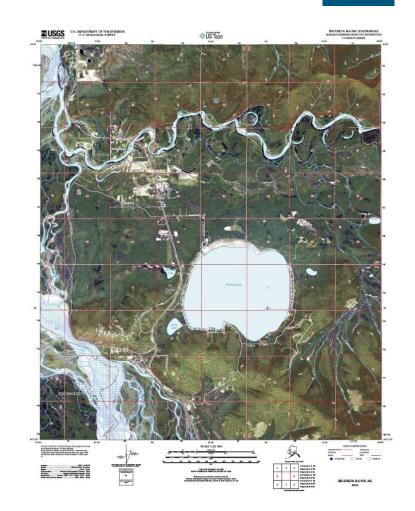


## +

## **USGS Alaska Mapping Initiative**

#### US Topo for Alaska

- Finalize specifications this year and begin full production of US Topo maps for Alaska in FY13
- Partner with the Alaska Statewide
  Digital Mapping Initiative (SDMI) on
  IfSAR data acquisition
- Sources for other map layers
   needed for The National Map
   datasets and US Topo provided by
   USGS and partners





# <sup>+</sup>Topographic Mapping Estimates

Alaska projected through 2018 (in millions of dollars)

Theme	Goal/Activity	Estimated Need	Previous Expenditures	Funding Gaps	Out-year Trend
Elevation	Statewide IfSAR	\$52.5	\$15.2	\$37.3	_
	Project-based LiDAR	\$4.1	\$4.1	<b>\$0</b>	<b>1</b>
Hydrography	Statewide high-resolution National Hydrography and Watershed Boundary Datasets replacement	\$20.0	\$0	\$20.0	<b>↑</b>
	Statewide SPOT satellite imagery	\$3.6	\$3.6	<b>\$0</b>	<b>+</b>
Imagery	High-resolution imagery (Anchorage, Juneau)	\$0.4	\$0.2	\$0.2	<b>↑</b>
Geographic Names Transportation Structures Boundaries Land cover	Statewide Data Maintenance and Delivery	\$2.3	\$0.3	\$2.0	_
Program and Production Operations	Data Processing and Delivery US Topo Map Production Liaison in State	\$8.3	\$1.3	<b>\$7.0</b>	_
	Total	\$91.2	\$24.7	\$66.5	

## +

# **Topographic Mapping Costs**

### Summary in Millions of Dollars

	Organization	Total
Total Need		\$91.2
	USGS/DOI	\$6.9
Previously Expended	State of Alaska	\$10.2
	Other participants	\$7.6
Remaining Gap		\$66.5





## Conclusion

#### National Topographic Mapping Goals for Alaska

- What would modern topographic mapping mean to your mission?
- More work remains to be done to bring Alaska mapping into the 21<sup>st</sup> century
- Accomplishment of the elevation need is a critical first step
- USGS and the Department of the Interior are committed to make it happen and need your support and partnership

