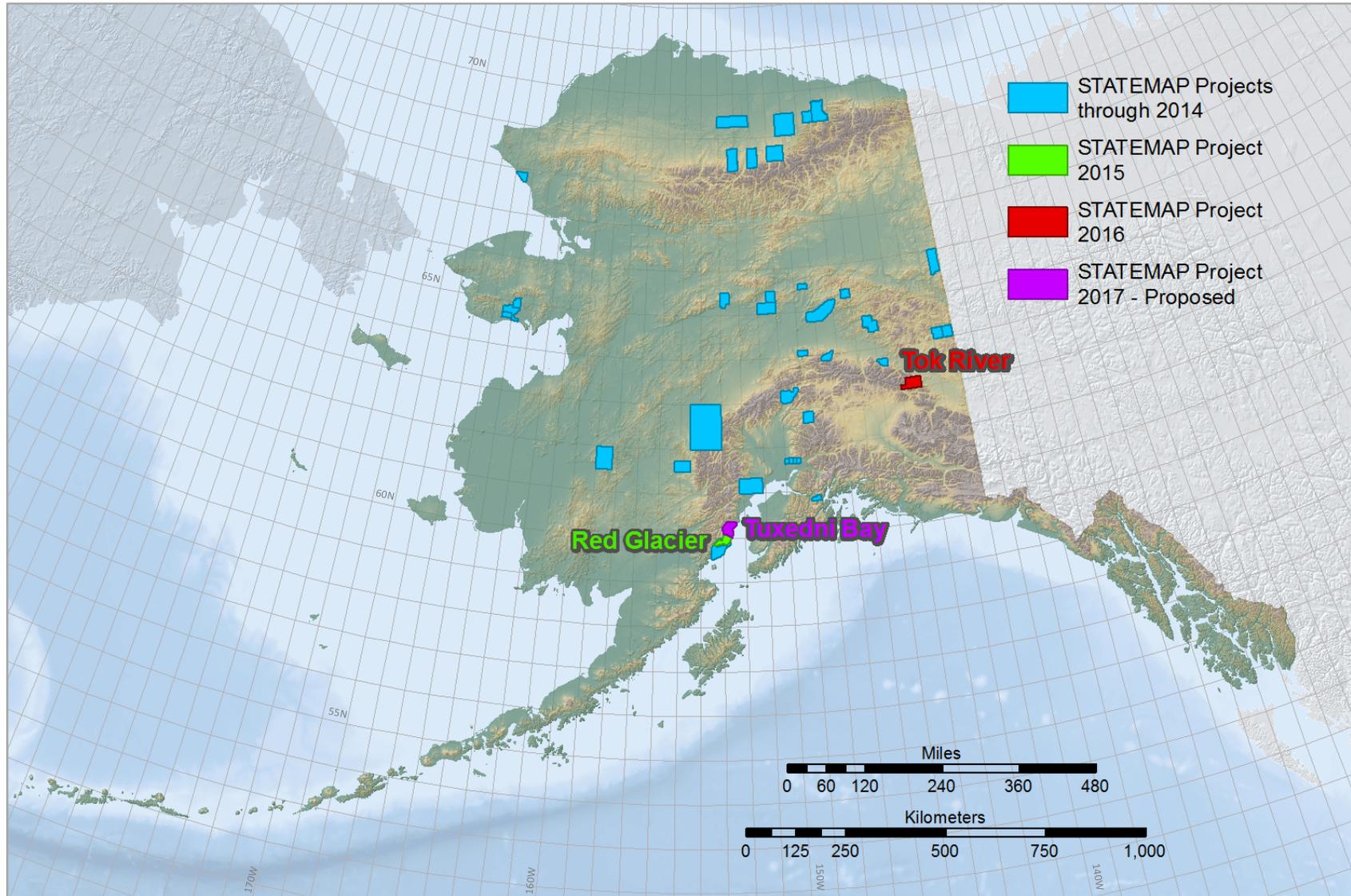


National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping



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Alaska STATEMAP Fact Sheet (FY2016)

Since 1993, the National Cooperative Geologic Mapping Program's STATEMAP program has made a significant contribution toward expanding geologic knowledge in Alaska, where current geologic mapping is limited or nonexistent. Alaska is endowed with a rich resource potential but also has significant natural hazards. The state, with its resourced-based economy, supplies a significant portion of the nation's energy and mineral resources. Our STATEMAP projects are primarily directed toward detailed mapping and analysis in areas of high resource potential and/or hazards to help meet the resource needs of the state and the nation, as well as to mitigate hazard risks.

Alaska's economy is predicated in large part on the discovery and development of new mineral and energy resources, yet less than 20 percent of its land has been geologically mapped at a scale of 1 inch = 1 mile or better. STATEMAP is helping to expand that coverage where needed for future resource-exploration and development projects, construction-materials evaluation, and geologic-hazards identification. Through 2016, the Alaska Division of Geological & Geophysical Surveys (DGGs) has completed new geologic mapping for 14,885 square miles of Alaska as part of STATEMAP. DGGs STATEMAP projects have included mapping of parts of strategic commercial access corridors, mining districts, and frontier oil and gas provinces. These projects have delivered products that have contributed to increased oil and gas lease sales and mineral exploration, and have helped Alaska Native corporations evaluate the mineral resources of their lands.

In FY2016, DGGs used STATEMAP funds to geologically map 466 square miles of the Tok River area along the eastern Alaska Range. The mapping and related products are helping to address a number of key questions about underexplored extensions of the Delta mineral belt of volcanogenic massive-sulfide

COMPLETED STATEMAP GEOLOGICAL MAPPING PROJECTS IN ALASKA

Federal Fiscal Year	Project	State Funds	Federal Funds	Total
1993 - 2003		\$ 1,711,621	\$ 1,519,165	\$ 3,230,786
2004	Council mining areas, Solomon Quadrangle	\$ 145,276	\$ 145,258	\$ 290,534
2004	Tiglukpuk Creek: Eastern Chandler Lake B-4 Quadrangle	\$ 107,666	\$ 107,588	\$ 215,254
2005	Siksikpuk River: Chandler Lake B-4 & C-4 quadrangles	\$ 144,751	\$ 144,507	\$ 289,258
2005	Liberty Bell, southern 1/2 Fairbanks A-4 quadrangle	\$ 81,583	\$ 81,561	\$ 163,144
2006	Kavik River area, Mt. Michelson Quadrangle	\$ 75,804	\$ 39,992	\$ 115,796
2006	Casadapega River Bluff area, Solomon Quadrangle	\$ 321,144	\$ 179,992	\$ 501,136
2007	NE Fairbanks, Circle Quadrangle	\$ 158,261	\$ 158,246	\$ 316,507
2007	AK Highway Corridor, NE Mount Hayes C-2 quadrangle	\$ 96,142	\$ 76,054	\$ 172,196
2008	Sagavanirktok A-3, A-4, B-3, & B-4 quadrangles	\$ 105,155	\$ 72,344	\$ 177,499
2008	Eastern Bonnifield mining district	\$ 145,547	\$ 145,496	\$ 291,043
2009	Tyonek-Capps Glacier area, Tyonek Quadrangle	\$ 258,141	\$ 147,958	\$ 406,099
2009	Mentasta-Slana area, parts of Mt. Hayes A-2 & A-3 quads	\$ 73,009	\$ 73,000	\$ 146,009
2010	Kivalina area, parts of Noatak C-5, D-5, and D-6 quads	\$ 75,791	\$ 75,313	\$ 151,104
2010	Tyonek-Capps Glacier area (year 2)	\$ 151,082	\$ 150,839	\$ 301,921
2011	Eastern Moran area, Tanana B-6 and north part of A-6 quads	\$ 223,218	\$ 221,599	\$ 444,817
2012	Umiat-Gubik area, Umiat B-3 and B-4 quads	\$ 50,939	\$ 50,748	\$ 101,687
2012	Whittier area, southern Seward D-4 and D-5 quads	\$ 150,658	\$ 150,608	\$ 301,265
2013	Iniskin Peninsula, Lower Cook Inlet (portions of 5 quads; yr 1)	\$ 309,800	\$ 191,819	\$ 501,619
2014	Talkeetna Mountains C4	\$ 194,399	\$ 165,827	\$ 360,226
2015	Western Cook Inlet	\$ 335,597	\$ 171,197	\$ 506,794
2016	Tok River/Tanacross A-6 Quadrangle	\$ 210,011	\$ 173,457	\$ 383,468
	TOTALS	\$ 5,125,594	\$ 4,242,568	\$ 9,368,162

(VMS) deposits, in close proximity to an actively drilled gold-copper-silver skarn exploration project, and punctuated by gold-copper porphyry prospects. Results from this proposed mapping project will help to better define the Mesozoic meta-sedimentary and meta-volcanic rocks and their associated VMS deposits, identify how they were deformed and subsequently intruded by Triassic and Cretaceous plutons, and identify new targets for exploration.

Alaska has the potential to supply the nation with all but a few of the 65 strategic nonfuel minerals and materials identified by the U.S. Geological Survey as essential to national security and the U.S. economy. Yet of all the resource-rich regions in the United

States, Alaska is the least understood geologically, and arguably maintains the highest unrealized resource potential for both energy and mineral deposits.

DGGs deploys a relatively large and diverse field team to conduct comprehensive geologic mapping within our remote map areas. Our projects result in bedrock, surficial, and engineering-geologic maps, where applicable, and provide basic geologic framework data for use by State and Federal agencies, private industry, scientists, and other end users.