



ECONOMIC AND COMMUNITY IMPACTS OF THE

RHYOLITE RIDGE LITHIUM-BORON PROJECT



April 10, 2020

Ms. Rebecca A. Sawyer
Director, Environmental Affairs and Community Relations
ioneer USA Corporation
290 Gentry Way
Reno, NV 89502

RE: Economic and Community Impacts of the Rhyolite Ridge Lithium-Boron Project

Dear Ms. Sawyer:

In accordance with your request, Applied Analysis ("AA") is pleased to submit this reported titled *Economic and Community Impacts of the Rhyolite Ridge Lithium-Boron Project*. AA was retained by ioneer USA Corporation ("ioneer" or the "Company") to review and analyze the economic, fiscal and social impacts associated with its proposed Rhyolite Ridge development project in Esmeralda County, Nevada ("Rhyolite Ridge" or "the project"). This summary report outlines the salient findings and conclusions of our review and analysis.

This report was designed by AA in response to your request. However, we make no representations as to the adequacy of these procedures for all your purposes. Generally speaking, our findings and estimates are as of our last date of fieldwork (April 10, 2020) and utilize the most recent data available. The information provided in this summary, and the conclusions reached herein, are based on the findings of our research and our knowledge of the market as of the date of this report. Our report contains economic, financial and other predominant market data. This information was collected from publicly available reports, our internal databases and various third parties, including the Company. The data were assembled by AA. While we have no reason to doubt its accuracy, the information collected was not subjected to any auditing or review procedures by AA; therefore, we can offer no representations or assurances as to its completeness.

This report is an executive summary. It is intended to provide an overview of the analyses conducted and a summary of our salient findings. If you reproduce this report, it must be done so in its entirety. We welcome the opportunity to discuss this report with you at any time. Should you have any questions, please contact Jeremy Aguero or Brian Gordon at (702) 967-3333.

Sincerely,


Applied Analysis

Table of Contents

Section	Page
Summary of Findings	3
Project and Company Background	15
Methodology	18
Economic Impacts of Construction	22
Economic Impacts of Recurring Operations	29
Fiscal Impacts of Construction	37
Fiscal Impacts of Recurring Operations	39
Social Impacts of the Project	53
Intended Use, Limitations and Considerations	57
About the Author	58

SUMMARY OF FINDINGS



Summary of Findings

Rhyolite Ridge Will Be Important for Nevada and Esmeralda County



- Rhyolite Ridge is a large, shallow lithium-boron deposit located close to existing infrastructure in the southern portion of the state of Nevada in Esmeralda County.
- Completed in October 2018, the Rhyolite Ridge Pre-Feasibility Study confirmed the project's strong potential to become a cost-competitive, major producer of lithium carbonate and boric acid.
- Given the pre-development stage of Rhyolite Ridge, the size, scale and life of the project is evolving; this analysis estimates the impacts of the project under a range of potential scenarios.
- The initial capital investment is expected to range from \$600 million to \$900 million over a two-year development cycle (2021 to 2022), and the operations range as follows (starting in 2023):
 - Low Case: Approximately \$250 million in annual revenue (subject to commodity pricing) with an estimated 250 employees;
 - Median Case: Reflects the midpoint of the low and high cases; and
 - High Case: An estimated \$600 million in annual revenue with upwards of 400 employees.
- In addition to the range of scenarios presented, the life of the project is expected to range from a minimum of 26 years to a maximum of 60 years; the timeline is ultimately driven by the resources of Rhyolite Ridge. As such, there are low case operational impacts in this analysis that assume the minimum operating performance during the shortest time horizon (26 years) and longest timeline (60 years); and there are also high case operational impacts that assume maximum performance across both the minimum project length (26 years) and maximum lifespan (60 years).

Note: All economic and fiscal impact amounts are stated in current year (2020) dollars.

Summary of Findings

Rhyolite Ridge Will Be Important for Nevada and Esmeralda County



Local Capital Impacts Exceed \$68 Million

The Rhyolite Ridge project is expected to span a two-year development cycle. This process is estimated to support a minimum of \$68 million of economic activity in Nevada (low case development scenario), while creating 508 person-years of employment and \$30 million in wages and salaries. A more robust development scenario supports \$217 million of output, \$103 million in wages and 1,520 person-years of employment. Simply put, for every dollar spent in the local economy on the development of Rhyolite Ridge, a total of \$1.99 in economic activity benefits the community as a whole.



Annual Operations Impact to Reach \$820 Million

Rhyolite Ridge's operational impacts are estimated to generate up to \$340 million of annual economic activity (low case), support \$58 million of personal incomes and employ 823 workers per year. A more aggressive operational profile supports \$820 million in output, \$144 million in wages and 1,900 jobs annually. While impacts are dependent on commodity prices and the overall project life, every dollar of direct economic activity sourced to Ioneer is expected to support a total of \$1.57 in activity throughout the state of Nevada.



Public Revenues to Benefit State and Local Governments

The operational impacts of the project are estimated to generate millions of dollars in public revenues for the state of Nevada and local governments. In the first year of operations, the mine is estimated to generate between \$13 million and \$31 million of public revenues, depending on the project scale (low to high). The majority of the revenue is sourced to net proceeds of minerals taxes, and sales and use taxes is another key source of revenue. The project will incur other taxes and fees typically borne by mining companies and in Nevada.



The Impacts Include Social and Charitable Support

The investments by Ioneer go well beyond the economic and fiscal impacts reported in this analysis. The company plans to be an active participant in the community with targeted contributions to important local causes. The project activity is expected to result in charitable investments ranging from \$100,000 to \$250,000 annually. The beneficiaries are wide ranging, including scholarships at Tonopah High School and sponsoring events like the Nevada State Mining Championships during Jim Butler Days.

Note: Employment during the construction phase is stated in person-years of employment (i.e., one person employed full-time for one year).

Summary of Findings

One-Time (Non-Recurring) Construction Impacts in Nevada



Construction Impacts

Low Case

Median Case

High Case

Initial Capital Investment

\$600 Million

\$750 Million

\$900 Million

Nevada-Specific Impacts:



Economic Output

\$67.6 Million

\$131.8 Million

\$216.8 Million



Wages and Salaries

\$30.3 Million

\$60.4 Million

\$103.2 Million



Employment (Person-Years)

508

946

1,520

Note: Employment impacts during the construction phase are stated in person-years of employment (i.e., one person employed full time for one year).

Summary of Findings

Annual (Recurring) Operational Impacts in Nevada: Per Year



Operations Impacts

Low Case

Median Case

High Case

Initial Capital Investment

\$600 Million

\$750 Million

\$900 Million

Nevada-Specific Impacts (Per Year):



Economic Output

\$340.3 Million

\$579.0 Million

\$819.7 Million



Wages and Salaries

\$57.8 Million

\$99.2 Million

\$143.6 Million



Employment (Annual Average)

823

1,346

1,893

Summary of Findings

Annual (Recurring) Operational Impacts in Nevada: 26-Year Project



Operations Impacts

Low Case

Median Case

High Case

Initial Capital Investment

\$600 Million

\$750 Million

\$900 Million

Nevada-Specific Impacts (Over 26 Years):



Economic Output

\$8.8 Billion

\$15.1 Billion

\$21.3 Billion



Wages and Salaries

\$1.5 Billion

\$2.6 Billion

\$3.7 Billion



Employment (Annual Average)

823

1,346

1,893

Summary of Findings

Annual (Recurring) Operational Impacts in Nevada: 60-Year Project



Operations Impacts

Low Case

Median Case

High Case

Initial Capital Investment

\$600 Million

\$750 Million

\$900 Million

Nevada-Specific Impacts (Over 60 Years):



Economic Output

\$20.4 Billion

\$34.7 Billion

\$49.2 Billion



Wages and Salaries

\$3.5 Billion

\$5.9 Billion

\$8.6 Billion



Employment (Annual Average)

823

1,346

1,893

Summary of Findings

Fiscal (Public Revenue) Impacts: Non-Recurring Construction Phase

\$15.0 M

Sales and Use Tax Paid During Construction (Low Case)

\$20.0 M

Sales and Use Tax Paid During Construction (Median Case)

\$25.0 M

Sales and Use Tax Paid During Construction (High Case)









*Sales and Use Taxes
inure to benefit of state and local agencies*

Sales and Use Tax Distribution (Median)	Rate	Amount Paid
State of Nevada	2.00%	\$5.8 M
Local School Support Tax	2.60%	\$7.6 M
Basic City-County Relief Tax	0.50%	\$1.5 M
Supplemental City-County Relief Tax	1.75%	\$5.1 M
Total	6.85%	\$20.0 M

Note: The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

Summary of Findings









Fiscal (Public Revenue) Impacts: First Year of Operations

	 Net Proceeds of Minerals Taxes	 Sales and Use Taxes	 Property Taxes	 Modified Business Taxes	 Commerce Taxes	 Bureau of Land Mgmt.	 Nevada Claim Fees	 Total Taxes Paid
Low Case	\$6.5 M	\$2.1 M	\$3.5 M	\$0.6 M	\$0.1 M	\$0.2 M	\$0.01 M	\$13.0 M
Median Case	\$12.8 M	\$3.8 M	\$4.4 M	\$1.0 M	\$0.2 M	\$0.2 M	\$0.01 M	\$22.3 M
High Case	\$19.0 M	\$5.5 M	\$5.2 M	\$1.3 M	\$0.3 M	\$0.2 M	\$0.01 M	\$31.5 M

Note: Public revenue impacts reflect the recurring impacts of operations over the life of the project. The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

Summary of Findings









Fiscal (Public Revenue) Impacts: 26-Year Project Life

	 Net Proceeds of Minerals Taxes	 Sales and Use Taxes	 Property Taxes	 Modified Business Taxes	 Commerce Taxes	 Bureau of Land Mgmt.	 Nevada Claim Fees	 Total Taxes Paid
Low Case	\$169.0 M	\$53.4 M	\$90.7 M	\$15.6 M	\$3.3 M	\$5.2 M	\$0.3 M	\$335.8 M
Median Case	\$331.5 M	\$98.0 M	\$113.3 M	\$24.7 M	\$5.6 M	\$5.2 M	\$0.3 M	\$575.8 M
High Case	\$494.0 M	\$142.5 M	\$136.0 M	\$33.8 M	\$7.9 M	\$5.2 M	\$0.3 M	\$815.7 M

Note: Public revenue impacts reflect the recurring impacts of operations over the life of the project. The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

Summary of Findings

Fiscal (Public Revenue) Impacts: 60-Year Project Life

	 Net Proceeds of Minerals Taxes	 Sales and Use Taxes	 Property Taxes	 Modified Business Taxes	 Commerce Taxes	 Bureau of Land Mgmt.	 Nevada Claim Fees	 Total Taxes Paid
Low Case	\$390.0 M	\$123.3 M	\$209.3 M	\$32.3 M	\$7.5 M	\$12.0 M	\$0.6 M	\$775.0 M
Median Case	\$765.0 M	\$226.1 M	\$261.6 M	\$50.7 M	\$12.9 M	\$12.0 M	\$0.6 M	\$1,328.8 M
High Case	\$1,140.0 M	\$328.8 M	\$313.9 M	\$69.0 M	\$18.2 M	\$12.0 M	\$0.6 M	\$1,882.5 M

Note: Public revenue impacts reflect the recurring impacts of operations over the life of the project. The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

Summary of Findings

All Beneficiaries of Rhyolite Ridge Taxes and Fees (Operations)

	Share	Low Case			Median Case			High Case		
		1-Year	26-Year	60-Year	1-Year	26-Year	60-Year	1-Year	26-Year	60-Year
Esmeralda County General Fund	39.9%	\$5.2 M	\$134.0 M	\$309.3 M	\$8.4 M	\$218.0 M	\$503.1 M	\$11.6 M	\$302.0 M	\$696.9 M
State of Nevada General Fund	29.7%	\$3.9 M	\$99.8 M	\$230.3 M	\$7.3 M	\$187.4 M	\$432.6 M	\$10.7 M	\$275.0 M	\$634.8 M
Esmeralda County School District	14.3%	\$1.8 M	\$47.9 M	\$110.5 M	\$3.0 M	\$77.9 M	\$179.7 M	\$4.1 M	\$107.9 M	\$249.0 M
Local School Support Tax	6.0%	\$0.8 M	\$20.3 M	\$46.8 M	\$1.4 M	\$37.2 M	\$85.8 M	\$2.1 M	\$54.1 M	\$124.8 M
Supplemental City-County Relief Tax	4.1%	\$0.5 M	\$13.7 M	\$31.5 M	\$1.0 M	\$25.0 M	\$57.8 M	\$1.4 M	\$36.4 M	\$84.0 M
State of Nevada – Debt and Capital	3.2%	\$0.4 M	\$10.9 M	\$25.0 M	\$0.7 M	\$17.7 M	\$40.7 M	\$0.9 M	\$24.5 M	\$56.4 M
Basic City-County Relief Tax	1.2%	\$0.2 M	\$3.9 M	\$9.0 M	\$0.3 M	\$7.2 M	\$16.5 M	\$0.4 M	\$10.4 M	\$24.0 M
U.S. Bureau of Land Mgmt.	1.5%	\$0.2 M	\$5.2 M	\$12.0 M	\$0.2 M	\$5.2 M	\$12.0 M	\$0.2 M	\$5.2 M	\$12.0 M
Esmeralda County Recorder	0.08%	<u>\$0.0 M</u>	<u>\$0.3 M</u>	<u>\$0.6 M</u>	<u>\$0.0 M</u>	<u>\$0.3 M</u>	<u>\$0.6 M</u>	<u>\$0.0 M</u>	<u>\$0.3 M</u>	<u>\$0.6 M</u>
Total	100.0%	\$13.0 M	\$335.8 M	\$775.0 M	\$22.3 M	\$575.8 M	\$1,328.8 M	\$31.5 M	\$815.7 M	\$1,882.5 M

Notes: Taxes included are Net Proceeds of Minerals, Sales and Use Tax, Property Tax, Modified Business Tax, Commerce Tax, BLM Claim Fees and Nevada Mining Claim/Recording Fees paid to Esmeralda County. Federal Taxes are excluded. The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

PROJECT AND COMPANY BACKGROUND



About ioneer USA Corporation

- ioneer was formed in 2007 as Global Geoscience (Australian entity)/Paradigm Minerals (Nevada entity)
- The company changed its name to ioneer in 2018; the name ioneer is a combination of “ion” and “pioneer”, reflecting the company’s aim to be pioneers in the producing the materials for a sustainable future
- ioneer spent over fifteen years exploring in and around Nevada in partnership with other mining companies, leading to the discovery and acquisition of the Rhyolite Ridge Lithium-Boron Project in 2016
- ioneer’s focus is developing Rhyolite Ridge, which will become the world’s lowest-cost source of lithium due to the minimal amount of clay in its sedimentary layers
- Nevada’s relatively stable regulatory environment was key decision factor in ioneer’s site selection



Source: ioneer USA Corporation

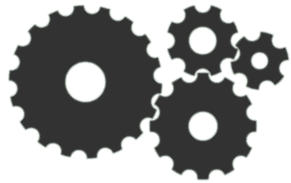


METHODOLOGY

MEASURING ECONOMIC IMPACTS

Economic Impact Analysis

Types of Impacts



Economic Output
Impact on Total Spending



Wages and Salaries
Impact on Personal Incomes



Employment
Impact on the Number of Jobs

Direct Impacts

Impacts generated by the Rhyolite Ridge project

Indirect Impacts

Secondary impacts generated by suppliers of the Rhyolite Ridge project

Induced Impacts

Sourced to businesses that are supported by the spending of direct employees

Total Impacts

The sum of direct, indirect and induced impacts

Economic Impact Analysis

Methodology

IMPLAN Model

- 1 of 3 nationally recognized impact analysis software tools
- Developed by Minnesota IMPLAN Group, Inc. and used by more than 1,000 public and private institutions
- IMPLAN is an input-output model that utilizes complex economic equations to explain how the “outputs” of one industry become the “inputs” of others, and vice versa
- This relationship is sometimes referred to as the “multiplier effect”, illustrating how changes in one sector of the economy can affect other sectors

Economic Impact Analysis

Methodology

Limitations and Assumptions

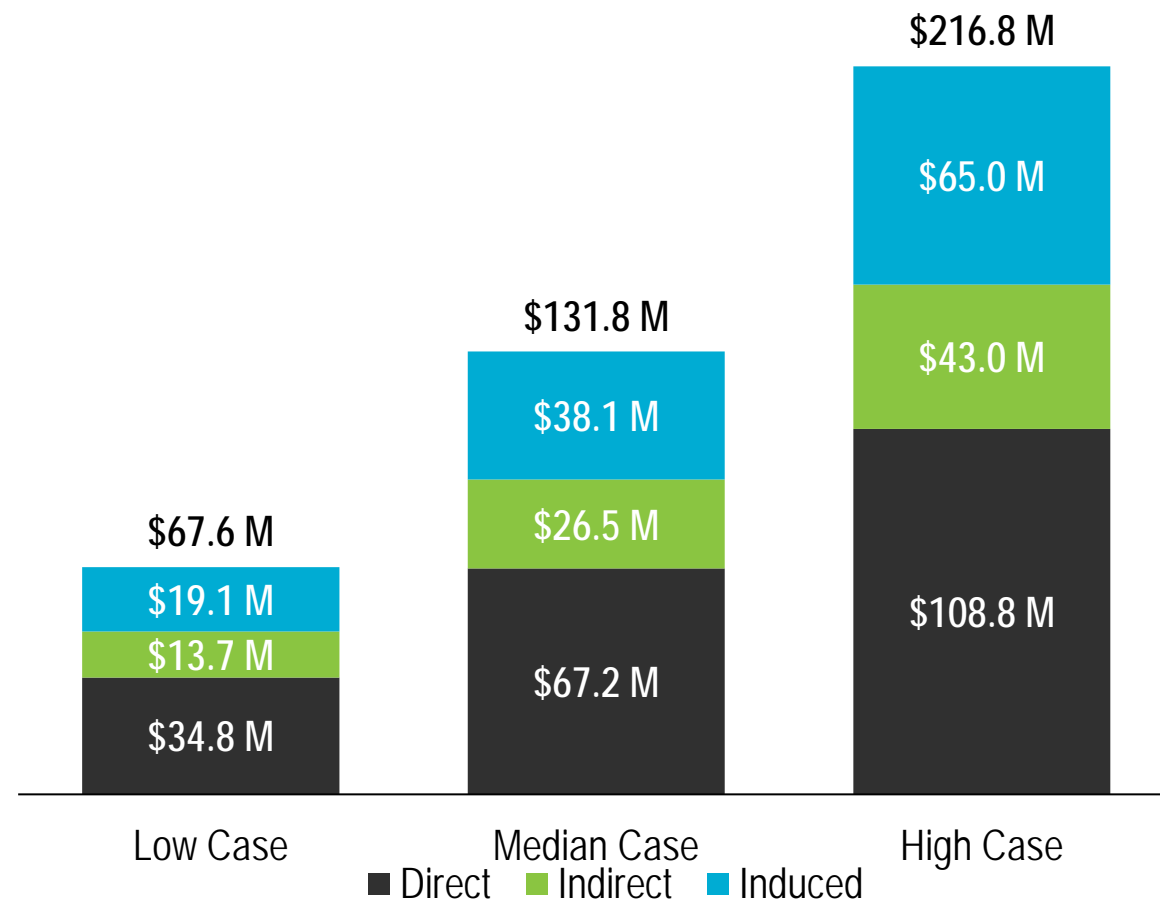
- Input-output models, as is the case with all econometric models, are not without their limitations; the statistical model used in this analysis, IMPLAN, assumes capital and labor are used in fixed proportions
- This means that for every job created or lost, a fixed change in investment, income and employment results
- In reality, developers, consumers and governments respond to stimuli in complex ways, including changing the mix of capital or labor as well as the types and frequencies of investment
- Importantly, each impacting force has its own unique characteristics, affecting how consumers and businesses respond to the given change

ECONOMIC IMPACTS OF CONSTRUCTION

Total Economic Output

Construction Phase

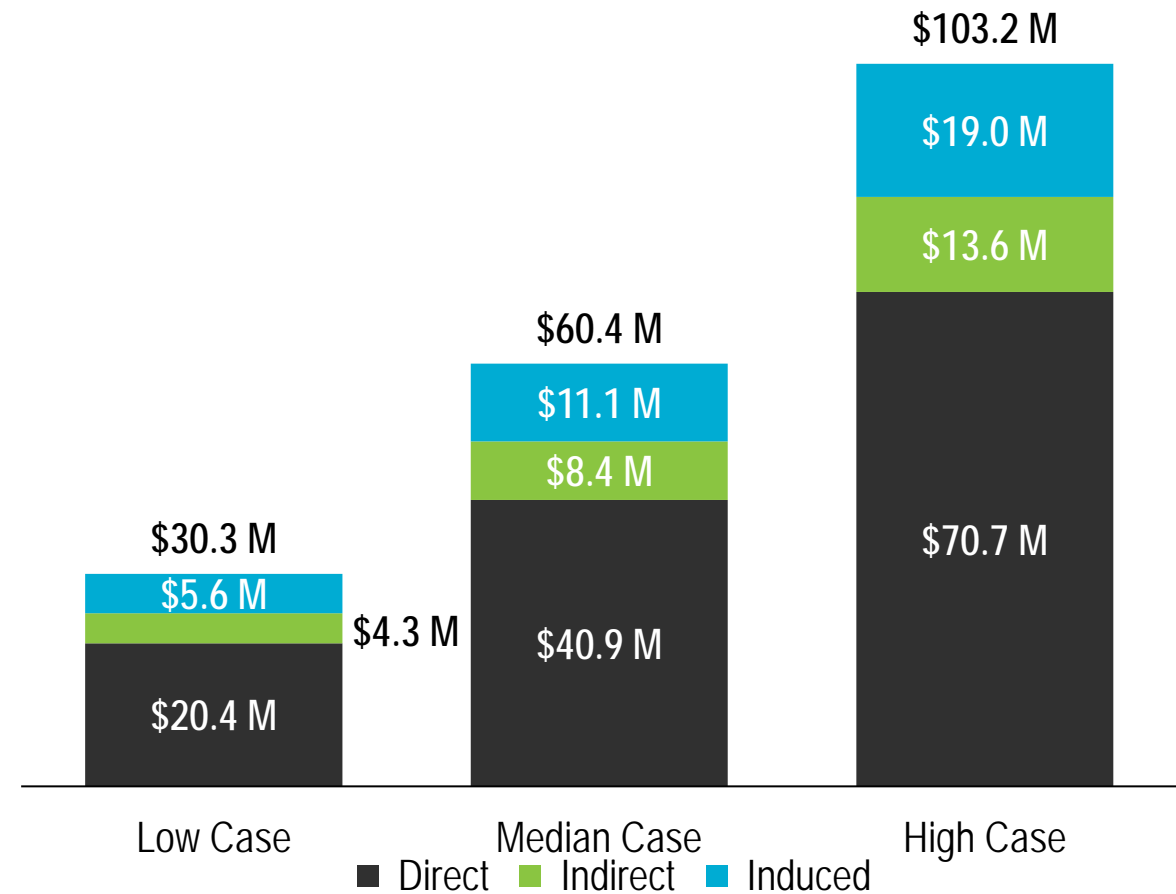
- Total output is the combined value of all spending on a direct, indirect and induced basis as result of the project's construction
- Economic impacts reflect activity taking place throughout Nevada
- In total, construction of Rhyolite Ridge is expected to have a one-time, statewide economic impact ranging from \$67.6 to \$216.8 million, including:
 - A minimum of \$34.8 million and a maximum direct output of \$108.8 million
 - A range of \$13.7 million to \$43.0 million of indirect output supported by supplier purchases
 - A minimum of \$19.1 million and a maximum of \$65.0 million of induced output created by employee spending



Labor Income Impacts

Construction Phase

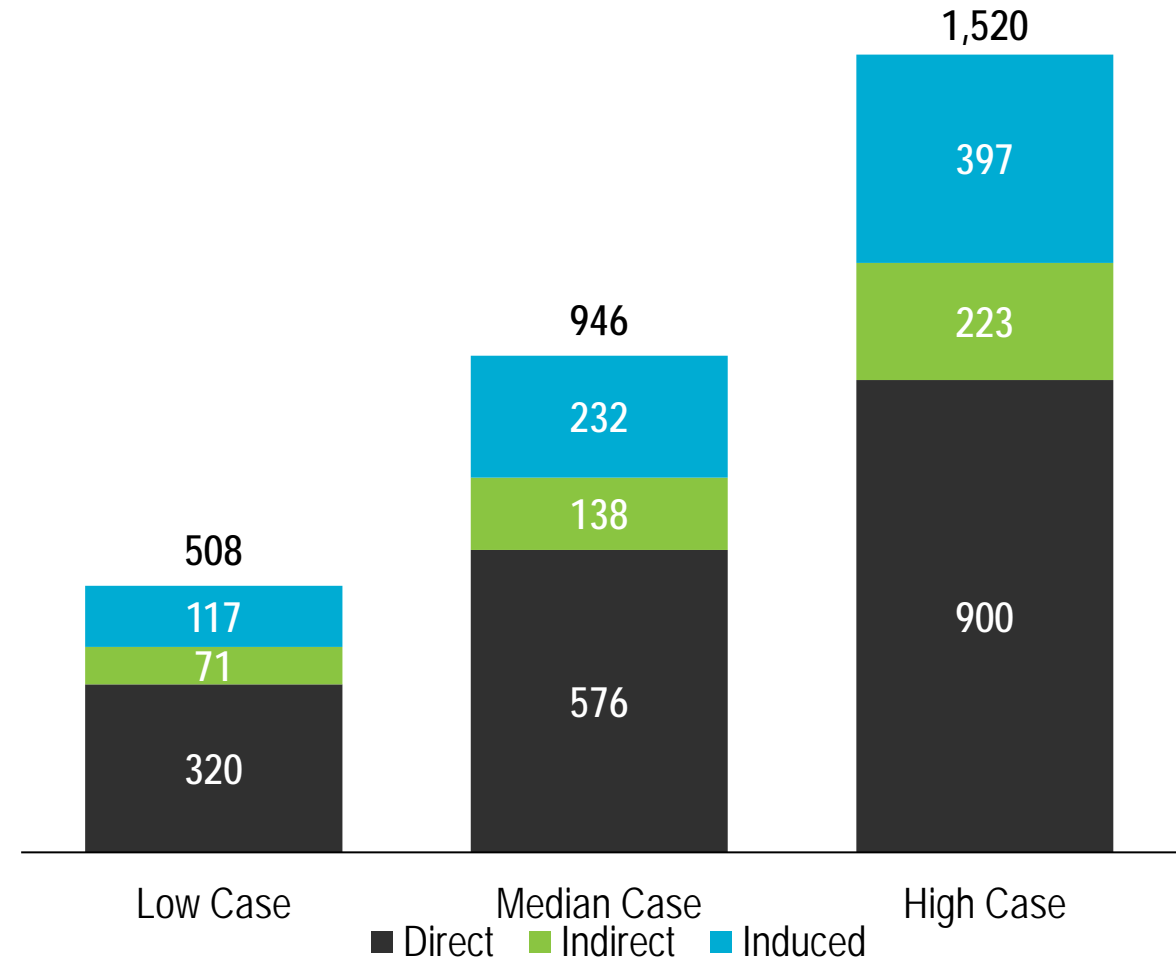
- Labor Income is defined as employee compensation (wages and benefits) and proprietor's income
- In total, construction of Rhyolite Ridge is expected to generate between \$30.3 and \$103.2 million of labor income in Nevada, including:
 - From \$20.4 million to \$70.7 million of direct construction income
 - \$4.3 million to \$13.6 million of indirect income supported by supplier purchases
 - Starting from \$5.6 million to \$19.0 million of induced income created by employee spending



Employment Impacts

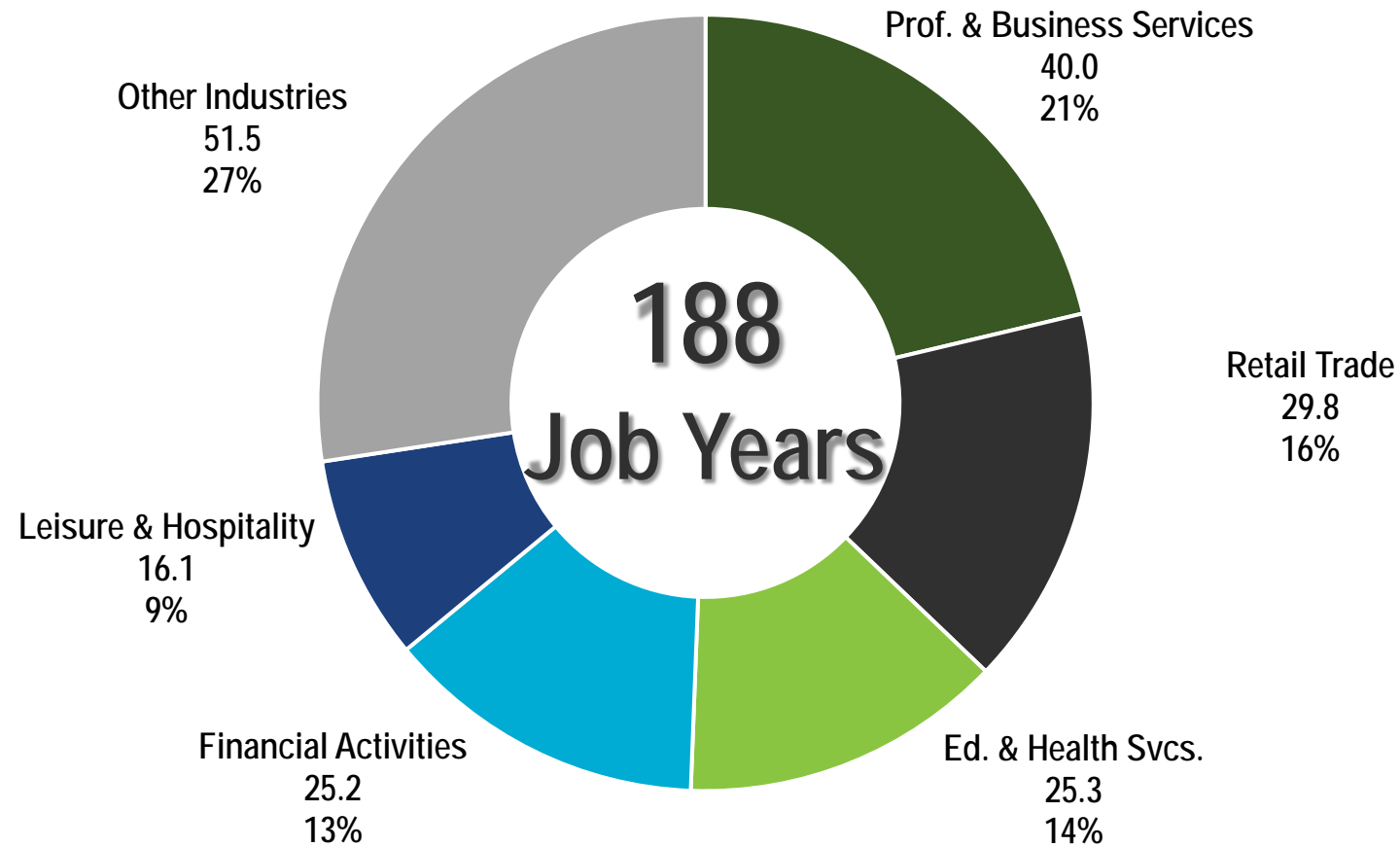
Construction Phase

- In total, development of Rhyolite Ridge is estimated to create between 508 and 1,520 person-years of employment throughout Nevada, including:
 - From 320 to 900 direct construction person-years of employment
 - Up to 223 indirect person-years supported by purchases from suppliers
 - A minimum of 117, and up to 397, induced person-years created by employee spending
- Employment impacts during the construction phase are stated in person-years of employment (i.e., one person employed full time for one year)



Indirect and Induced Job Details

Construction Phase: Low Case



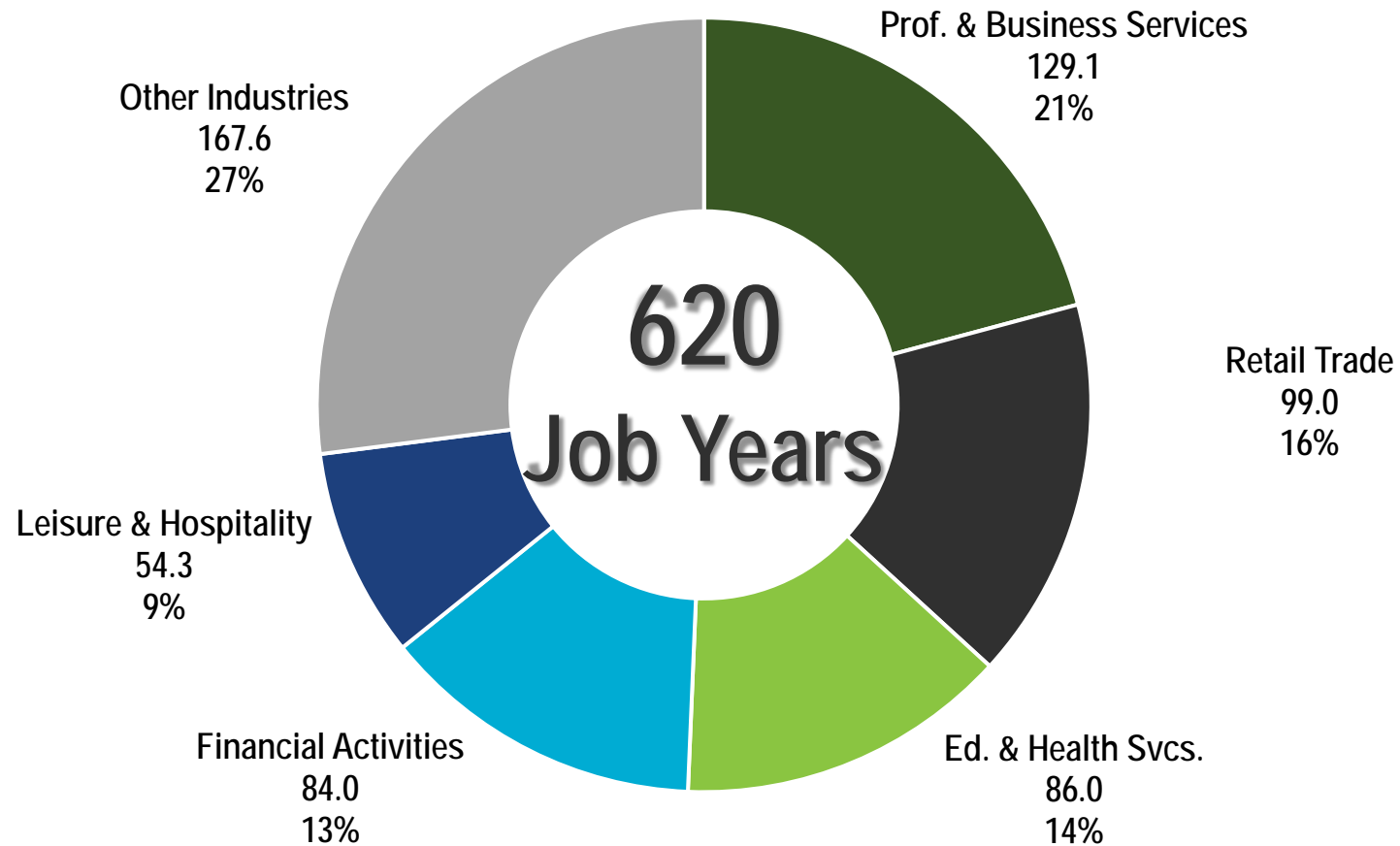
Indirect and Induced Job Details

Construction Phase: Median Case



Indirect and Induced Job Details

Construction Phase: High Case



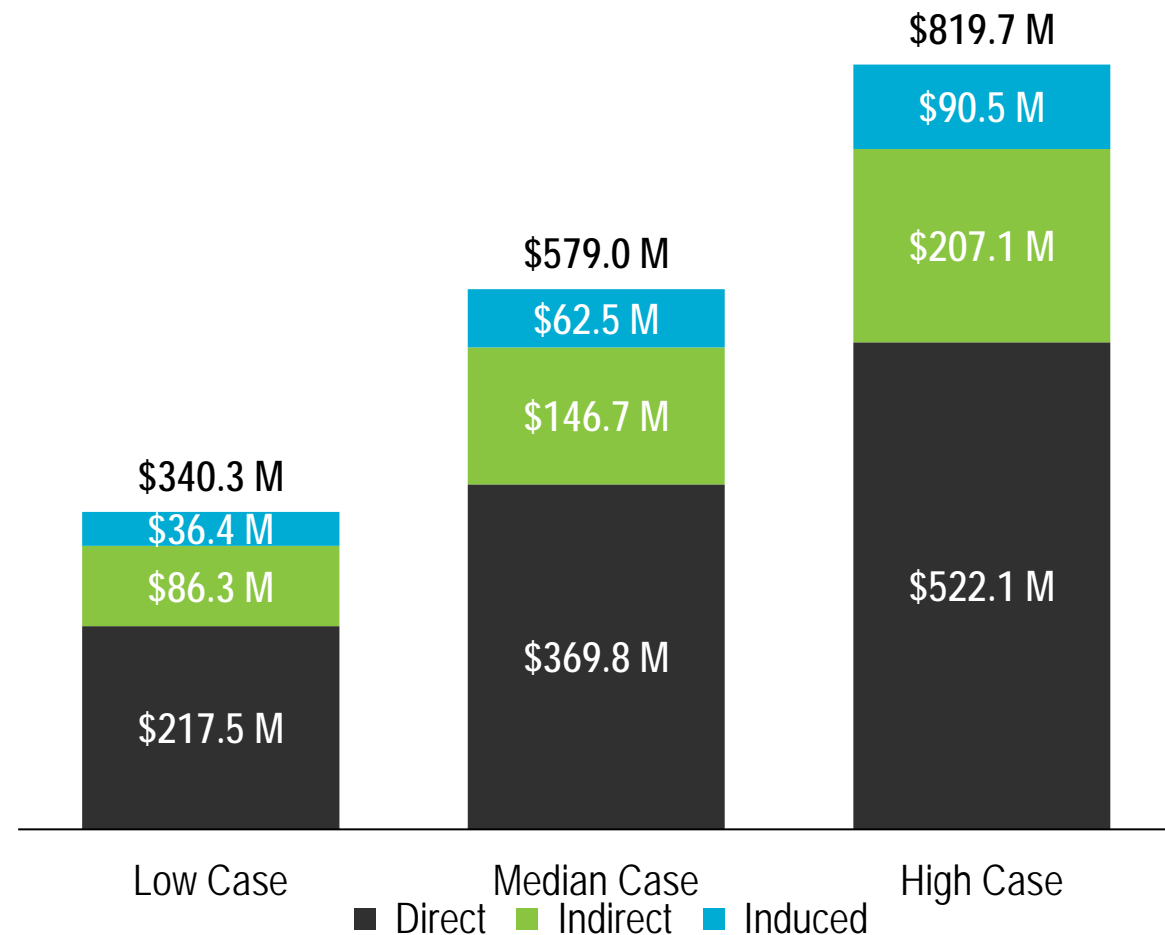
ECONOMIC IMPACTS OF RECURRING OPERATIONS



Total Economic Output

Operations Phase: Annual Impact

- Total output is the combined value of all spending on a direct, indirect and induced basis as result of the project's annual, recurring operations
- Economic impacts reflect activity taking place within Nevada
- In total, Rhyolite Ridge's operations are expected to have an annual, recurring economic impact ranging from \$346.0 million to \$819.7 million, including
 - \$217.5 million to \$522.1 million of direct impact in Nevada
 - From \$86.3 million up to \$207.1 million of indirect impact supported by supplier purchases
 - \$36.4 million to \$90.5 million of induced impact created by employee spending

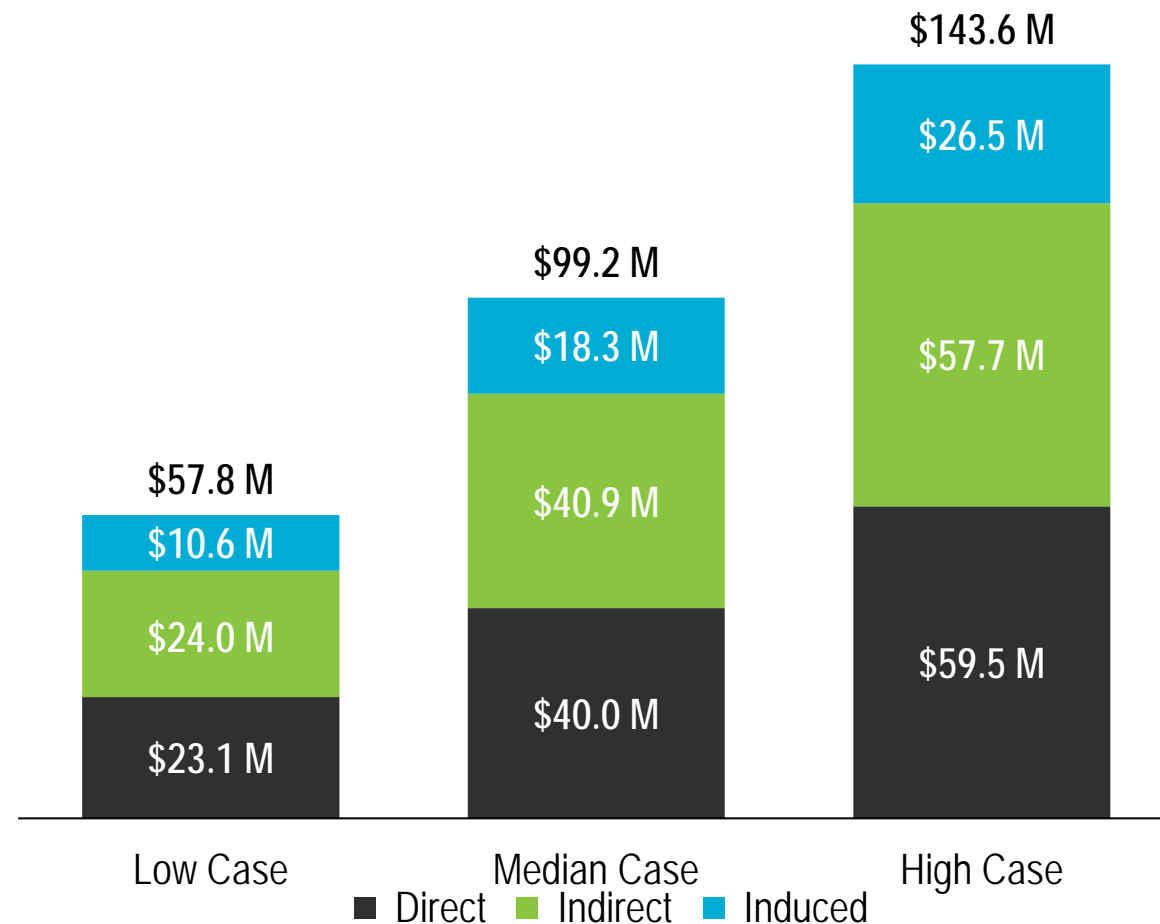


Labor Income Impacts

Operations Phase: Annual Impact

- In total, recurring operations of Rhyolite Ridge are expected to generate up to \$143.6 million of annual labor income starting in 2023 (with a minimum of \$57.8 million of annual labor income), including:
 - From \$23.1 million to \$59.5 million of direct income
 - Up to \$57.7 million of annual indirect income supported by supplier purchases
 - A maximum of \$26.5 million of induced income created by employee spending
- Average wage contributions per employee as a result of ongoing operations include:

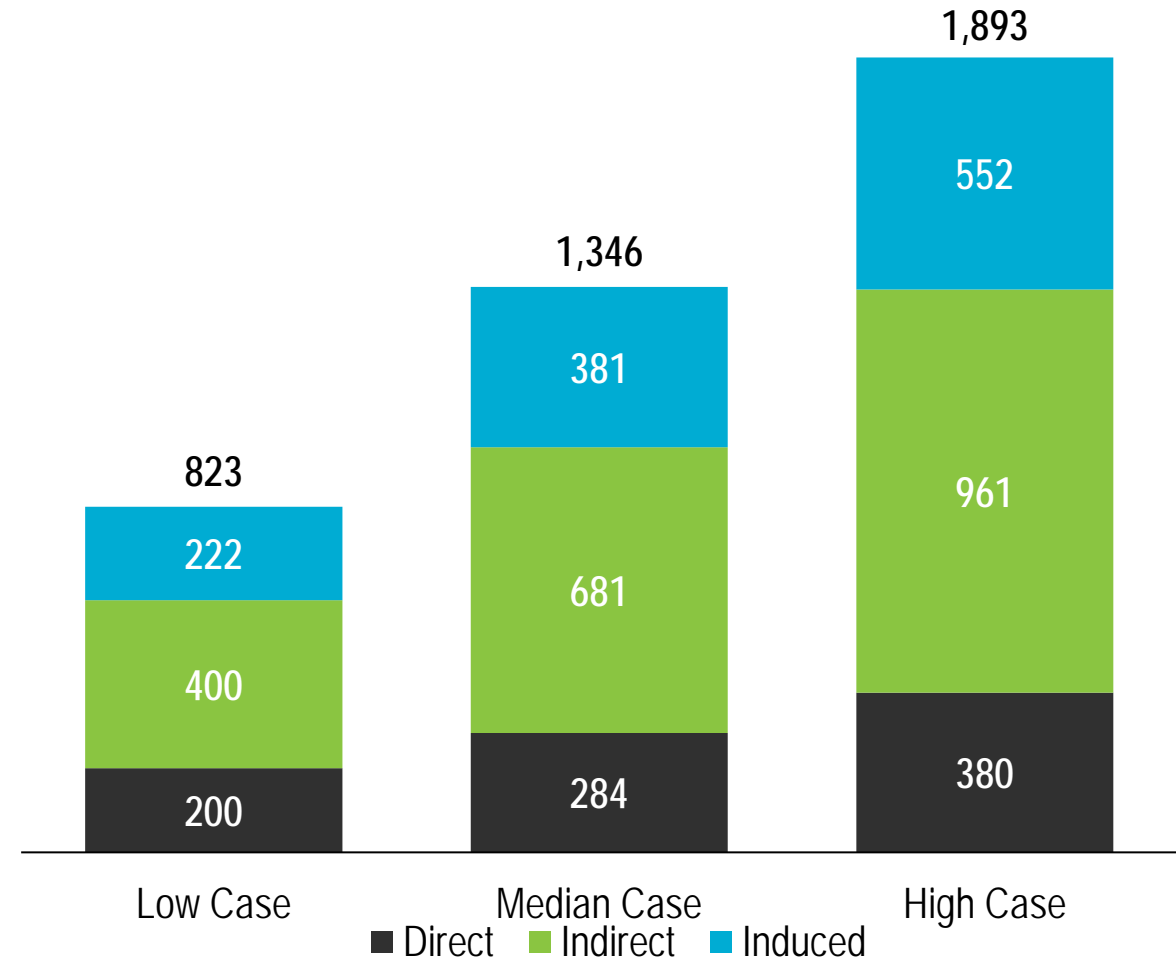
<u>Employees</u>	<u>Low Case</u>	<u>Median Case</u>	<u>High Case</u>
Direct	\$115,544	\$140,727	\$156,466
Indirect	\$60,058	\$60,058	\$60,058
Induced	\$47,899	\$47,899	\$47,899



Employment Impacts

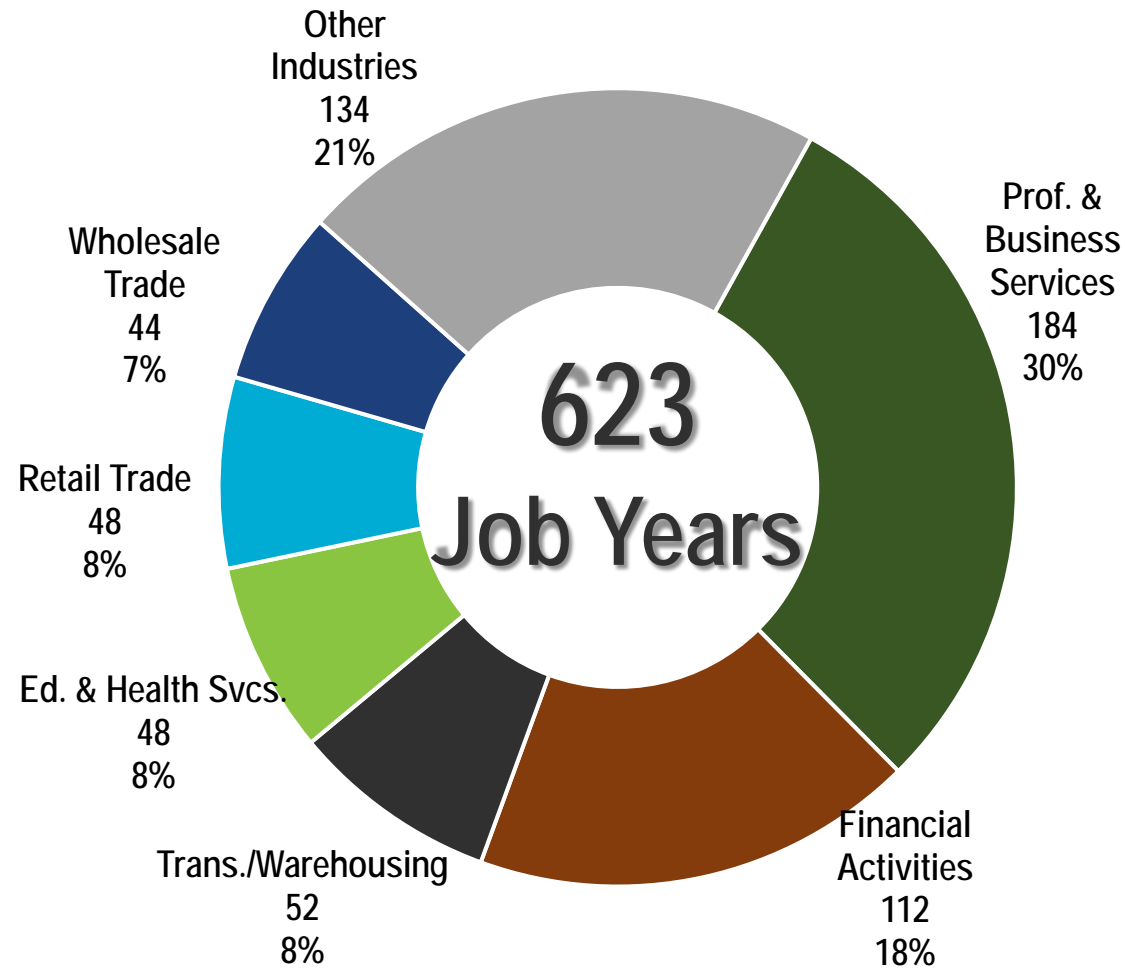
Operations Phase: Annual Impact

- In total, recurring operations of Rhyolite Ridge are expected to support up to 1,893 jobs annually, including:
 - 200 to 380 direct person-years of employment at Rhyolite Ridge
 - 400 to 961 indirect person-years supported by purchases from suppliers
 - 222 to 552 induced person-years created by employee direct spending



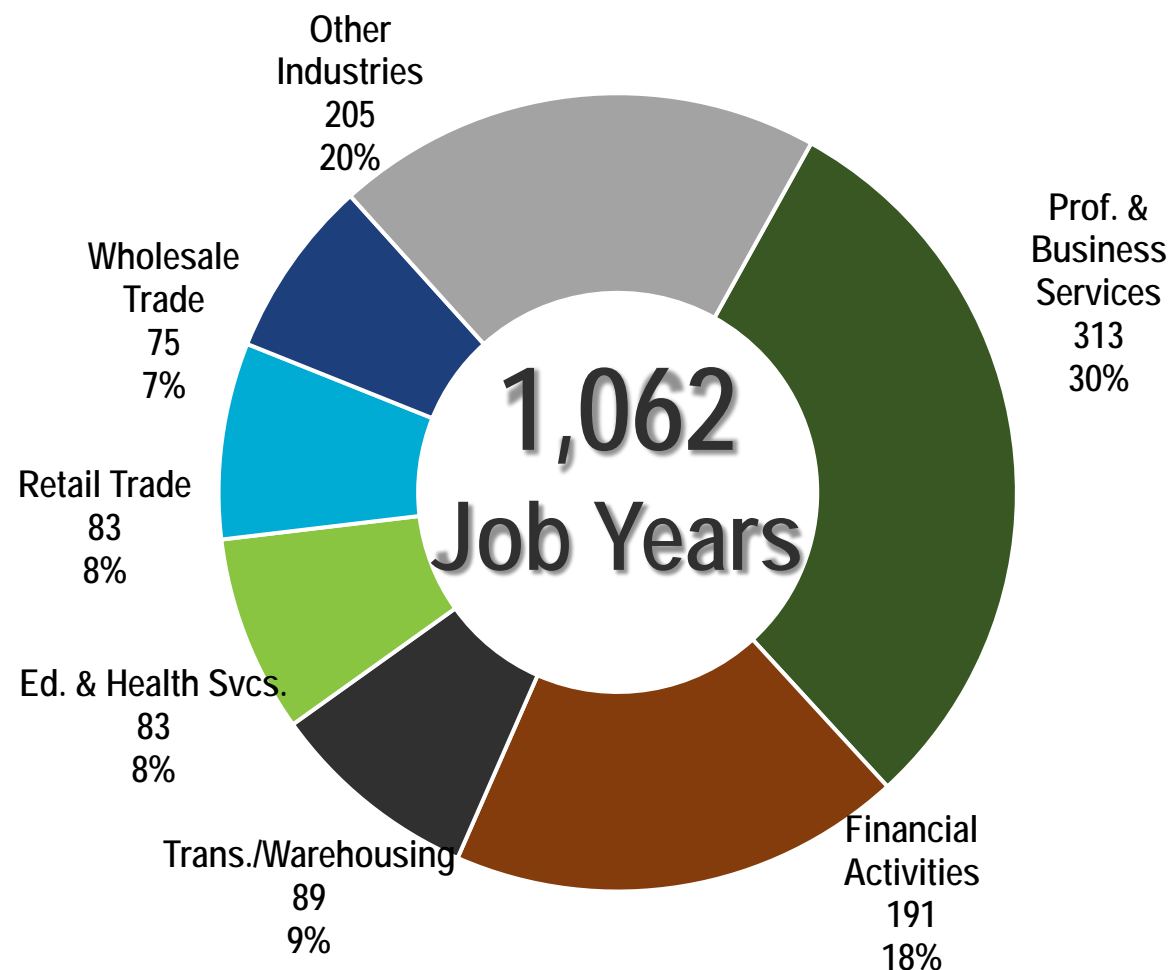
Indirect and Induced Jobs

Operations Phase: Low Case



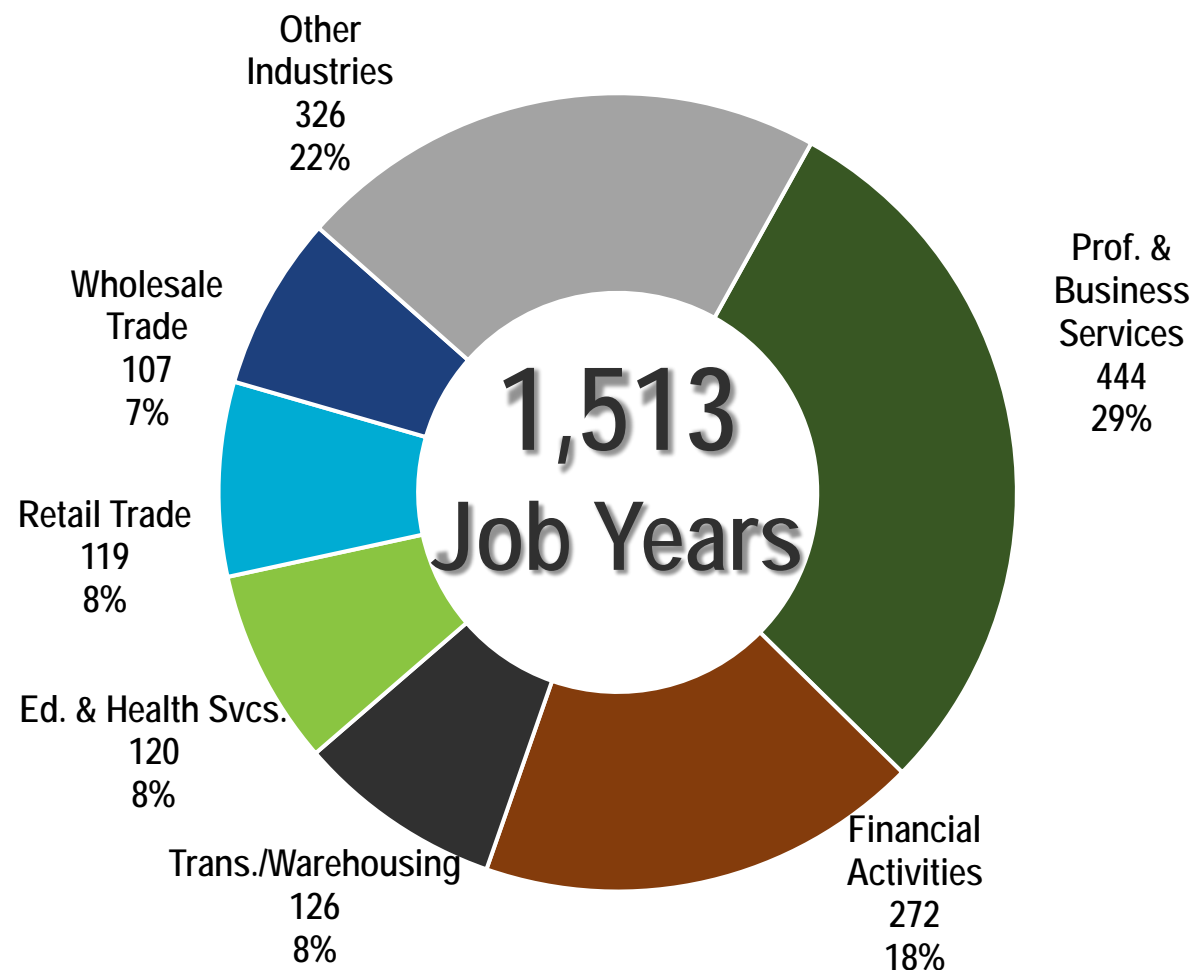
Indirect and Induced Jobs

Operations Phase: Median Case



Indirect and Induced Jobs

Operations Phase: High Case



Operational Impact Summary

		Low Case			Median Case			High Case		
		1-Year	26-Year	60-Year	1-Year	26-Year	60-Year	1-Year	26-Year	60-Year
Employment	Direct ¹	200	5,200	12,000	284	7,394	17,063	380	9,880	22,800
	Indirect ¹	400	10,409	24,021	681	17,695	40,835	961	24,981	57,649
	Induced ¹	<u>222</u>	<u>5,781</u>	<u>13,341</u>	<u>381</u>	<u>9,917</u>	<u>22,886</u>	<u>552</u>	<u>14,364</u>	<u>33,147</u>
	Total ¹	823	21,390	49,361	1,346	35,006	80,784	1,893	49,225	113,596
Labor Income	Direct	\$23.1 M	\$600.8 M	\$1,386.5 M	\$40.0 M	\$1,040.5 M	\$2,401.1 M	\$59.5 M	\$1,545.9 M	\$3,567.4 M
	Indirect	\$24.0 M	\$625.1 M	\$1,442.6 M	\$40.9 M	\$1,062.7 M	\$2,452.5 M	\$57.7 M	\$1,500.3 M	\$3,462.3 M
	Induced	<u>\$10.6 M</u>	<u>\$276.9 M</u>	<u>\$639.0 M</u>	<u>\$18.3 M</u>	<u>\$475.0 M</u>	<u>\$1,096.2 M</u>	<u>\$26.5 M</u>	<u>\$688.0 M</u>	<u>\$1,587.7 M</u>
	Total	\$57.8 M	\$1,502.9 M	\$3,468.1 M	\$99.2 M	\$2,578.3 M	\$5,949.8 M	\$143.6 M	\$3,734.2 M	\$8,617.4 M
Output	Direct	\$217.5 M	\$5,655.9 M	\$13,052.1 M	\$369.8 M	\$9,615.1 M	\$22,188.6 M	\$522.1 M	\$13,574.2 M	\$31,325.1 M
	Indirect	\$86.3 M	\$2,243.6 M	\$5,177.6 M	\$146.7 M	\$3,814.1 M	\$8,801.9 M	\$207.1 M	\$5,384.7 M	\$12,426.2 M
	Induced	<u>\$36.4 M</u>	<u>\$947.0 M</u>	<u>\$2,185.4 M</u>	<u>\$62.5 M</u>	<u>\$1,624.6 M</u>	<u>\$3,749.2 M</u>	<u>\$90.5 M</u>	<u>\$2,353.0 M</u>	<u>\$5,430.1 M</u>
	Total	\$340.3 M	\$8,846.5 M	\$20,415.1 M	\$579.0 M	\$15,053.9 M	\$34,739.7 M	\$819.7 M	\$21,311.9 M	\$49,181.4 M

¹ Employment on this table is stated in person-years of employment to depict the cumulative impact over the life of the project.

FISCAL IMPACTS OF CONSTRUCTION

Fiscal Impacts of Construction (Non-Recurring)

Sales and Use Tax: Two-Year Development Cycle

\$15.0 M

Sales and Use Tax Paid During Construction (Low Case)

\$22.5 M

Sales and Use Tax Paid During Construction (Median Case)

\$25.0 M

Sales and Use Tax Paid During Construction (High Case)

*Sales and Use Taxes
inure to benefit of state and local agencies*

Sales and Use Tax Distribution (High)	Rate	Amount Paid
State of Nevada	2.00%	\$7.3 M
Local School Support Tax	2.60%	\$9.5 M
Basic City-County Relief Tax	0.50%	\$1.8 M
Supplemental City-County Relief Tax	1.75%	\$6.4 M
Total	6.85%	\$25.0 M

FISCAL IMPACTS OF RECURRING OPERATIONS



Fiscal Impacts of Operations

Public Revenue Estimates: First Year Taxes and Fees

\$13.0 M

First Year Taxes and Fees Paid (Low Case)

\$22.3 M

First Year Taxes and Fees Paid (Median Case)

\$31.5 M

First Year Taxes and Fees Paid (High Case)

	Low Case	Median Case	High Case
Net Proceeds of Minerals Tax	\$6.5 M	\$12.8 M	\$19.0 M
Sales and Use Tax	\$2.1 M	\$3.8 M	\$5.5 M
Property Tax	\$3.5 M	\$4.4 M	\$5.2 M
Modified Business Tax	\$0.6 M	\$1.0 M	\$1.3 M
Commerce Tax	\$0.1 M	\$0.2 M	\$0.3 M
Bureau of Land Mgmt. Fees	\$0.2 M	\$0.2 M	\$0.2 M
NV Mining Claim/Recording	<u>\$0.01 M</u>	<u>\$0.01 M</u>	<u>\$0.01 M</u>
Total	\$13.0 M	\$22.3 M	\$31.5 M

Fiscal Impacts of Operations

Public Revenue Estimates: 26-Year Project Life Taxes and Fees

\$335.8 M

26-Year Project Life Taxes and Fees Paid (Low Case)

\$575.8 M

26-Year Project Life Taxes and Fees Paid (Median Case)

\$815.7 M

26-Year Project Life Taxes and Fees Paid (High Case)

	Low Case	Median Case	High Case
Net Proceeds of Minerals Tax	\$169.0 M	\$331.5 M	\$494.0 M
Sales and Use Tax	\$53.4 M	\$98.0 M	\$142.5 M
Property Tax	\$90.7 M	\$113.3 M	\$136.0 M
Modified Business Tax	\$15.6 M	\$24.7 M	\$33.8 M
Commerce Tax	\$3.3 M	\$5.6 M	\$7.9 M
Bureau of Land Mgmt. Fees	\$5.2 M	\$5.2 M	\$5.2 M
NV Mining Claim/Recording	<u>\$0.3 M</u>	<u>\$0.3 M</u>	<u>\$0.3 M</u>
Total	\$335.8 M	\$575.8 M	\$815.7 M

Fiscal Impacts of Operations

Public Revenue Estimates: 60-Year Potential Life Taxes and Fees

\$775.0 M

60-Year Potential Life Taxes and Fees Paid (Low Case)

\$1,328.8 M

60-Year Potential Life Taxes and Fees Paid (Median Case)

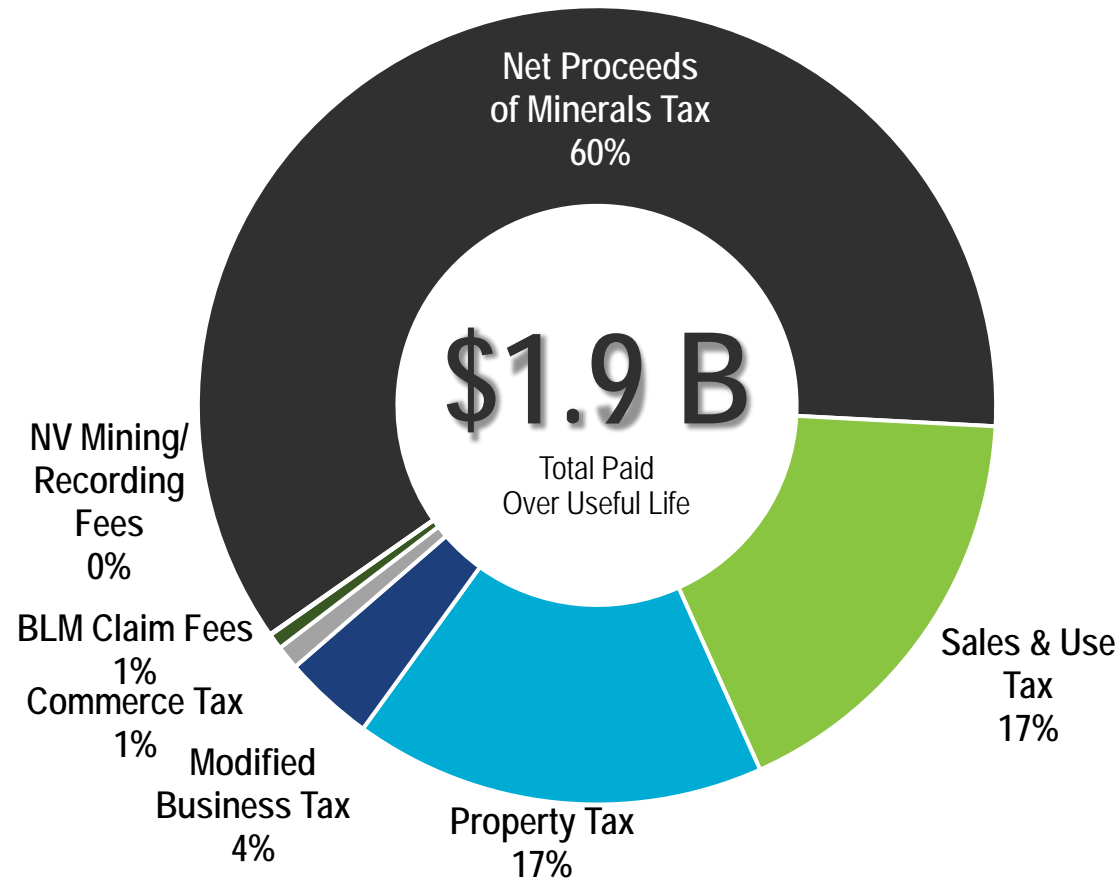
\$1,882.5 M

60-Year Potential Life Taxes and Fees Paid (High Case)

	Low Case	Median Case	High Case
Net Proceeds of Minerals Tax	\$390.0 M	\$765.0 M	\$1,140.0 M
Sales and Use Tax	\$123.3 M	\$226.1 M	\$328.8 M
Property Tax	\$209.3 M	\$261.6 M	\$313.9 M
Modified Business Tax	\$32.3 M	\$50.7 M	\$69.0 M
Commerce Tax	\$7.5 M	\$12.9 M	\$18.2 M
Bureau of Land Mgmt. Fees	\$12.0 M	\$12.0 M	\$12.0 M
NV Mining Claim/Recording	<u>\$0.6 M</u>	<u>\$0.6 M</u>	<u>\$0.6 M</u>
Total	\$775.0 M	\$1,328.8 M	\$1,882.5 M

Fiscal Impacts of Operations

High Case: 60-Year Project Life



Net Proceeds of Minerals Tax

High Case: 60-Year Project Life

\$1,140.0 M

Maximum Net Proceeds of Minerals Taxes
Paid Over Potential Life

*Net Proceeds of Minerals Taxes
inure to the benefit of state and local agencies*

Net Proceeds of Mines Tax Distribution	Rate [a]	Amount Paid
State of Nevada – Debt and Capital	0.17	\$38.8 M
Esmeralda County School District	0.75	\$171.0 M
Esmeralda County	<u>2.10</u>	\$478.7 M
Total County Rate	3.02	\$688.4 M
State of Nevada	1.98	\$451.6 M
Total	5.00	\$1,140.0 M

[a] Rate is per \$100 of value.

Note: The distribution of taxes assumes all operations are located within Esmeralda taxing district.

Sales and Use Tax

High Case: 60-Year Project Life

\$328.8 M

Maximum Sales & Use Tax
Paid Over Potential Life

*Sales and Use Taxes
inure to the benefit of state and local agencies*

Sales and Use Tax Distribution	Rate	Amount Paid
State of Nevada	2.00%	\$96.0 M
Local School Support Tax	2.60%	\$124.8 M
Basic City-County Relief Tax	0.50%	\$24.0 M
Supplemental City-County Relief Tax	1.75%	\$84.0 M
Total	6.85%	\$328.8 M

Note: The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

Property Tax

High Case: 60-Year Project Life

\$313.9 M

Maximum Property Taxes
Paid Over Potential Life

*Property Taxes
inure to the benefit of state and local agencies*

Property Tax Distribution	Rate [a]	Amount Paid
State of Nevada	0.17	\$17.7 M
Esmeralda County School District	0.75	\$78.0 M
Esmeralda County	2.10	\$218.2 M
Total	3.02	\$313.9 M

[a] Rate is per \$100 of value.

Note: The distribution of taxes assumes all operations are located within Esmeralda taxing district.

Modified Business Tax

High Case: 60-Year Project Life

*Modified Business (payroll) Taxes
inure to the benefit of the state general fund*

\$69.0 M

Maximum Modified Business Taxes
Paid Over Potential Project Life



Commerce Tax

High Case: 60-Year Project Life

\$18.2 M

Maximum Commerce Taxes Paid
Over Potential Project Life

*Commerce Taxes
inure to the benefit of the state general fund*



BLM Mining Claim Maintenance Fees

High Case: 60-Year Project Life

*Claim Fees
are expected to inure to the benefit of the BLM*

\$12.0 M

Maximum United States Bureau of Land Management
Payments for Mining Claim Maintenance
(\$200,000 per year)



Source: United States Bureau of Land Management

Nevada Mining Claim Fees and Recordings

High Case: 60-Year Project Life

*All Claim Fee are expected to
inure to the benefit of Esmeralda County*

\$600,000

Maximum Esmeralda County Recorder Payments
for Recording and Nevada Mining Claim Fees
(\$10,000 per year)



Source: Esmeralda County

Fiscal Impacts of Operations

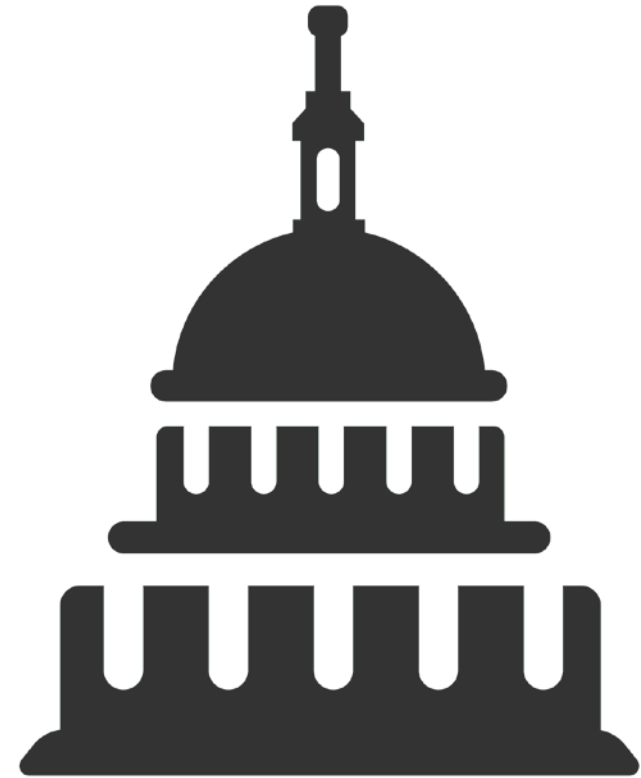
All Beneficiaries of Rhyolite Ridge Taxes and Fees

	Share	Low Case			Median Case			High Case		
		1-Year	26-Year	60-Year	1-Year	26-Year	60-Year	1-Year	26-Year	60-Year
Esmeralda County General Fund	39.9%	\$5.2 M	\$134.0 M	\$309.3 M	\$8.4 M	\$218.0 M	\$503.1 M	\$11.6 M	\$302.0 M	\$696.9 M
State of Nevada General Fund	29.7%	\$3.9 M	\$99.8 M	\$230.3 M	\$7.3 M	\$187.4 M	\$432.6 M	\$10.7 M	\$275.0 M	\$634.8 M
Esmeralda County School District	14.3%	\$1.8 M	\$47.9 M	\$110.5 M	\$3.0 M	\$77.9 M	\$179.7 M	\$4.1 M	\$107.9 M	\$249.0 M
Local School Support Tax	6.0%	\$0.8 M	\$20.3 M	\$46.8 M	\$1.4 M	\$37.2 M	\$85.8 M	\$2.1 M	\$54.1 M	\$124.8 M
Supplemental City-County Relief Tax	4.1%	\$0.5 M	\$13.7 M	\$31.5 M	\$1.0 M	\$25.0 M	\$57.8 M	\$1.4 M	\$36.4 M	\$84.0 M
State of Nevada – Debt and Capital	3.2%	\$0.4 M	\$10.9 M	\$25.0 M	\$0.7 M	\$17.7 M	\$40.7 M	\$0.9 M	\$24.5 M	\$56.4 M
Basic City-County Relief Tax	1.2%	\$0.2 M	\$3.9 M	\$9.0 M	\$0.3 M	\$7.2 M	\$16.5 M	\$0.4 M	\$10.4 M	\$24.0 M
U.S. Bureau of Land Mgmt.	1.5%	\$0.2 M	\$5.2 M	\$12.0 M	\$0.2 M	\$5.2 M	\$12.0 M	\$0.2 M	\$5.2 M	\$12.0 M
Esmeralda County Recorder	0.08%	<u>\$0.0 M</u>	<u>\$0.3 M</u>	<u>\$0.6 M</u>	<u>\$0.0 M</u>	<u>\$0.3 M</u>	<u>\$0.6 M</u>	<u>\$0.0 M</u>	<u>\$0.3 M</u>	<u>\$0.6 M</u>
Total	100.0%	\$13.0 M	\$335.8 M	\$775.0 M	\$22.3 M	\$575.8 M	\$1,328.8 M	\$31.5 M	\$815.7 M	\$1,882.5 M

Notes: Taxes included are Net Proceeds of Minerals, Sales and Use Tax, Property Tax, Modified Business Tax, Commerce Tax, BLM Claim Fees and Nevada Mining Claim/Recording Fees paid to Esmeralda County. Federal Taxes are excluded. The retail sales and use tax reported herein does not attempt to account for Esmeralda County's classification as a "Guaranteed County".

Federal Tax Obligations

In addition to the state and local taxes, ioneer will be responsible for a number of tax obligations to the federal government throughout the Rhyolite Ridge mine's project life, including corporate income taxes; estimating federal income taxes was beyond the scope of this analysis



SOCIAL IMPACTS OF THE PROJECT

Local Community Investment Initiatives



ioneer uses a part of its social investment budget (between \$100,000 - \$250,000 annually) to sponsor scholarships for Tonopah High School students



ioneer also helps sponsor the Nevada State Mining Championships, which take place during Jim Butler Days every year

Source: iioneer USA Corporation, Pahrump Valley Times, Nye County School District

Benefits of Lithium Carbonate

- Lithium is included as a “critical mineral” by the United States Department of Defense, underlining its importance
- According to industry research by UBS, global demand for lithium is expected to grow by roughly twenty percent per year
- Reducing the cost of Lithium-ion batteries will help the transition to electric vehicles, reduce reliance on fossil fuels, and help Nevada meet greenhouse gas reduction targets
- Lithium is mainly found in Argentina, Chile and Australia
- Two-thirds of Lithium materials (Lithium Carbonate and Lithium Hydroxide) ultimately come from China
 - All Australian hard rock (spodumene) needs to be converted, China is the only place that has this capability
 - Some of the South American production is sent to China to upgrade to battery grade
- The Rhyolite Ridge project is expected to provide economic development opportunities for Esmeralda County and the State of Nevada, while also reducing long-term dependence on China



Source: Ioneer USA Corporation

The Importance of Boron

- Substantial quantities of Boric acid are expected to be produced at the Rhyolite Ridge mine
- Boron is valuable because it has a wide variety of uses, including the following:
 - Making glass heat/chemical resistant (e.g. Pyrex)
 - Improves cleaning products
 - Serves as a source of nutrients for plants
 - Absorbs infrared light
 - Can be used in the development of super-magnets
 - As a part of the fiberglass used in insulation
- Boron is primarily found in Turkey, where two-thirds of global reserves are located
- With the only other major Boron production being at a mine in California in operation for over 100 years, Rhyolite Ridge reduces long-term dependence on Turkey



Source: Ioneer USA Corporation

Intended Use, Assumptions and Considerations

- The objective of this analysis is to identify and quantify the economic and material revenue impacts associated with the proposed investment. This report's purpose is to assist Ioneer in better understanding how the Company impacts the local community and to estimate economic and fiscal impacts.
- Included in this report are an overview and analysis of the estimated economic and revenue impacts associated with the proposed investment and operations. Data used in this analysis were obtained from the Company and third-party data providers. While we have no reason to doubt the accuracy of the information referenced herein, we have neither audited these data nor performed thorough review and assurance procedures, and as such, AA can make no representations or assurances as to their completeness or usefulness for all purposes.
- With regard to fiscal estimates, Nevada has hundreds of taxes, fees, exactions and charges that are levied on businesses and residents. This analysis considers notable sources of public revenue sourced to the proposed investment. Taxes inuring to the federal government, while significant, are omitted from this analysis (fees to the Bureau of Land Management are included) as our scope of work is specific to state and local impacts. In contrast to the economic impacts analyzed, fiscal impacts generally reflect only the direct consequence of the activity. This approach is a function of the near impossibility of accurately predicting the secondary fiscal consequences of growth as well as the potential for double counting. That having been said, some level of indirect impacts are likely and this analysis does not attempt to quantify indirect fiscal impacts as a result of indirect payrolls and consumer spending.
- The economic and fiscal impacts are based on Company estimates; this analysis does not evaluate the feasibility of the project or the financial pro forma for the proposed investment.
- Note that totals on charts, tables and exhibits may not sum to 100 percent due to rounding.

About the Author

Applied Analysis (AA) is a Nevada-based economic analysis and gaming consulting firm with extensive experience in preparing economic and fiscal impact analyses. AA also maintains a broad range of gaming experience. AA has been retained by several organizations to review and analyze the economic, fiscal and social impacts of community investments and operations. This includes impacts on employment, wages and output as well as impacts on tax collection and public service demands.

AA is an information and analysis resource founded in 1997 for both the public and private sectors. Our team has extensive experience in real estate, market analysis, urban economics, information technology, finance and hospitality consulting. We apply this knowledge in an effort to develop creative solutions to our clients' challenges.

Our team has performed analyses in Nevada, California, Mississippi, Colorado, New York, Illinois and other markets around the country. We have serviced a broad spectrum of business clients, from governmental agencies to healthcare providers. Our public sector practice has analyzed the fiscal and economic impact of developments from five to 23,000 acres, and handled policy issues spanning business tax initiatives to the cost of air quality programs.

Our vision and goals have been the same since our inception. We strive to provide superior advisory services through a better understanding of our clients and their issues. We obtain this superior understanding through listening closely to our clients' needs and designing solutions that take into account their unique nature, circumstances and requirements.

To put it simply, we are a solutions resource. Our future is branded by the success of our clients and the quality of our professionals. *Our commitment lies therein.*

Applied Analysis' broad range of experience in a number of industries and disciplines provides our professionals with a global view and approach to projects. The following highlights key service lines and areas of expertise.

- Economic Analysis
- Financial Analysis / Advisory Services
- Hospitality / Gaming Consulting Services
- Information Technology / Web-based Solutions
- Litigation Support / Expert Analysis
- Market Analysis
- Opinion Polling / Consumer Sentiment Analysis
- Public Policy Analysis

For More Information, Contact:

Applied Analysis

6385 S. Rainbow Blvd.; Suite 105

Las Vegas, Nevada 89118

(702) 967-3333 | AppliedAnalysis.com

**APPLIED
ANALYSIS**





ECONOMIC AND COMMUNITY IMPACTS OF THE

RHYOLITE RIDGE LITHIUM-BORON PROJECT

