



The Economic Benefits of **ALASKA'S MINING INDUSTRY**

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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 2017, Alaska's mining industry provided:

- **4,500** direct mining jobs in Alaska.
- **9,000** total direct and indirect jobs attributed to Alaska mining industry.
- **\$700 million** in total direct and indirect payroll.
- Some of **Alaska's highest paying jobs** with an estimated average annual wage of \$108,600, twice the state average for all sectors of the economy.
- **\$34 million** in local government revenue.
- **\$109 million** in state government revenue.
- **\$250 million** in payments to Alaska Native corporations.
- **\$580 million** in procurement from **600 Alaska vendors**.
- **Mostly year-round jobs** for residents of more than 55 communities throughout Alaska, over 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	●	●	●
Greens Creek	Private/Federal	●	●	●
Kensington	Private/Federal/State	●	●	●
Pogo	State	●	●	
Red Dog	Private	●		●
Usibelli Coal	State	●	●	●
Development Projects				
Donlin Gold	Private	●		
Pebble	State	●	●	●
Advanced Exploration Projects				
Graphite Creek	State/Federal	●	●	
Livengood	State/Mental Health Trust/ Federal	●	●	
Palmer	State/Mental Health Trust/ Federal	●	●	●
Upper Kobuk	State/Federal/Private	●	●	●

2017 Economic Impacts

(estimated)

Exploration

- \$110 million spent on exploration.
- \$3.5 billion spent on exploration since 1981.

Development

- \$213 million spent on mine construction and other capital investment.

Production

- Export value of \$1.5 billion, or 35%, of Alaska's total exports (2016).
- 236 active placer mines produced approximately 51,800 ounces of gold with a gross production value of \$69 million.
- Approximately 120 active rock quarries, and sand and gravel operations throughout Alaska with at least \$17 million in production value on state lands.

Advanced Exploration Projects

Graphite Creek
Graphite

- Preliminary Economic Assessment completed in 2017
- \$363 million in projected capital costs
- 370 potential production jobs

Livengood
Gold

- Placer mining began in 1914, lode exploration in 2003
- Approximately \$232 million invested to date
- Completed new pre-feasibility study as result of 2016 project optimization work
- 330 potential production jobs

Palmer
Copper, zinc, gold, and silver

- \$7 million spent in 2017 for exploratory drilling, access road construction, and ongoing environmental and geotechnical studies
- Nearly \$30 million invested since 2006

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

- Significant exploration work conducted from 2011 to present
- Preliminary Economic Assessments completed for underground and open pit operation (Arctic)
- Updated resource statement completed in 2014 (Bornite)
- Continued drilling program and technical studies in 2017
- Environmental baseline data collected (Arctic)
- EIS initiated for Ambler Access road development

Projects in Permitting

Donlin Gold
Gold

- Discovered in 1988, continued exploration since 1995
- Permitting process began in 2012; estimate final EIS in 2018
- Up to 90% Calista shareholder hire at its camp operation
- Up to 1,200 expected production jobs, depending on the production timeline

Pebble
Copper, gold, and molybdenum

- Discovered in 1987 on State of Alaska land
- Ongoing exploration, engineering, and environmental studies since 2002
- Over \$150 million spent on environmental baseline studies
- Contains 81 billion pounds of copper, 107 million ounces of gold, and 5.6 billion pounds of molybdenum
- Approximately 750 potential production jobs

MINING EXPLORATION TIMELINE



Mining Activity in Alaska

Producing Mines

Fort Knox
Gold

- Alaska's largest producing gold mine; poured 7 millionth ounce in 2016
- Largest single property taxpayer in the Fairbanks North Star Borough
- Approximately 640 employees, plus 170 on-site contractors
- Expected 2018 exploration program on newly acquired adjacent Gilmore property, adding 2 million ounces to reserves

Greens Creek
Silver, zinc, gold, and lead

- Largest silver mine in the U.S., and in the top 10 producers worldwide
- Discovered in 1975, producing from 1989 to 1993, and continuously since 1996
- Largest payer of property tax in the City and Borough of Juneau
- Largest Southeast Alaska for-profit employer, in terms of payroll
- Approximately 420 employees

Kensington
Gold

- Produced 115,094 ounces of gold in 2017
- Exploration underway to expand ore zones
- 2nd largest private sector employer in Southeast Alaska in terms of payroll; over \$36 million in 2017
- 2nd largest payer of property tax in the City and Borough of Juneau
- 378 employees in 2017

Pogo
Gold

- Discovered in 1994, producing since 2006
- Celebrated 10th Anniversary of production in 2016
- 8th largest gold producer in the U.S.
- Approximately 320 employees with \$44 million in wages

Red Dog
Zinc, lead, and silver

- Largest lead concentrate and zinc concentrate producer in the U.S.
- Mine life expected until 2031
- 2nd largest silver producer in the U.S.
- Only taxpayer in the Northwest Arctic Borough
- Discovered in 1968, producing since 1989
- Approximately 550 employees (including 100 contractors)

Usibelli Coal
Coal

- In continuous production since 1943
- Fuels 29% of Interior Alaska's electricity
- Approximately 110 employees

MINING PRODUCTION TIMELINE





Strengthening Local Economies and Communities

Mining companies strengthen Alaska's local economies by employing residents from more than 55 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 2017, Alaska's mining industry paid:

An estimated total of \$33.9 million to local governments, including:

- Approximately \$14.0 million in payments in lieu of taxes by Red Dog to the Northwest Arctic Borough, plus \$8.0 million paid to the Village Improvement Fund.
- \$8.7 million in property taxes paid by Fort Knox to the Fairbanks North Star Borough.
- \$1.7 million in property taxes paid by Greens Creek to the City and Borough of Juneau.
- \$1.4 million in property taxes paid by Kensington 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 \$60.6 million to state government in royalties, rents, fees, and taxes, including:

- \$54.4 million in mining license tax, rents, and royalties.
- Approximately \$6.2 million in state material sales, miscellaneous fees, and other taxes

A total of \$48.7 million in other state government-related revenues, including:

- \$21.2 million to the Alaska Railroad Corporation for moving coal, sand and gravel.
- \$24.8 million to the Alaska Industrial Development and Export Authority for the use of state-owned facilities (DeLong Mountain Regional Transportation System and Skagway Ore Terminal).
- \$2.7 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.

- \$247.0 million in net proceeds from Red Dog Operations to NANA and distributed \$156.4 million to other Alaska Native regional and village corporations and at-large shareholders.
- Between 1982 and 2017, NANA received \$1.5 billion in net proceeds from Red Dog and paid more than \$1.0 billion to other regional and village corporations, KIC, and at-large shareholders via 7(i) and 7(j) provisions of ANCSA.
- 55% of the 550 year-round jobs at Red Dog are filled by NANA shareholders, including Teck, NANA companies and other service providers.
- Calista Corporation has received millions of dollars in royalties and other revenue for mineral agreements, including lode exploration, placer gold production, and construction material sales.
- 59% of all employees at the Upper Kobuk Minerals Projects, including contractor hires, were NANA shareholders in 2017.
- Many Alaska Native corporations have taken the opportunity to develop businesses that serve the mining sector, such as NANA Regional Corporation, Iliamna Development Corporation, Calista Corporation, and The Kuskokwim Corporation.