

## THE FLORENCE COPPER PROJECT: ECONOMIC & FISCAL IMPACT



L. William Seidman Research Institute  
W. P. Carey School of Business  
Arizona State University

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**EXECUTIVE SUMMARY**

This report presents a revised set of economic impact estimates for the Florence Copper project in Pinal County and the State of Arizona, using data available as of March 2023. The economic impact estimates are calculated using an Arizona-specific version of the REMI regional input-output forecasting model. An overview of total economic impact is summarized in Table 1.

During the life of the project (consisting of the construction, production and reclamation phases), Florence Copper will create significant economic benefits for the State of Arizona, Pinal County and the Town of Florence. Arizona’s State GDP will be enhanced by a cumulative value of more than \$4.3 billion, including more than \$2.5 billion originating in Pinal County.

Florence Copper will create and support an annual average of 819 direct and indirect jobs in Arizona, including 498 in Pinal County. Mineral recovery jobs will only account for approximately 17 percent of total jobs. Most of the employment impact will be in other industries in the regional economy.

<b>Table 1: Florence Copper Project – Overview of Economic Impact</b>	
<b>Impact Focus</b>	<b>Economic Impact</b>
<b>State GDP (Cumulative)</b>	
<i>Arizona</i>	\$4.3 billion
<i>Pinal County</i>	\$2.5 billion
<b>Employment, Annual Average</b>	
<i>Arizona</i>	819
<i>Pinal County</i>	498
<b>Personal Income (Cumulative)</b>	
<i>Arizona</i>	\$2.2 billion
<i>Pinal County</i>	\$1.5 billion
<b>State and Local Tax Revenues (Cumulative)</b>	
<i>Total S&amp;L for all Arizona</i>	\$593.1 million
<i>Combined Pinal County &amp; Town of Florence</i>	\$174.5 million
<i>Town of Florence</i>	\$115.4 million
<i>Note: Dollar values are constant 2024 dollars.</i>	
<i>Source: REMI model of Arizona and Pinal County economies and author calculations.</i>	

Total Personal Income generated over the life of the project will be approximately \$2.2 billion, including more than \$1.5 billion going to Pinal County workers and business owners.

Over the project’s 26 years, there will be \$593.1 million in combined state and local government fiscal revenues and state land trust royalties in Arizona. An estimated \$115.4 million of that total will directly accrue to the Town of Florence, \$59.1 million to Pinal County, and the rest directly to the State of Arizona and the Arizona State Land Department. Seidman cannot explicitly identify a local jurisdiction’s portion of State-shared revenues, as the value will fluctuate through time. However, the research team’s formula to estimate local taxes includes an allowance for State-shared revenue; and the Town of Florence’s share is likely to be very small.

## ECONOMIC AND FISCAL IMPACT: 2024 UPDATE

Located midway between Phoenix and Tucson in Arizona’s historic copper corridor, Florence Copper is an in-situ copper recovery project intending to mine over one billion pounds of high-quality copper cathode using revolutionary technology called in-situ copper recovery (ISCR).

The principal focus of this update is to generate a revised set of economic impact estimates for Florence Copper in Pinal County and the State of Arizona, based on the data available in 2023. Previous estimates of impact were completed in August 2013 and January 2014.

The current report is based on and draws inputs from the NI 43-101 Technical Report on the Florence Copper project completed in March 2023.<sup>1</sup>

When a project like Florence comes to fruition in the State of Arizona, there is a resulting increase in capital expenditures - for example, new buildings are constructed and/or old buildings remodeled. These initial expenditures create and support jobs in various industries, including construction, as well as stimulating employment growth in other sectors of the local economy - e.g., finance, real estate and government.

Coupled with initial capital investments, new jobs are created as businesses hire workers and begin operations. In addition to immediate construction jobs, the subsequent employment typically continues during the life of the business. Further capital investment follows as the business grows.

The aforementioned steps describe the *direct* impacts on the Arizona economy when a new project comes to fruition in the state. Direct impacts are generally readily identified and measured. As a part of the process for establishing operations in the Town, Florence Copper LLC has calculated the direct effects for the Florence Copper project.

In addition to direct economic impacts from the new project, second order expenditures and jobs are created as a result of the initial “injection” of capital and hiring of new workers. These *multiplier* impacts represent additional economic wealth created in the supply chain, such as businesses providing services in support of the new project (indirect impacts); and through the rise in personal income from new employees (induced impacts). The sum of direct, indirect and induced impacts represents the total economic impacts. For example, a driller hired at the Florence Copper project would represent a direct job. The income that this employee receives and in turn spends in the local economy then creates revenues/income for a multitude of different businesses downstream.

However, these rounds of expenditures are not self-perpetuating or indefinite. Instead, the expenditures may become smaller as more of the initial income/expenditures “leak” out of the local economy. This leakage may be due to purchases outside the region, or additions to savings that are withdrawn from the spending stream.

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<sup>1</sup> The technical information contained in this “Florence Copper Project: Economic and Fiscal Impact” study is based upon the report entitled: “NI 43-101 Technical Report – Florence Copper Project, Pinal County, Arizona” issued March 30, 2023, with an effective date of March 15, 2023, which is available on SEDAR. The Florence Copper Project Technical Report was prepared under the supervision of Richard Tremblay, P.Eng., MBA, Richard Weymark, P.Eng., MBA, and Robert Rotzinger, P.Eng. Mr. Tremblay is employed by the Company as Chief Operating Officer, Mr. Weymark is Vice President Engineering and Robert Rotzinger is Vice President Capital Projects. All three are Qualified Persons as defined by NI 43–101.

Within the field of regional economic analysis, the cumulative impacts of these rounds of expenditures are known as “ripple” or “multiplier” effects. Importantly, a single multiplier does not exist for every conceivable economic scenario. In fact, due to the interconnected nature of the Arizona economy and its connections to the rest of the U.S. (and world), the eventual ripple effects will depend on numerous factors.

Critically, it is the size of the initial direct impact, the geography (i.e., state or county) in which it occurs (which county), and the sector of the economy (e.g., manufacturing, mining, finance, etc.) that shapes a project’s economic importance to Arizona.

To measure cumulative effects, it is necessary to estimate how many years of annual direct impacts will continue. This is the so-called life of the project.

To fully understand the total impact that a new project like Florence will have on the Arizona economy is therefore more complex than a simple extrapolation of a series of annual direct impacts.

As such, the methodology utilized to study the potential economic impacts of the Florence Copper project (as set out and followed below) has its basis in the pioneer work of Wassily Leontief, who was awarded the Nobel Prize in 1973 for development of input-output analysis as a means to understanding the workings of the interconnected sectors of the economy.

## STUDY METHOD AND SCENARIO

Below is a brief description of the study method adopted and scenario examined to estimate the impact of a new project like Florence coming to fruition in the State of Arizona.

This study makes use of an Arizona-specific version of the REMI regional input-output forecasting model (PI+ version 3.0.0, updated in June 2023), to produce numeric estimates of the impact on the Arizona economy of a new economic activity in the state.

The REMI model has certain unique features that make it an excellent choice for analysis of the Florence Copper project.

Unlike most other models, the REMI model has been developed with dynamic capability for projections over a long-term time horizon. Other models provide a static, one-time impact. Since the Florence Copper project is expected to be productive over several decades, the REMI model has been chosen for its ability to provide economic impact results year-by-year over that time horizon.

Further, the REMI model is widely considered as the most powerful regional economic impact tool available to researchers. It incorporates not only advanced input-output estimation, but also includes general equilibrium, econometric and economic geography features.

General equilibrium refers to the ability of the model to incorporate in-migration to a region - for example, in response to expanded economic activity. Econometric techniques are used to estimate underlying relationships between industries, rather than simple ratio coefficients found in less complex impact models. The economic geography equations in the model account for transportation costs, industry clustering and labor market conditions. These features are not found in other economic impact models.

The REMI model has been used and tested by national researchers for many years over a wide range of projects. The model is well known in Arizona, where it has been in use since 2003. Public sector users of the REMI model include the Arizona Department of Transportation, the Arizona Joint Legislative Budget Committee, the Arizona Department of Housing and Arizona State University.

Through its dynamic modeling, REMI demonstrates how the economic impact of a business or project will vary through time within a particular phase of the project, or as it moves from the establishment or construction phase through to the operations phase.

The model's estimated impacts represent the difference between the baseline economy and the baseline economy augmented with the new enterprise. That is, the simulations are designed in the current application to measure the Arizona economy over the production life of the Florence Copper project with and without the project in place. The changes in key measures of economic activity are known as the economic impacts.

Using a county level model enables a more detailed disaggregation of results, thereby allowing for an estimation of the economic impacts that "leak" into other Arizona counties.

Finally, given its overall flexibility, REMI allows for a host of different scenarios to be examined (that is, different businesses/projects and/or different construction and operations phases) while at the same time providing consistent estimates across project phases.

The method for estimating the economic impact involves four fundamental steps:

**1. Preparation of a baseline forecast for the state economy**

This baseline scenario forecasts the future path of the Arizona economy based on a combination of the extrapolation of historic economic conditions and a forecast of relevant national economic variables. This is often referred to as the Business as Usual (BAU) case.

**2. Development of a policy scenario**

The policy scenario describes the *direct* impacts that a new project like Florence will generate in Pinal County and the State of Arizona. Florence Copper project representatives provided the planned direct hiring and planned supplier purchase inputs.

**3. Preparation of a forecast based on the policy scenario**

This alternative forecast simulates the future path of the state and regional economies, incorporating the effects (or impacts) of the changes specified in the policy scenario.

**4. Comparison of the baseline and policy scenario forecasts**

The differences between the baseline and future values of each variable in the forecast results represent the estimated economic impacts of a new project like Florence in Pinal County and the State of Arizona.

## CAVEATS IN INPUT-OUTPUT MODELING

The results of REMI or any economic impact model should be interpreted with care and with attention to factors outside the scope of the model.

The Florence Copper project's capital investment will take place in Pinal County, which is far less developed today than its neighbors Maricopa County and Pima County. REMI is based on establishing a baseline growth trajectory for the State and will implicitly assume that all segments of the State will grow commensurately. Hence the model, *a priori*, does not incorporate the significant economic development throughout Pinal County that is likely to occur due to spillover from the Greater Phoenix area. This may lead to predictions of leakages out of Pinal County to other counties that may not actually (or reasonably be expected to) occur. The REMI impact results tend to be somewhat smaller due to this effect. For example, a significant share of the predicted induced effects will be in retail transactions. REMI understands that retail establishments today are disproportionately located in Maricopa County. As a result, any growth in capital and income in Pinal County today will result in higher retail transactions in Maricopa County simply because there are fewer retail establishments located in Pinal County.

Simulation results in the future maintain this tendency, but if population growth trajectories are realized, retail establishments will grow faster in Pinal County than in the rest of the State; and more of the Florence Copper economic activity will be retained in closer proximity to Florence. At the same time, if growth in Pinal County falls short of estimates, the impact of the direct jobs associated with the Florence Copper project may be even more important for the area.

## SIMULATION RESULTS

To model the economic impact of the Florence Copper project, the effects were broken down into three distinct phases. These are: (1) the construction phase; (2) the operations phase; and (3) the reclamation or closure phase. The timelines for these phases were provided by the Florence Copper project.

The **construction** phase will be approximately two years (2024-2025). Most of the expenditures and employment will be related to construction of the required infrastructure, testing, analysis and site preparation.

The **operations** or production phase extends for 22 years (2025-2046). This will be the period of greatest economic impact, not only because of its duration, but also because it includes the peak employment, income and tax revenue generation periods.

One environmental benefit of Florence Copper's ISCR process is that it allows for the reclamation of portions of the wellfield as the project progresses, shortening the closure phase once mineral recovery operations cease. As such, the project's **reclamation** or closure phase is projected to last 3 years (2047-2049). Mineral recovery employment at the site will wind down, but economic activity will continue due to the reclamation and restoration of the site for future uses.

Unlike less complex models, REMI's impacts include estimates of ongoing economic activity created during the operations phase. As the Florence Copper project contributes to economic growth, new businesses in retail, health care, transportation and other industries will be established in the region. These could continue to support employment and contribute to personal income and tax revenues even after mineral recovery at the site concludes.

***As the Florence Copper project contributes to economic growth, new businesses in retail, health care, transportation and other industries will be established in the region. These could continue to support employment and contribute to personal income and tax revenues even after mineral recovery at the site concludes.***

The results shown in Table 2 incorporate the direct economic impacts associated with the establishment and operations of Florence Copper as well as the potential multiplier impacts that occur due to the increased economic activity associated with the establishment of the project. All estimates of impact are relative to the alternative baseline forecast of no copper mining operations in Florence. For instance, if State GDP is estimated to be "x" dollars higher than the baseline case, this does not mean it is x dollars higher than what State GDP is today. It is simply x dollars higher than what State GDP is forecast to be in that given year if the new project had not come to fruition in Arizona. The simulation's fundamental inputs are based on detailed annual expenses for all three phases of the project, including: labor and supplier purchases; estimated operating revenue; and employee count estimates. The confidential data supplied by the Florence Copper project are not reproduced in this report but are comparable to the employment and capital investment numbers shown in the March 2023 NI 43-101 Technical Report.<sup>2</sup>

<sup>2</sup> Source: Florence Copper website Reports section. Available at <https://www.florencecopper.com/resources/reports>

## ECONOMIC IMPACT SUMMARY

Table 2 is an overall summary of the economic impact of the Florence Copper project on State GDP, Employment, and Personal Income in the State of Arizona and Pinal County.

Cumulative totals over the full life of the project and annual average impacts are summarized for each geography.

<b>Table 2: Florence Copper Project Economic Impact Summary</b>		
<b>Type &amp; Location of Impact</b>	<b>Total Impact</b>	<b>Annual Average Impact</b>
<b>State GDP</b>		
<i>Arizona</i>	\$4.3 billion	\$160.6 million
<i>Pinal County</i>	\$2.5 billion	\$94.4 million
<b>Employment</b>		
<i>Arizona</i>	-	819
<i>Pinal County</i>	-	498
<b>Personal Income</b>		
<i>Arizona</i>	\$2.2 billion	\$81.1 million
<i>Pinal County</i>	\$1.5 billion	\$56.4 million
<i>Note: Dollar values are constant 2024 dollars. Personal income appreciation will accrue throughout the economy as salaries, proprietor income, interest, and property income, not just as wages in the newly created jobs.</i>		
<i>Source: REMI model of Arizona and Pinal County economies</i>		

## STATE GDP IMPACT

**Florence Copper will add more than \$4.3 billion to Arizona’s State GDP over the life of the project.**

**State GDP produced in Pinal County will increase by more than \$2.5 billion over this period.**

State GDP is sometimes called “value added.” This is the most comprehensive indicator of economic performance for a state or region. State GDP contributes to the tally of national GDP, which is a measure of the country’s annual output of goods and services.

The annual average addition to State GDP in Arizona over the entire project life is \$160.6 million. The annual average addition to State GDP produced within Pinal County is \$94.4 million.

To put these estimated annual contributions into perspective, total State GDP in Arizona in 2022 (the most recent year available) was \$475.6 billion.<sup>3</sup> Pinal County’s contribution to that total in 2022 was

<sup>3</sup> This is a non-seasonally adjusted Gross Domestic Product: All Industry Total in Arizona (AZNGSP) reported by U.S. Bureau of Economic Analysis and retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/AZNGSP>, February 12, 2024.

\$11.9 billion.<sup>4</sup> At those 2022 total State GDP values, the Florence Copper project would contribute 0.03% of annual State GDP in Arizona, and 0.79% of Pinal County's annual contribution to State GDP.

## EMPLOYMENT IMPACT

**The Florence Copper project will create and support an annual average of 819 Arizona jobs over the duration of the three phases of activity.**

**The annual average employment within Pinal County from Florence Copper will be 498 jobs.**

The job count includes the direct employment onsite, jobs supported in businesses or government agencies that supply goods and services to Florence Copper and the induced employment that stems from the expenditures of all these workers as consumers.

Up to 160 mineral recovery jobs in any one year will be required at the Florence Copper site during the peak years of the operations phase.<sup>5</sup> <sup>6</sup> Across all project phases, more than 600 additional Arizona jobs supported each year will be in other industries in the overall general economy.

## PERSONAL INCOME

**Florence Copper will increase Personal Income in Arizona by approximately \$2.2 billion over the life of the project.**

**Personal Income to Pinal County residents will rise by more than \$1.5 billion over this period.**

The components of Personal Income are: (a) the combined total wages and salaries of workers; (b) the contributions by employers to worker social security and benefit accounts; (c) the combined proprietor's earnings by owners of small businesses; and (d) rental and interest income.

The annual average addition to Personal Income from the Florence Copper project is \$81.1 million per year for Arizona, including \$56.4 million within Pinal County. These additions to aggregate Personal Income include the wages and salaries paid to the newly created jobs and any salary appreciation that accrues across the economy as the induced economic activity creates additional demands for products and services.

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<sup>4</sup> This is a non-seasonally adjusted Gross Domestic Product: All Industries in Pinal County (GDPALL04021) reported by U.S. Bureau of Economic Analysis and retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/GDPALL04021>, February 12, 2024.

<sup>5</sup> The average number of jobs over all production years, including the ramp-up period at the beginning and cool-down period at the end, is 149.

<sup>6</sup> The direct jobs figure excludes any contractors for ongoing construction and wellfield construction during the production phase.

**IMPACT BY PROJECT PHASE**

The economic impact of the Florence Copper project on the State of Arizona and Pinal County will vary during each of the three phases.

<b>Table 3: Economic Impact of Florence Copper Project By Phase</b>				
<b>Type and Location of Impact</b>	<b>Construction Phase (2 Years)</b>	<b>Production Phase (22 Years)</b>	<b>Closure Phase (3 Years)</b>	<b>Total Impact (26 Years)*</b>
<b>Total State GDP</b>				
<i>Arizona</i>	\$211.5	\$3,954.5	\$171.4	\$4,337.4
<i>Pinal County</i>	\$78.9	\$2,339.0	\$131.6	\$2,549.5
<b>Annual Average Total Employment</b>				
<i>Arizona</i>	978	881	259	819
<i>Pinal County</i>	274	552	255	498
<b>Total Personal Income</b>				
<i>Arizona</i>	\$174.9	\$1,874.6	\$140.5	\$2,190.0
<i>Pinal County</i>	\$51.2	\$1,225.0	\$247.0	\$1,523.2
<i>Note: Dollar values are expressed in millions of constant 2024 dollars. Personal Income appreciation will accrue throughout the economy as salaries, proprietor income, interest, and property income, not just as wages in the newly created jobs.</i>				
<i>* The second construction year overlaps the first production year; hence the total number of years of the project is 26.</i>				
<b>Source: REMI model of Arizona and Pinal County economies</b>				

**CONSTRUCTION PHASE**

The construction phase will extend over a two-year period. During this time, Florence Copper will invest \$232 million in site preparation, the development of facilities and infrastructure, engineering studies, testing and analysis, permits and the initial hiring and training of workers.

The total State GDP of the construction phase expenditures in Arizona will be \$211.5 million. This includes \$78.9 million originating in Pinal County.

Annual average employment during the construction phase will be 978 new jobs state-wide, including 274 in Pinal County. There will be an annual average 147.5 construction workers at Florence Copper project during the two years of construction. The estimated indirect and induced state-wide employment impact of this construction work is 830.5 jobs in Arizona, including 126.5 jobs in Pinal County.

The addition to Arizona Personal Income during the construction phase will be \$174.9 million state-wide. In Pinal County, Personal Income received by residents will rise by \$51.2 million.

**PRODUCTION (OPERATIONS) PHASE**

The production or operations phase at Florence Copper has the longest duration (22 years) and the greatest economic impact. The Florence Copper project will directly employ an annual average of 149 direct jobs at the mine during production and spend on average approximately \$68.6 million per year on supplier purchases.

Table 4 summarizes the direct expenditures by year and in total for eight key types of purchase.

<b>Table 4: Summary of Direct Supplier Expenditures during Production Phase</b>		
<b>Type of Purchase</b>	<b>Average Annual Expenditure (Millions \$)</b>	<b>Total Expenditure (Millions \$)</b>
Utilities	\$7.1	\$142.9
Construction	\$26.9	\$537.6
Chemical Manufacturing	\$28.2	\$563.3
Retail Purchases	\$0.3	\$5.2
Rental and Leasing	\$0.6	\$11.4
Professional, Scientific & Professional Services	\$0.7	\$14.6
Administrative and Support Services	\$1.8	\$35.3
Repairs and Maintenance	\$3.1	\$61.6

*Source: Florence Copper Project Technical Report*

The addition to Arizona’s State GDP from the production phase will be almost \$4.0 billion, accounting for 90 percent of the total State GDP impact over the entire life of the project. This includes more than \$2.4 billion State GDP originating within Pinal County.

Annual average employment created during the production phase will rise to 881 jobs state-wide, including 552 jobs within Pinal County.

Cumulative Personal Income will increase by approximately \$1.9 billion state-wide, including more than \$1.2 billion in Pinal County.

***Annual average employment created during the production phase will rise to 881 jobs state-wide, including 552 jobs within Pinal County.***

***Cumulative Personal Income will increase by approximately \$1.9 billion state-wide, including more than \$1.2 billion in Pinal County.***

### RECLAMATION (CLOSURE) PHASE

The production phase is expected to continue for over two decades, but mineral recovery will be a temporary land use for the Florence Copper site. Following the completion of ISCR operations, the Florence Copper site will be reclaimed and returned to productive use as determined by the Town of Florence. Progressive reclamation and closure activities are planned. That is, some portions of the ISCR production area will be fully reclaimed while others are still in production. On completion of all mineral recovery operations, the Florence Copper project's buildings, facilities and infrastructure will be removed as needed to accommodate future land use.

The reclamation phase will extend over three years. It is important to note that activity in the overall economy created by the Florence Copper project will continue to support jobs not only on the project site, but in the region. For example, additional retail and service firms drawn to the area are projected to continue even as copper production declines.

In the reclamation phase, the Florence Copper project will still contribute a cumulative \$171.4 million to State GDP in Arizona, including \$131.6 million in Pinal County.

Annual average Arizona employment will become much smaller at 259 jobs state-wide. Pinal County jobs will fall by a lesser proportion, though, to an average of 255 jobs over the three-year reclamation phase.

**ANNUAL AVERAGE IMPACT BY PHASE**

An Arizona Mining Association 2022 report suggests that mining industry workers earn about twice the total compensation of the average Arizona worker,<sup>7</sup> and Florence Copper’s compensation package will be representative of that mining compensation across the State.

Table 5 summarizes annual average impact measures for each phase of the Florence Copper project.

Annual average State GDP will increase by \$105.8 million during the construction phase in Arizona, and by \$179.7 million during the production phase.

Pinal County’s State GDP impact will more than double between the construction and production phases, rising from an annual average of \$39.4 million to \$106.3 million. Approximately 60% of the state-wide GDP impact will occur in Pinal County during the production phase.

The average annual increases in Personal Income for both the State and Pinal County will be greatest during the production phase. They will decrease during the closure phase as the Florence Copper project’s total output and total employment impact decline.

<b>Table 5: Annual Average Impact of Florence Copper Project By Phase</b>				
<b>Type and Location of Impact</b>	<b>Construction Phase (2 Years)</b>	<b>Production Phase (22 Years)</b>	<b>Closure Phase (3 Years)</b>	<b>Project Annual Avg. Impact (26 Years)*</b>
<b>Average Annual State GDP</b>				
<i>Arizona</i>	\$105.8	\$179.7	\$57.1	\$160.6
<i>Pinal County</i>	\$39.4	\$106.3	\$43.9	\$94.4
<b>Average Annual Total Employment</b>				
<i>Arizona</i>	978	881	259	819
<i>Pinal County</i>	274	552	255	498
<b>Average Annual Personal Income</b>				
<i>Arizona</i>	\$87.4	\$85.2	\$46.8	\$81.1
<i>Pinal County</i>	\$25.6	\$55.7	\$82.3	\$56.4
<i>Note: Dollar values are expressed in millions of constant 2024 dollars. Personal income appreciation will accrue throughout the economy as salaries, proprietor income, interest, and property income, not just as wages in the newly created jobs.</i>				
<i>* The second construction year overlaps the first production year; hence the total number of years of the project is 26.</i>				
<i>Source: REMI model of Arizona and Pinal County economies</i>				

<sup>7</sup> Source: Arizona Mining Stakeholders Presentation, February 22, 2022. Available at: <https://www.azmining.com/wp-content/uploads/2022/11/AMA-ARPA-Impact-Feb-22.pdf>

## EMPLOYMENT BY INDUSTRY

The Florence Copper project will be directly responsible for an annual average of:

- 147.5 construction jobs per year during the construction phase.
- 149 mining jobs per year during the production phase.
- 45 mining jobs per year during the reclamation phase.

However, the total employment impact of the Florence Copper project will extend far beyond these industries. As workers spend their earned incomes, additional jobs will be created in retail, health care, finance and other industries in the local economy.

Table 6 summarizes the direct and indirect/induced job impacts by industry for each phase. The job numbers in Table 6 represent an increase compared to a baseline scenario of the Arizona economy in which the Florence Copper project does not come to fruition.

Note also that the new job creation will not be dominated by a growth in retail, trade and construction - the sectors that have historically seen the most job creation in Arizona.

The construction industry will obviously be the main benefactor during Florence Copper's construction phase at 390 total (direct, indirect and induced) jobs. However, many other jobs will also be created in retail, health care services, and professional, technical and administrative services.

Mineral recovery employment will increase sharply during the production phase, but jobs in other industries will also show a rise compared to the baseline scenario. These include retail trade, construction, real estate, food services, health care and government.

During the production phase, there will be in total 881 annual average jobs due to the presence of the Florence Copper project.<sup>8</sup> Of these, 731 (83%) will be in industries other than mining. This ratio is particularly significant for economic development, as it shows the job-creating effects of a basic industry that brings in external dollars.

Mineral recovery employment will be significantly curtailed during the closure phase. The largest sources of employment at that time will be health care (33 jobs), accommodation and food services (26 jobs), government (25 jobs) and retail (23 jobs). These jobs could potentially continue in the short-term as mineral recovery winds down because they could be supported by an overall larger economy whose growth was stimulated initially by the Florence Copper project.

***During the production phase, there will be 881 annual average jobs due to the presence of the Florence Copper project. Of these, 731 (83%) will be in industries other than mining.***

<sup>8</sup> The total jobs figure encompasses direct, indirect and induced employment impacts.

**Table 6: Average Annual Employment Impact by Phase and Industry in Arizona<sup>9</sup>**

Industry	NAICS	Construction Phase (2 Years)		Production Phase (22 Years)		Reclamation Phase (3 Years)		Average Per Year (26 years)
		Direct	Indirect/ Induced	Direct	Indirect/ Induced	Direct	Indirect/ Induced	Total
Mining	21		1	149	-	45		127
Utilities	22		2		7		1	6
Construction	23	148	242		175		5	172
Manufacturing	31-33		29		19		1	18
Wholesale Trade	42		23		16		4	15
Retail Trade	44-45		104		71		23	68
Transportation & Warehousing	48-49		35		26		8	25
Information	51		6		5		2	5
Finance & Insurance	52		28		14		5	14
Real Estate, Rental & Leasing	53		41		37		20	36
Professional & Technical Services	54		39		37		15	34
Administration & Waste Services	56		39		41		16	38
Educational Services	61		10		10		6	10
Health Care & Social Assistance	62		79		63		33	61
Arts, Entertainment & Recreation	71		16		11		5	11
Accommodation & Food Services	72		47		54		26	50
Other Services	81		49		50		18	46
Government	92		40		95		25	83
<b>Total Per Phase</b>			<b>978</b>		<b>881</b>		<b>259</b>	<b>819</b>

Source: REMI Model of Arizona economy

<sup>9</sup> The direct and indirect/induced jobs in Table 6 are based entirely on the realization of the Florence Copper project outlined in Technical Report NI 43-101. The jobs totals do not take into account any mining or other employees that are currently or have previously worked at the Florence site such as the Production Test Facility or the SX/EW plant.

## ECONOMIC IMPACTS ON THE TOWN OF FLORENCE

REMI is designed to estimate economic impacts at the state and county levels over a period of several years. Conceptually a considerable portion of the positive economic impact for Pinal County will accrue to the Town of Florence where the direct employment opportunities will be created. Estimating the full economic impact of the Florence Copper project on the Town of Florence and its immediate geography (that is, the surrounding zip code) will be difficult as there is no way of knowing how many of the new workers will reside in the town or spend their dollars on goods and services within Florence.

It is reasonable to assume that the impact results on the town will be proportional to the number of workers that reside there. Estimates of this impact can be obtained from analyzing the economic impact of a single peak production year on the Town of Florence zip code using an alternative model designed to allow for impact analysis at the zip code level (IMPLAN). Maximum impact will be felt if every new Florence Copper worker estimated in the project's updated Technical Report lives in the town. If only half of those direct workers live in the town, the impacts will be reduced proportionately.

Using IMPLAN for a full production year, if all Florence Copper workers live within the Florence zip code area, the project could create up to 160 direct mineral recovery jobs plus an additional 94 indirect and induced jobs. All 254 jobs under this scenario will be within the town.

Also under this scenario, the Florence Copper project will add \$25.6 million in total labor income to the Town of Florence. This new labor income captures the wages associated with the new jobs plus wage increments that accrue to existing Florence jobs as the new capital investment stimulates economic activity throughout the town.<sup>10</sup>

***Using IMPLAN for a full production year, if all Florence Copper workers live within the Florence zip code area, the project could create up to 160 direct mineral recovery jobs plus an additional 94 indirect and induced jobs. All 254 jobs under this scenario will be within the town.***

***Also under this scenario, the Florence Copper project will add \$25.6 million in total labor income to the Town of Florence.***

<sup>10</sup> This excludes any ongoing construction and service contract workers after the initial construction phase, including drillers.

**FISCAL IMPACTS INCLUDING ROYALTY PAYMENTS**

Fiscal impacts from the Florence Copper project flow from three distinct sources. These are:

- Direct income, property, severance and mining taxes directly paid by the company.
- The new sales, income and property taxes generated from the incomes created by the project’s supplier purchases and economic activity.
- Royalties paid by the company to the Arizona State Land Department.

Seidman has previously validated the method used by the Florence Copper project’s company accountants to estimate the future income and severance tax burdens based on historical payments. The research team has also used the 2021 Census of State and Local Government finances to estimate the flow of new revenues that will be associated with the project’s total State GDP contribution. Future individual income tax rates have been adjusted as part of this analysis to account for the post-2021 reductions in Arizona individual income tax rates. The royalty estimates are based on the NI43-100 Technical Report, converted to 2024 dollars using a 2.5% future annual inflation factor.

<b>Table 7: Combined State and Local Fiscal Impacts and Royalties (Millions 2024 \$) <sup>11</sup></b>				
<b>Tax Type</b>	<b>Construction Phase (2 Years)</b>	<b>Production Phase (22 Years)</b>	<b>Closure Phase (3 Years)</b>	<b>Cumulative Revenues (26 Years)*</b>
<b>Individual Income Tax</b>	\$1.3	\$24.8	\$1.1	\$27.2
<b>General Sales Tax</b>	\$3.9	\$73.1	\$3.2	\$80.1
<b>Selective Sales Tax</b>	\$0.7	\$13.4	\$0.6	\$14.7
<b>Royalties</b>	\$0.0	\$109.9	\$0.0	\$109.9
<b>All Other**</b>	\$5.9	\$348.2	\$7.0	\$361.1
<b>Total</b>	<b>\$11.8</b>	<b>\$569.4</b>	<b>\$11.8</b>	<b>\$593.1</b>

*\*The second construction year overlaps with the first production year; hence the total number of years of the project is 26.  
 \*\*Includes all direct property, corporate income, Severance, mining taxes paid directly by the company plus all indirect property, corporate income, and miscellaneous taxes paid as a result of the new economic activity generated by the mining activity.*

*Source: Calculations based on data from Florence Copper, Inc., W.P. Carey School of Business, REMI Model of Arizona and Pinal County economies*

Table 7 summarizes the individual income, general sales and selective sales taxes, royalties, and other tax estimates projected by Seidman’s fiscal modeling. These fiscal revenues represent the combined tax payments of the Florence Copper project, as well as the tax dollars induced by the indirect economic activity that takes place as a result of the direct mineral recovery activities.

Table 7’s fiscal estimates suggest that the Florence Copper project will generate approximately \$593.1 million dollars over the life of the project in taxes and royalties paid to Arizona governments. This figure

<sup>11</sup> Columns may not tally exactly due to rounding.

represents a discounted stream of future dollars expressed in 2024 dollars. The greatest tax revenues and state royalties (\$569.4 million) will be created during the production phase.

The local Florence community and Pinal County will benefit from portions of the sales, selective sales, income and severance tax collections based on the State's revenue-sharing provisions. Significant shares of the property and local mining taxes will directly benefit local taxing jurisdictions.

As the Florence Copper project contributes to economic growth, new non-mining businesses will be created or existing non-mining businesses will grow in sectors such as construction, health care, accommodation and food services and retail. Employment in state and local government agencies could also increase. These new businesses should bring a diverse mix of economic activity to the region which could potentially continue to support employment and contribute to personal income and tax revenues after mineral recovery at the site has concluded. The economic impacts of these activities post-reclamation have not been assessed as they lie outside the time-horizon of the current study.

***As the Florence Copper project contributes to economic growth, new non-mining businesses will be created or existing non-mining businesses will grow in sectors such as construction, health care, accommodation and food services and retail. Employment in state and local government agencies could also increase.***

**FISCAL IMPACTS FOR PINAL COUNTY AND THE TOWN OF FLORENCE**

The revenue estimates discussed above accrue to state and local coffers as a result of the Florence Copper project. As the county seat for Pinal County, it will be difficult to distinguish between revenues that accrue to the Town of Florence and those that accrue directly to Pinal County. To track those dollars, Seidman has drawn from company-supplied estimates of local and town property and mining taxes, supplemented by Census of State and Local Government finances data.

Seidman’s analysis, summarized in Table 8, estimates that Florence Copper will generate \$174.5 million over the life of the project for local governments. This consists of taxes paid directly by the mine to local jurisdictions and other taxes paid as a result of the economic activity induced by the mining operations, including property and sales taxes. The sales taxes in particular are an important component.

<b>Tax Type</b>	<b>Construction Phase (2 Years)</b>	<b>Production Phase (22 Years)</b>	<b>Closure Phase (3 Years)</b>	<b>Cumulative Revenues (26 Years)*</b>
<b>General Sales Tax</b>	\$0.8	\$22.4	\$1.3	\$24.5
<b>Selective Sales Tax</b>	\$0.1	\$1.9	\$0.1	\$2.0
<b>All Other**</b>	\$1.8	\$143.2	\$3.0	\$148.0
<b>Total Pinal County***</b>	<b>\$2.7</b>	<b>\$167.5</b>	<b>\$4.4</b>	<b>\$174.5</b>

*\* The second construction year overlaps with the first production year; hence the total number of years of the project is 26.  
 \*\* Includes all direct property and local mining taxes paid to local jurisdictions, as well as local property taxes generated from the new economic activity associated with the mining activity. Although small, the formula used by Seidman is designed to account for local revenue sharing of the State revenues generated by the project.  
 \*\*\* Includes the Town of Florence.*

*Source: Calculations based on data from Florence Copper, Inc., W.P. Carey School of Business, REMI Model of Arizona and Pinal County economies*

Consistent with the economic impact discussions, it is very challenging to identify the portion of Pinal County fiscal impacts that will specifically accrue to the Town of Florence. The actual impact will depend upon where workers live and spend, when and where new construction activities occur, how tax rates for property and sales compare between the Town of Florence and Pinal County jurisdictions and what direct taxes are paid by the mine to which jurisdictions. Seidman’s analysis is based on a review of financial statements provided by Florence Copper LLC and an analytical comparison of state and local taxes paid locally in Arizona in comparison with GDP historically. The analysis permits some level of detail by type of tax for the State and County (but not the Town), as previously depicted in Table 7.

In making assessments for the Town of Florence, Seidman augmented the direct taxes paid by the mine with projections of Town and County revenue based on best estimates of where the economic activity and spending would occur. Importantly, recent revisions in the tax code have resulted in substantial increases in the shares of taxes flowing to the zip codes closest to where the economic activity occurs and, in the case of sales taxes, where the remote purchases are sent.

In reality, data limitations reduce the precision of local tax collection estimates for the analysis of a project like Florence Copper. Nevertheless, based upon Seidman’s best estimates, the total tax revenues that will accrue to the Town of Florence over the life of the project will be an estimated \$115.4 million.

Pinal County will receive an estimated \$59.1 million in total tax revenues over the life of the project. The primary drivers of this share differential are the differences in direct taxes paid by the mine to the two jurisdictions, the location of the mine itself in the Town of Florence, and the differential sales tax rates that prevail in Florence and Pinal County.



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