



The Economic Benefits of Alaska's Mining Industry

Mining is a growing force in Alaska's economy.

Providing jobs for thousands of Alaskans and millions of dollars of personal income throughout Alaska, Alaska's mining industry includes exploration, mine development, and mineral production. Alaska's mines produce coal, gold, lead, silver, zinc, as well as construction materials, such as sand, gravel, and rock.

In 2014, Alaska's mining industry provided:

- ▶ 4,400 direct mining jobs in Alaska.
- ▶ 8,700 total direct and indirect jobs attributed to Alaska mining industry.
- ▶ \$620 million in total direct and indirect payroll.
- ▶ Some of Alaska's highest paying jobs with an estimated average annual wage of \$100,000, over twice the state average for all sectors of the economy.
- ▶ \$20 million in local government revenue through property taxes and payments in lieu of taxes.
- ▶ \$119 million in state government-related revenue through rents, royalties, fees, and taxes.
- ▶ \$144 million in payments to Alaska Native corporations.
- ▶ Mostly year-round jobs for residents of more than 50 communities throughout Alaska, half of which are found in rural Alaska where few other jobs are available.

Largest Producing Mines and Selected Advanced Exploration Projects State and Local Government Tax Obligations

	Land Status	Mining License Tax	State Royalty Payments	Local Govt. Tax Payments
Producing Mines				
Fort Knox	State/Mental Health Trust	X	X	X
Greens Creek	Private/Federal	X		X
Kensington	Private/Federal/State	X	X	X
Pogo	State	X	X	
Red Dog	Private	X		X
Usibelli Coal	State	X	X	X
Advanced Exploration (Projected Payments)				
Bokan Mountain	Federal	X		
Chuitna Coal Project	State/Mental Health Trust/Private/Borough	X	X	X
Donlin Gold	Private	X		
Livengood	State/Mental Health Trust	X	X	
Niblack Project	State/Federal	X	X	
Palmer Project	State/Federal/Mental Health Trust	X	X	X
Pebble Project	State	X	X	X
Upper Kobuk	State/Federal/Private	X	X	
Wishbone Hill	State/Mental Health Trust/Private	X	X	X

2014 Economic Benefits

estimated

Exploration

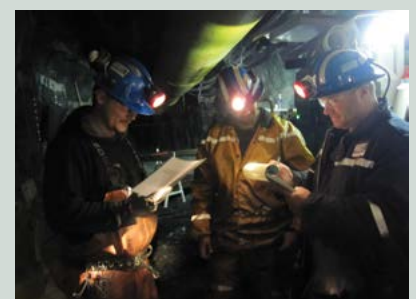
- ▶ \$67 million spent on exploration.
- ▶ \$3.3 billion spent on exploration since 1981.

Development

- ▶ \$102 million spent on mine construction and other capital investment.

Production

- ▶ More than 600 placer mines permitted produced approximately 83,000 ounces of gold with a gross production value of \$105 million.
- ▶ Approximately \$85 million in production value from more than 120 active rock quarries, and sand and gravel operations.
- ▶ Export value of \$1.6 billion, or 31%, of Alaska's total exports.



Advanced Exploration Projects

Bokan Mountain
Rare earth elements

- Geotechnical & diamond drilling programs in 2014
- Completed design engineering to support pending mine permit applications
- Advanced metallurgical studies in support of ore separation technology
- 190 potential production jobs

Chuitna
Coal

- Currently in the permitting process; anticipate draft permit decisions in 2015-2016
- 300-350 expected production jobs

Donlin Gold
Gold

- Discovered in 1988, continued exploration since 1995
- Permitting process began in 2012
- Up to 90% Calista shareholder hire at camp operation
- Up to 1,400 expected production jobs, depending on the production timeline

Livengood
Gold

- Placer mining began in 1914, lode exploration in 2003
- Approximately \$215 million invested to date
- Completed feasibility study in 2013; Project optimization underway
- 450 potential production jobs

Niblack
Copper, gold, silver, and zinc

- Ongoing exploration for more than 35 years
- \$39 million invested since 2009
- Focused on engineering, environmental, and other technical studies to support prefeasibility study
- 200 potential production jobs

Palmer Project
Copper, zinc, gold, and silver

- Focused on resource expansion drilling
- \$20 million invested since 2006
- 300 potential production jobs

Pebble Project
Copper, gold, and molybdenum

- Discovered in 1987 on State of Alaska land, ongoing exploration, engineering, and environmental studies since 2002
- \$150+ million spent on environmental baseline studies
- Approximately 1,000 potential production jobs

Upper Kobuk Mineral Projects (Arctic & Bornite)
Copper, zinc, gold, and silver

- Intermittent exploration from 1965 to 1998 and renewed efforts starting in 2004
- Preliminary Economic Assessments (Arctic) completed for underground and surface operation
- An updated resource statement completed at Bornite in 2014

Wishbone Hill
Coal

- First mined in 1916
- Project feasibility study completed in November 2011
- 75-125 potential production jobs

MINING EXPLORATION TIMELINE



Mining Activity in Alaska

Producing Mines

Fort Knox Mine
Gold

- Alaska's largest producing gold mine; poured six millionth ounce in 2013
- Largest single property taxpayer in the Fairbanks North Star Borough
- Discovered in 1984, producing since 1996
- 650 employees in 2014

Greens Creek Mine
Silver, zinc, gold, and lead

- Among the top 10 silver producers in the world
- Largest Southeast Alaska for-profit employer, in terms of payroll
- Discovered in 1975, producing from 1989 to 1993, and continuously since 1996
- 415 employees in 2014

Kensington
Gold

- Produced over 100,000 ounces of gold in 2014
- Exploration underway to expand ore zones
- Second largest private employer in Southeast Alaska in terms of payroll; over \$41 million in 2014
- Largest payer of property tax in the City & Borough of Juneau
- 320 full-time, year-round employees in 2014

Pogo Mine
Gold

- Discovered in 1994, producing since 2006
- 320 full-time employees in 2014
- Paid \$57 million in wages and benefits in 2014

Red Dog
Zinc, lead, and silver

- One of the world's largest zinc concentrate producers
- Only taxpayer in the Northwest Arctic Borough
- Discovered in 1968, producing since 1989
- 610 employees (including 130 contractors) in 2014

Usibelli Coal Mine
Coal

- In continuous production since 1943
- 140 full-time year-round employees in 2014
- Alaska's only operating coal mine, exporting about half of its production in 2013
- Fuels 29% of Interior Alaska's electricity

MINING PRODUCTION TIMELINE



Ongoing Environmental Studies, Protection, and Reclamation

Strengthening Local Economies and Communities

Mining companies strengthen Alaska's local economies by employing Alaska residents from more than 50 Alaska communities. The industry also purchases supplies and services from hundreds of Alaska businesses.

These mining companies are also a significant source of stable revenue for local governments, as well as significant state government revenue. In 2014, Alaska's mining industry paid:

An estimated total of \$19.9 million to local governments, including:

- \$8.8 million in payment in lieu of taxes (PILT) by Red Dog to the Northwest Arctic Borough, plus \$2.5 million paid to the Northwest Arctic Borough School District.
- \$5.2 million in property taxes paid by Fort Knox to the Fairbanks North Star Borough.
- \$1.6 million in property taxes paid by Kensington to the City and Borough of Juneau.
- \$1.7 million in property taxes paid by Greens Creek to the City and Borough of Juneau.
- Tax payments to other local governments, including Denali Borough, City of Nome and others
- Mining industry employees also pay local property and sales taxes.

An estimated \$64.4 million to state government in royalties, rents, fees, and taxes, including:

- \$46.4 million in mining license tax and rents and royalties.
- \$15.2 million in corporate income tax collections, representing 15% of the State's non-petroleum industry corporate income tax receipts.
- Approximately \$2.8 million in state material sales, miscellaneous fees, and other taxes.

Over \$54.7 million in other state government-related revenues, including:

- \$24.1 million to the Alaska Railroad Corporation for moving coal, sand and gravel.
- \$26.5 million to Alaska Industrial Development and Export Authority for the use of state-owned facilities (DeLong Mountain Regional Transportation System and Skagway Ore Terminal).
- \$4.1 million to the Alaska Mental Health Trust for mining claim and lease rent and royalty payments, and construction material sales.

Partnering with Alaska Native Corporations

All Alaska Native corporations benefited from mining industry activity – in 7(i) and (j) royalty sharing payments, in jobs for shareholders, or through business partnerships.

- In FY2014, NANA received \$143.2 million in net proceeds from the Red Dog Mine and distributed \$93.7 million to other Alaska Native Corporations, Kikiktargruk Inupiat Corporation (KIC), and at-large shareholders via the 7(i) provisions of the Alaska Native Claims Settlement Act (ANCSA).
- Since 1989, NANA has received \$1.1 billion in net proceeds from the mine and paid more than \$705.5 million to other regions, KIC, and at-large shareholders via 7 (i) and 7(j) of ANCSA.
- 57% of 610 year-round jobs at Red Dog are filled by NANA shareholders, including Teck, NANA Lynden and NANA Management Services jobs.
- Calista Corporation anticipates \$1.2 million in royalties and other revenue for mineral agreements, including lode exploration, placer gold production, and construction material sales.
- 53% NANA shareholder hire at Upper Kobuk Mineral Projects (NovaCopper) since 2011.
- Many Alaska Native corporations have taken the opportunity to develop businesses that serve the mining sector, such as NANA Regional Corporation, Calista Corporation, The Kuskokwim Corporation, Central Council Tlinglit & Haida Indian Tribes of Alaska, Goldbelt, Inc., Kake Tribal Corporation, Klukwan, Inc., Prince of Wales Tribal Enterprise Consortium, Tenalian Inc., and Tyonek Native Corporation.

