

Statewide Socioeconomic Impacts of

USIBELLI COAL MINE, INC.

January 2015



Prepared For



Prepared By



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Table of Contents

- Summary of Key Findings** 1
- Methodology** 5
- Overview of Usibelli Coal Mine** 6
 - Production 6
- Statewide Economic Impacts**..... 7
 - Statewide Economic Impact Summary 7
 - Economic Impacts..... 7
 - Benefits to the Alaska Railroad 11
 - Downstream Economic Impacts 11
- Economic Impacts on the Denali Borough**..... 13
 - Denali Borough 13
 - Total Regional Impacts of UCM 15
- Other Regional Impacts**..... 16
 - Interior Alaska (Fairbanks North Star Borough and Denali Borough) 16
 - Kenai Peninsula Borough..... 16
 - Matanuska Susitna Borough 16
- Summary of UCM Employee Survey Results** 17
 - In Summary 18

Summary of Key Findings

Usibelli Coal Mine (UCM), located in Healy, Alaska, has been producing coal for more than 70 years. UCM's year-round mining activity produced an annual average of 1,960,000 tons of coal from 2009 to 2013 for use in Interior power plants and the export market. In addition to its mining operations in Healy, Aurora Energy Services (AES), a subsidiary, operates the Seward Coal Loading Facility. UCM staff are also located in Fairbanks and Palmer offices.

In 2013, McDowell Group conducted a study for UCM entitled *Energy and Economic Impacts of Coal in Interior Alaska*. The purpose of that report was to profile the role of coal in Interior Alaska's energy supply infrastructure and assess the economic impact of coal in the region's economy in 2012. This report differs from the first report by assessing the broader economic impact of UCM's operations statewide in 2013.

A summary of key findings are detailed below.

Direct Impacts (2013)

EMPLOYMENT AND WAGES

- Usibelli Coal Mine, including AES, employed an average of 140 individuals, with 117 positions located in Healy, 14 in Seward, seven in Fairbanks, and two in Palmer.
- Total wages for UCM/AES employees totaled \$14.7 million. Including benefits, total labor income was \$21.3 million.
- The average wage paid to UCM/AES employees were more than double the average wage in Alaska.
- One-in-four UCM employees has been with the company over 20 years. The longest employed individual has been with UCM for 40 years.
- All UCM/AES employees are Alaska residents.

SPENDING ON GOODS AND SERVICES

- Of UCM/AES's total spending of \$53.3 million on goods and services, 76 percent (or \$40.7 million) was spent in Alaska with approximately 360 Alaska businesses, including the Alaska Railroad (ARRC), a quasi-governmental entity. Some major expenditures included:

Map of UCM Operations



- \$18.9 million (or 47 percent of total Alaska spending) to the Alaska Railroad for transportation services to move coal from Healy to Interior energy plants and to the Seward Coal Loading Facility.
- \$7.7 million (19 percent) for fuel.
- \$2.4 million (6 percent) for electricity.

GOVERNMENT PAYMENTS

- UCM paid approximately \$3.0 million to the State of Alaska for rents, royalties, and taxes. Approximately \$618,000 of UCM's royalty payments were deposited in the Alaska Permanent Fund.
- Approximately \$125,000 was also paid to a number of local governments, including the Kenai Peninsula, Matanuska Susitna, Denali, and Fairbanks North Star boroughs, as well as some municipalities in these boroughs.

CHARITABLE SUPPORT

- UCM and The Usibelli Foundation contributed \$272,000 to nearly 100 nonprofit organizations in 16 Alaska communities.
- Since 2010, UCM has donated \$610,000 to the University of Alaska Fairbanks and has participated in a number of research projects related to coal mining, electricity generation, and natural resource development.
- More than 20 academic scholarships are supported annually by UCM, including:
 - Four University of Alaska Fairbanks (UAF) scholarship programs—the UCM Mining Scholarship awarded to up to four student entering UAF's mining or geological engineering programs, the Honors Scholarship awarded annually to 10 students in the Honors Program, the Diesel/Heavy Equipment Certificate Scholarship awarded to one student, and a four-year scholarship awarded to a business student at the UAF School of Management who graduated from an Alaska high school.
 - Five academic scholarships to Healy's Tri-Valley School graduating seniors.
 - \$1,000 scholarships awarded to students of UCM employees who graduate high school and pursue post-secondary education.
- The Emil Usibelli Distinguished Teaching, Research, and Service Award honors three UAF staff for outstanding teaching, research, and public service with a \$10,000 prize.

SIGNIFICANCE OF UCM ON THE HEALY AND DENALI BOROUGH ECONOMIES

- Healy, with a year-round resident population of 1,064 people, is located in the Denali Borough. In 2013, there were approximately 476 Healy employed residents (374 within the private sector). With UCM's 117 employees living and working in Healy, UCM's operations directly provide 25 percent of all employment for Healy year-round residents and 31 percent of all employment for residents working in the private sector. UCM paid \$12.9 million to its Healy employees, representing nearly 60 percent of all wages paid (totaling \$21.8 million) to Healy residents.
- Healy is in close proximity to Denali National Park and during the summer tourist season the borough's population and employment increase dramatically. To illustrate, during the winter season, Denali Borough's employment hovers around 794, of which UCM's 117 positions in Healy account for nearly one in six jobs (15 percent). During the summer tourist season, however, Denali Borough's employment almost quadruples (3,834 jobs in July). Averaged over the year, UCM wages represent 20 percent of private-sector employment and 40 percent of all wages paid in the Denali Borough.
- The average wage paid to Healy residents was \$43,068. However, if UCM wages were removed from the total wages paid to borough residents, the remaining 359 employed residents would make an average of \$24,791.
- The Denali Borough government generated about \$100,000 from a 5¢ per ton severance tax levied on coal.
- UCM spent approximately \$270,000 with 21 Denali Borough vendors.
- Approximately 28 percent of students (50 of 178) enrolled in Healy's K-12 Tri-Valley School came from UCM employee households.

Total Statewide Impacts

- Including direct, indirect, and induced impacts, the total impact of UCM's operations in Alaska are 418 jobs paying \$30.7 million in wages.
- In addition, the downstream impacts of UCM's coal supply includes 222 jobs and \$17.8 million in wages at Interior Alaska coal-fired power plants.
- Including downstream impacts, the total 2013 impact of UCM's operations in Alaska was 640 jobs with \$48.5 million in wages.

Summary of UCM/AES Socioeconomic Impacts in Alaska, 2013

2013	
UCM/AES Direct Impacts	
Annual UCM/AES average employment	140
UCM/AES employee wages	\$14.7 million
UCM/AES employee labor income (wages plus benefits)	\$21.3 million
Spending with Alaska-based private businesses	\$40.7 million
Number of Alaska-based vendors	360 vendors
UCM/AES Induced and Indirect Impacts	
Indirect and induced employment	278 jobs
Indirect and induced wages	\$16.0 million
Downstream Impacts of Interior Coal-fired Power Plants	
Interior Alaska coal-fired power plant employment	222 jobs
Interior Alaska coal-fired power plant wages	\$17.8 million
Total UCM/AES/Coal-fired Power Plant Statewide Impacts (Direct, Indirect, and Induced)	
Total employment statewide	640 jobs
Total wages statewide	\$48.5 million

Source: UCM, 2014, *Energy and Economic Impacts of Coal in Interior Alaska, 2013* and McDowell Group estimates.

Methodology

To assess the statewide socioeconomic impact of Usibelli Coal Mine (UCM) and its subsidiary, Aurora Energy Services (AES), a variety of research and analysis tools were used. Public officials in Seward, the Kenai Peninsula and Denali boroughs, and Alaska Railroad (ARRC), as well as business owners in Healy, were contacted to gather information about mine-impacts to local communities and businesses. Research conducted for McDowell Group's 2013 report prepared for UCM entitled *Energy and Economic Impacts of Coal in Interior Alaska* was revisited. Additional information provided by the Institute of Social and Economic Research (ISER) and other organizations, such as ARRC, was reviewed. Community data was compiled from Alaska Local and Regional Information (ALARI), U.S. Census, Alaska Department of Education and Early Development, and the Alaska Department of Labor and Workforce Development (ADOLWD). Finally, a survey of UCM's employees (not including AES employees) was conducted to understand employee household spending patterns. Employees had the option to complete the survey online or by mail. With 54 completed surveys, the response rate was 41 percent.

Unless otherwise mentioned, all data and analysis are referring to the year 2013. Throughout the report UCM employment refers to both direct employees of the Usibelli Coal Mine and Aurora Energy Services.

Photographs used in this report are credited to UCM and Alaska Business Monthly.

Overview of Usibelli Coal Mine

Founded in 1943, UCM is a family-owned, fourth-generation coal mine in Healy, Alaska. Currently the only operating coal mine in the state, the mine produced an annual average of 1,960,000 tons of coal from 2009 to 2013 which was used to generate power and heat in Interior Alaska or exported to international markets.

Known as the Suntrana Formation, three seams of coal ranging from an average of 18 to 30 feet thick are covered with layers of overburden that can be more than 100 feet thick. After removal of the overburden, the coal is mined, crushed, and brought to market mainly by rail, though a small amount of coal is trucked to consumers as well.

Throughout the mine's history, coal has been produced from a number of areas within the mine site. Today, these areas are in different stages of development. Reclamation is underway at the Poker Flats Mine and Gold Run Pass Mine. The Two Bull Ridge Mine is currently UCM's main mine; however, UCM is moving forward in developing its Jumbo Dome Mine. With 83 million tons in coal reserves, the Jumbo Dome Mine will accommodate several decades of new production. Additionally, the previously-mined Rosalie site is undergoing permit revisions for further development. With more than 500 million tons of proven reserves in Healy, UCM has approximately 250 years of supply at current production levels.

UCM also plans to further develop the Wishbone Hill Mine located 10 miles from Palmer. Currently being permitted, that mining project has the potential to support 93 direct jobs over a 16-year life-of-mine scenario.¹ Proven reserves at the Wishbone Hill deposit total 14 million tons.

In addition to its mining operations, AES, a UCM subsidiary, operates the Seward Coal Loading Facility, which is owned by the Alaska Railroad (ARRC). UCM also staffs offices in Fairbanks and Palmer.

Production

UCM production totaled 1.6 million tons in 2013, down from the record 2.2 million tons produced in 2011. Production of coal for the Alaska market, mainly used to generate power in Interior Alaska, has been relatively stable in recent years, while the export market has fluctuated (dropping by 48 percent in 2013 from its 2011 peak).

Usibelli Coal Mine Production (tons), 2007-2013

	2007	2008	2009	2010	2011	2012	2013
Export	310,000	540,000	890,000	1,080,000	1,200,000	970,000	630,000
Alaska Market	990,000	960,000	1,010,000	1,020,000	1,000,000	1,030,000	970,000
Total Production	1,300,000	1,500,000	1,900,000	2,100,000	2,200,000	2,000,000	1,600,000

Source: UCM, 2014

¹ http://www.iser.uaa.alaska.edu/Publications/wishbone_hill_impacts_final.pdf

Statewide Economic Impacts

This section details the statewide economic impact of UCM/AES. UCM/AES operations impact Alaska through wages and benefits for employees, spending with Alaska businesses, and payments of taxes and fees to state and local governments. The majority of UCM/AES's spending accrues to Alaska businesses, all UCM/AES employees are Alaska residents, and eight government entities receive regular payments by UCM/AES.

Statewide Economic Impact Summary

Based on vendor data provided by UCM and input-output modeling conducted by McDowell Group, direct, indirect, and induced impacts of UCM/AES operations support 418 jobs statewide, generating wages of \$30.7 million. Including downstream effects, 640 jobs are supported throughout Alaska generating wages of \$48.5 million.

Statewide Employment and Wage Impacts of Usibelli Coal Mine, 2013, including Direct, Indirect, Induced, and Downstream Impacts

Statewide	
Employment Impacts	
Direct Impacts	140 jobs
Indirect/Induced Impacts	278 jobs
Additional Downstream Impacts	222 jobs
TOTAL Impacts	640 jobs
Wages Impacts	
Direct Impacts	\$14.7 million
Indirect/Induced Impacts	\$16.0 million
Additional Downstream Impacts	\$17.8 million
TOTAL Impacts	\$48.5 million

Source: UCM, 2014 and McDowell Group estimates.

Economic Impacts

Direct Employment and Wages

In 2013, UCM and AES employed 140 people in Alaska and paid a total of \$14.7 million in wages. Most employees (117) live and work in Healy. There are 14 positions with AES in Seward. UCM operations in Palmer and Fairbanks have 2 and 7 employees, respectively.

UCM wages are similar to pay levels in the mining industry throughout Alaska. Mining wages are among the highest in the state, averaging \$101,952 in 2013, and double the average statewide wage of \$51,036. In addition to wages paid, benefits (health insurance, retirement, etc.) added approximately 30 percent to labor income. When combined, total wages and benefits totaled \$21.3 million.

Comparison of Annual Average Wages in Alaska, by Sector, 2013

	Average Annual Wage
Mining (Metal Ore and Coal)	\$101,952
All Private and Public Sectors in Alaska	\$51,036
All Private Sectors	\$50,340
Construction	\$74,904
Federal Government	\$72,420
State Government	\$54,372
Local Government	\$44,844
Healthcare and Social Assistance	\$46,212
Retail	\$29,484

Source: Alaska Department of Labor and Workforce Development, 2014.

Indirect and Induced Impacts

In addition to direct jobs and wages, UCM/AES's operations generate indirect and induced impacts as well (often referred to as the multiplier impact). Indirect impacts are generated by UCM/AES's spending with vendors, employment generated from payments to government, and support of nonprofit organizations. For example, employment and wages resulting from the transportation of coal on the ARRC or a local government official that is paid in-part by revenue generated by the mine would be considered an indirect effect.

Induced impacts result from UCM/AES employee household spending. An example of this effect would be the jobs and wages at a local restaurant that are dependent on spending by UCM/AES employees.

In 2013, UCM and AES spent \$49.1 million on goods and services in support of its operations. Slightly more than 80 percent of this spending, or \$40.7 million, went to 360 businesses located in Alaska.

Alaska vendors provide a wide range of services to UCM/AES, including retail and wholesale trade goods (machinery, parts, tires, or office supplies), utilities, fuel, construction and professional services, transportation (trucking, freight couriers, and rail), accommodations and hospitality, and other goods and services. The largest expense for UCM was the cost of shipping coal by ARRC to Interior coal-fired plants and export markets. Other significant costs included fuel, electricity, and maintenance of mining equipment.

UCM/AES Private Sector Spending in Alaska, by Sector

Sector	Spending (\$ millions)	Percent of Total
Alaska Railroad Transportation*	\$18.9	47%
Fuel	7.7	19
Wholesale and Retail Trade	6.4	16
Electricity	2.4	6
Professional and Technical Services	2.0	5
Other	3.2	8
Total	\$40.7	100%

Note: Due to rounding, columns may not sum.

Source: UCM, 2014.

UCM/AES spending flowed to 360 Alaska businesses in 22 communities across Alaska. One hundred and twenty-five businesses located in Anchorage provided \$21.0 million in goods and services (52 percent of UCM/AES’s vendor spending), followed by \$17.1 million spent with 145 businesses located in Fairbanks (42 percent of total spending).

Usibelli Coal Mine Private Sector Spending in Alaska, by Vendor Location

Location	Spending (\$)	Percent of Total	Number of Vendors
Anchorage	\$21,010,000*	52%	125
Fairbanks North Star Borough	17,070,000	42	145
Kenai Peninsula Borough	1,230,000	3	29
Denali Borough	270,000	2	21
Mat-Su Borough	340,000	1	27
Other Alaska	170,000	<1	13
Total	\$40,700,000	100%	360

Note: Due to rounding, columns may not sum.

* Anchorage spending includes payments to the Alaska Railroad Corporation.

Source: UCM, 2014.

Government Revenue

UCM paid about \$3.1 million in taxes and fees to state and local governments in 2013. In addition to these direct payments, communities generated revenue from UCM/AES employees through sales, property, and other taxes. Government employment and wages supported by these payments are considered indirect effects.

STATE GOVERNMENT

Payments to the State of Alaska totaled approximately \$3.0 million in 2013. Revenue from the production of coal in Alaska is generated through three main vehicles:

- Coal **royalties**, usually 5 percent of the adjusted gross value, are paid on coal production in Alaska.
- **Rent** on lands leased from the State range from \$140 to \$680 per acre based on age of the lease.
- **Mining License Tax** is levied on net income of mining operations, and ranges from zero to 7 percent. In addition to other credits, this tax qualifies for the Alaska Education Tax Credit which allows deduction of taxes based on donations to qualifying educational institutions (such as University of Alaska Fairbanks (UAF)).

Government revenues paid by UCM are a mixture of restricted and unrestricted funds. One of the largest amounts of restricted revenue accrue from royalty payments. Either 25 or 50 percent of royalty revenues, depending on the date at which the site was leased, is designated for the Alaska Permanent Fund. In 2013, approximately \$618,000 in royalties paid by UCM were deposited into the Fund. In addition to the main sources of revenue detailed above, small payments accrued to the departments of Transportation and Public Facilities, Administration (Division of Motor Vehicles), and Environmental Conservation.

LOCAL GOVERNMENT

Payments to local governments totaled \$133,408 in 2013. The largest payments were to the Denali, Mat-Su, Fairbanks North Star, and Kenai Peninsula borough governments. The cities of Fairbanks, Palmer, and Seward also received smaller payments.

Nonprofit Organizations and Community Support

NONPROFIT ORGANIZATIONS

In 2013, UCM and The Usibelli Foundation contributed \$272,000 to nearly 100 nonprofit organizations in 16 Alaska communities. UCM is a regular supporter of many Alaska nonprofit organizations, such as the United Way, Tri-Valley Volunteer Fire Department, Alaska Sealife Center, and Special Olympics Alaska, among others. Corporate donations were made to a wide variety of organizations dedicated to the arts, education, human services, recreation and sports, youth development, and civil engagement. In addition to corporate giving, UCM matches employee contributions to a number of nonprofit organizations.

EDUCATION

UCM supports education at all levels through donations, collaboration, and scholarships.

Since 2010, UCM has donated \$610,000 to UAF, including funding for more than 20 academic scholarships awarded annually, and participation in a number of research projects related to coal mining, electrical generation, and natural resource development.

The Emil Usibelli Distinguished Teaching, Research, and Service Award honors three UAF staff for outstanding teaching, research, and public service. Started in 1992, 72 people have received the \$10,000 award.

Four UAF scholarship programs are supported by UCM. The four-year UCM Mining Scholarship is granted to up to four students entering UAF's mining or geological engineering programs, the Honors Scholarship is awarded annually to ten students who participate in the Honors Program, the Diesel/Heavy Equipment Certificate Scholarship is awarded to one student, and a four-year scholarship is awarded to a business student at the UAF School of Management who graduated from an Alaska high school.

Additionally, UCM provides five academic scholarships totaling \$7,500 to Healy's Tri-Valley School graduating seniors. Further, students of UCM employees who graduate high school and pursue post-secondary education are awarded a \$1,000 scholarship.

Benefits to the Alaska Railroad

ARRC's main source of income is from the shipment of freight, accounting for \$96.6 million or 58 percent of operating revenue in 2013.² UCM is one of the railroad's largest customers, spending \$18.9 million or approximately 20 percent of freight revenue. In a typical year, UCM ships an average of one million tons from Healy to Fairbanks for power and heat generation. With the closure of Flint Hill's North Pole refinery, UCM is an increasingly important anchor customer of ARRC, particularly in Interior Alaska.

From 2009 to 2013, ARRC moved an annual average of 950,000 tons of coal from UCM's Healy mine to the Seward Coal Loading Facility. That facility, which is owned by ARRC and operated by AES, supports the export of coal to South Korea, Japan, and Chile. With 2013 coal exports totaling 630,000 tons, approximately 100 trainloads from Healy were used to fill eight ships in Seward. ARRC estimates 53 year-round positions are directly connected to its coal export activity.³ ARRC employment fluctuates seasonally with approximately 600 positions in the winter and an additional 100 in the summer.⁴



An Alaska Railroad train connects to a coal car in Healy.

Downstream Economic Impacts

Interior Energy

The Interior of Alaska relies on coal mined by UCM for much of its electricity and a significant amount of space heating needs. The Interior's main electrical utility, GVEA, uses a combination of coal, oil, wind, hydro, and electricity purchased from Southcentral utilities (Intertie) to provide the region with power. Coal accounted for 29 percent of the total and is the cheapest source, excluding hydro.⁵ UAF uses a coal plant for all space heating needs and the majority of its electricity. Finally, Fort Wainwright, Eielson Air Force Base, and Clear Air Force Station use coal to provide electricity and heat to their military installations in Interior Alaska. Research previously conducted by McDowell Group indicates the absence of coal, holding demand constant, could increase energy costs an estimated \$200 million annually.⁶

² http://alaskarailroad.com/Portals/6/pdf/corp/2014_04_01_Annual_Report_CORP.pdf.

³ http://alaskarailroad.com/Portals/6/pdf/projects/2010%20Seward%20Coal%20Loading%20Facility_Facts.pdf.

⁴ <http://www.alaskarailroad.com/aboutARRCCc/factsheet/tabid/452/default.aspx>.

⁵ McDowell Group, *Energy and Economic Impacts of Coals in Interior Alaska*, 2013.

⁶ *Ibid*

The six Interior Alaska coal-burning power plants are detailed below:

- Eielson AFB’s cogeneration plant has a capacity of 25 MW (megawatts). Constructed in 1952, the plant burns approximately 180,000 tons of coal annually.
- Doyon Utilities’ 20 MW plant which was built in the 1940s produces electricity for Ft. Wainwright. The plant uses 280,000 tons of coal per year.
- University of Alaska Fairbanks’ 10 MW plant was built in 1964 and burns approximately 70,000 tons of coal per year. A replacement coal plant designed to produce 17 MW has been planned for construction.
- The privately owned Aurora Energy plant, located in Fairbanks, is a 32 MW plant that sells wholesale electricity generated to GVEA, and provides hot water and steam heat to downtown Fairbanks. Built in 1952, the plant uses 210,000 tons of coal a year.
- The 25 MW Healy Unit 1 plant, completed in 1967, is operated by Golden Valley Electric Association (GVEA) and uses 200,000 tons of coal annually. This is the only non-cogeneration Interior coal plant.
- Clear AFS operates a 23 MW cogeneration plant that was built in 1961 and uses about 55,000 tons of coal per year.

UCM’s production of coal in Alaska has “downstream” economic benefits that are associated with converting coal to energy. Similar to processing of other natural resources such as seafood, timber, crude oil, or other minerals, coal undergoes a “value-added” process when it is transformed into electricity or heat. Employment and wages at the five Interior power plants are considered downstream economic benefits and total 222 jobs with estimated wages of \$17.8 million (downstream economic impacts are not typically included in analysis of industry multiplier effects and are not included in the indirect and induced jobs and wages described previously in this chapter).

**Coal-Fired Power Plant Employment in Alaska, 2013
(UCM-Related Downstream Impacts)**

Facility	Estimated Employment
GVEA Healy Unit 1	30
UAF	38
Aurora Energy	20
Clear Air Force Station	31
Fort Wainwright (operated by Doyon)	47
Eielson Air Force Base	56
Total	222

Source: McDowell Group, 2013

Economic Impacts on the Denali Borough

Most of UCM’s operations are located in Healy, within the Denali Borough. The mine is the largest employer in Healy and provides economic benefits to the region through employment, spending with local businesses, and community support.

Denali Borough

Denali Borough encompasses more than 12,700 square miles, including Mt. McKinley (Denali) and Denali National Park, and has a year-round population of approximately 1,800.⁷ The largest communities within the Borough are Healy, Anderson, and Cantwell. Located between the Fairbanks North Star Borough and Matanuska-Susitna Borough, the region is dominated by a seasonal tourism economy. As shown in the table below, in 2013, resident and nonresident employment ranged from a high of 3,834 positions in July to a low of 794 in January.⁸ Some of the largest year-round employers in Denali Borough are local, state, and federal governments, UCM, and a power plant owned by GVEA. During the off-tourism season, UCM directly accounts for nearly one in six jobs (15 percent) in the Denali Borough. Nearly all UCM employees in the Borough live in Healy.

UCM’s 117 Healy employees were paid \$12.8 million in 2013, or nearly 40 percent of all wages paid to Denali Borough residents (\$33.4 million). Average annual UCM wages were more than double the borough-wide wage of \$43,068.⁹ Compensation rises approximately 30 percent when benefits are included. These 117 jobs represent 15 percent of all positions held by Borough residents (an annual average of 775 jobs).¹⁰ For private sector employment (586 jobs), UCM directly represents nearly 20 percent of all jobs.

Seasonal Variation in the Denali Borough Workforce, Resident and Non-Resident, 2013

	January		July	
	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total
Government	314	40%	411	11%
Professional And Business Services	132	17%	167	4%
Usibelli Coal Mine	117	15%	117	3%
Leisure And Hospitality	102	13%	2,673	70%
Trade, Transportation, And Utilities	67	8%	338	9%
Other Services	48	6%	81	2%
Educational And Health Services	15	2%	48	1%
Total	794	100%	3,834	100%

Note: Includes resident and nonresident employment.

Source: Alaska Department of Labor and Workforce Development, 2014; UCM, 2014, McDowell Group calculations, 2014

⁷ Department of Commerce, Community and Economic Development.

⁸ Alaska Department of Labor and Workforce Development, QCEW data.

⁹ Ibid.

¹⁰ Alaska Department of Labor and Workforce Development, ALARI.

Median household income in Denali Borough was an estimated \$72,500, which is slightly higher than the Alaska average of \$70,760.¹¹ The number of people living below the poverty level, based on a spectrum of household income, is 11.4 percent, a figure slightly higher than the statewide level.

The Denali Borough generated approximately \$100,000 from a \$0.05 per ton severance tax levied on coal and limestone extraction in 2013. With about two million tons of production, UCM paid nearly all of this tax. Neither the Borough nor Healy has a property or sales tax. The borough's largest source of tax revenue is its bed tax, generating \$2.7 million in 2013 and representing approximately 96 percent of its total tax revenue.

HEALY

With 117 positions in Healy, UCM is estimated to directly provide 25 percent of all jobs (476 jobs) held by Healy residents, and 31 percent of all private sector positions (374 jobs).¹²⁻¹³ Total wages paid to Healy residents totaled \$21.8 million in 2013, with about 60 percent coming from the \$12.9 million paid to UCM employees.¹⁴

Median household income in Healy in 2013 was \$99,464, which is 37 percent higher than average wages found in the rest of the Denali Borough and throughout the state.¹⁵ Average wages (\$43,068) in Healy are higher because of the large amount of well-paid UCM employees living in the area. For example, if UCM wages were removed from the total wages paid to borough residents, the remaining 359 employed residents would make, on average, \$24,791, or about 74 percent less. A result of higher wages is seen in Healy's 8.2 percent poverty rate, a rate lower than both the Denali Borough and State of Alaska.¹⁶



One of UCM's eight 150-ton capacity haul trucks.

In FY2013, the Denali School District had an average daily enrollment of 854 students and received \$6.3 million in funding from the State of Alaska, or approximately \$7,350 per student.¹⁷ Healy's Tri-Valley School, the largest school in the District had approximately 178 students enrolled in the same period. An estimated 28 percent,

¹¹ Department of Commerce, Community and Economic Development, <http://commerce.state.ak.us/cra/DCRAExternal/community/Details/286d8268-d39e-44ba-8cdb-38e940b62a3b>

¹² Alaska Department of Labor and Workforce Development, ALARI.

¹³ This assumes all UCM employees are Healy residents. In the past, employees have commuted from Cantwell or Anderson.

¹⁴ Alaska Department of Labor and Workforce Development, ALARI.

¹⁵ US Census, <http://quickfacts.census.gov/qfd/states/02000.html>.

¹⁶ Alaska Department of Labor and Workforce Development, ALARI.

¹⁷ <http://www.eed.state.ak.us/stats/>

or 50, of these students are from UCM employee households.¹⁸ As such, UCM-related enrollment accounts for approximately \$370,000 in state funding support for the District.¹⁹

UCM is a stable economic foundation of Healy. The average UCM employee has been with the company slightly more than 12 years, a figure much higher than the national average tenure of 4.6 years.²⁰ ²¹ One-in-four employees has been employed more than 20 years, and approximately 10 percent have been with the company more than 30 years. The longest employed individual has been with UCM for 40 years.

Total Regional Impacts of UCM

The economies of Healy and the Denali Borough are supported in-part by direct, indirect, and induced effects of UCM operations. Economic benefits result from spending by UCM employees, spending with businesses providing UCM with goods and service, and payments to local government. Because of the seasonal aspect of the region's economy, stability provided by UCM is especially important.

Approximately \$270,000 was spent by UCM with approximately 21 businesses in the Denali Borough in 2013. Every sector in the Borough was impacted, including hospitality, retail, professional services, construction, and others. Discussions with local businesses indicate revenue generated from UCM is important to sustaining their enterprises and make it possible to be in business year-round in an otherwise highly seasonal economy.

It is conservatively estimated that UCM operations in the Denali Borough have indirect and induced effects including an additional 30 jobs and \$1.6 million in wages. These jobs and income stem from critical linkages between UCM and businesses within the region, local spending by mine employees, and support of local non-profit organizations and schools. This estimate reflects a local employment multiplier of 1.25, meaning that for every four direct jobs at UCM in Healy, another job is created in the local economy. These additional positions are found throughout the economy, including hospitality, construction, services, education, and public sectors.

¹⁸ Estimate based on personal communication with Lester McCormick, Principal, Tri-Valley School, 1/13/15; and UCM, 2015.

¹⁹ This figure is based on average per-student funding of \$7,350.

²⁰ <http://www.bls.gov/news.release/tenure.nr0.htm>.

²¹ Does not include AES employees.

Other Regional Impacts

In addition to UCM's Healy operations in the Denali Borough, the company maintains a presence in the Kenai Peninsula, Fairbanks North Star, and Matanuska Susitna boroughs.

Interior Alaska (Fairbanks North Star Borough and Denali Borough)

In addition to the 117 employees in Healy, there were also 9 UCM employees in Fairbanks. Including direct, indirect, and induced impacts, the total impact of UCM's operations in Interior Alaska is 254 jobs and \$20.8 million in wages. Including the downstream impacts of UCM's coal supply, the total impact of UCM's operations in Interior Alaska was 476 jobs and \$38.6 million in wages in 2013.

UCM's spent \$17.4 million with the private sector, including 21 businesses in the Denali Borough and 145 vendors and 28 non-profit organizations in the Fairbanks North Star Borough. Located relatively close to the mine and with an established industrial support sector, Fairbanks businesses typically receive approximately half of the mine's annual spending. UCM paid the Fairbanks North Star Borough \$3,427 for 2013 property taxes. While UCM paid \$100,000 in severance taxes in the Denali Borough, the borough has no property tax.

Kenai Peninsula Borough

As mentioned earlier, AES operates the Seward Coal Loading Facility. AES's 14 employees located in Seward receive approximately \$950,000 in wages. Approximately \$1.2 million was spent with 29 businesses in Seward, Soldotna, and Kenai. Donations were made to five local non-profit organizations.

While the City of Seward and Kenai Peninsula Borough generated revenue through a small amount of taxes and fees paid by AES, the most significant tax revenue is likely generated from employee household spending. AES's 14 employees pay both property taxes to the Borough and a 7 percent sales tax (3 percent to the Borough and 4 percent to the City of Seward).

Matanuska Susitna Borough

UCM employs 2 people in its Palmer office. Employees pay a variety of taxes including a sales tax in Palmer, and property taxes.

UCM spent approximately \$340,000 with 27 businesses in the Mat-Su Borough and donated to 15 local non-profit organizations. Spending accrued to businesses and non-profit organizations in Wasilla, Palmer, Big Lake, Talkeetna, Sutton, and Chickaloon. In 2013, UCM paid the Borough \$31,000 in property taxes associated with its Mat-Su operations.

Summary of UCM Employee Survey Results

McDowell Group surveyed UCM employees to better understand the impact of employee household spending in Alaska communities (considered induced impacts). The following are summarized results of the survey.

Employee Spending

UCM employees were asked to describe the proportion of spending in various categories (food and beverage, clothing, electronics, etc.) by area. Nearly all employees surveyed reside in the Denali Borough.

- With nearly 75 percent of spending on food and beverages taking place in Fairbanks, employees are making the 220-mile round-trip between Healy and Fairbanks regularly.
- It is assumed the majority of out-of-state spending takes place online. The most significant amount of this type of spending occurs with travel expenditures, clothing, electronics, and education expenses.
- While the majority (54 percent) of spending on cars, trucks, and recreational vehicles takes place in Fairbanks, 20 percent takes place in Healy, and 16 percent occurred in Anchorage. Spending in Healy is assumed to be taking place at a local recreational vehicle dealer and on used vehicles.
- The 55 percent of employee spending on fuel from Fairbanks is assumed to include significant amounts of heating oil for residential homes.

Average Composition of UCM Employee Spending, by Area, 2014

n=54	Healy/ Denali Borough	Fairbanks	Mat-Su Borough	Anchorage	Other Alaska	Out- of- State
Food And Beverages	13%	73%	6%	5%	<1%	2
Clothing	1	64	3	17	<1	16
Household Furnishings/Appliances	1	83	1	8	3	3
Electronics	3	68	3	11	0	15
Healthcare	4	85	2	5	0	4
Outdoor and Sporting Equipment	4	68	6	15	<1	7
Travel	0	41	1	21	4	32
Cars, Trucks, and Recreation Vehicles	20	54	7	16	2	1
Fuel	34	55	6	4	2	0
Charitable Contributions	56	29	3	1	3	7
Education Expenses	28	43	1	9	3	16

Note: Due to rounding, some rows may not total to 100 percent.
Source: UCM Employee Survey, 2014.

Housing Costs

UCM employees were asked what type of payment they make for their primary residence. With 83 percent reporting they either have a mortgage payment or no payments, the homeownership rate among UCM employees is much higher than the current Alaska homeownership rate of 64 percent.²² It is assumed the majority of respondents reporting “No payments” owned a home.

Two main factors likely influencing elevated homeownership rates among UCM employees are the relatively high level of wages paid to the typical employee and duration (and stability) of employment which allows for long-term financial investment in a home.

“What type of payment do you make for your primary residence?”

n=54	Percent of Total
Mortgage	60%
No payments	23%
Rent	17%
Total	100%

Source: UCM Employee Survey, 2014.

In Summary

The impacts of Usibelli Coal Mine are statewide. Employment of 140 workers in Healy, Fairbanks, Palmer, and Seward, with wages of \$14.7 million, supports regional economies as these dollars circulate locally. Spending of \$40.7 million with 360 Alaska businesses, support of nearly 100 nonprofit organizations, and payments to state and local government generates additional employment and wages. These direct, indirect, and induced impacts account for 418 jobs and \$30.7 million in wages in Alaska. Additionally, downstream effects associated with Interior Alaska’s six coal-fired plants adds 222 jobs and \$17.8 million in wages.

²² <http://quickfacts.census.gov/qfd/states/02000.html>.