



Regional Economic Models, Inc.



Economic Impacts of Retiring & Replacing the San Juan Generating Station in 2022

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Sponsor:
Public Service Company of New Mexico



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Executive Summary

The Public Service Company of New Mexico (PNM) has engaged Regional Economic Models, Inc. (REMI) to analyze the economic and demographic impacts of retiring the coal-fired San Juan Generating Station (SJGS), located in San Juan County, New Mexico, in 2022. PNM is the operator of SJGS and currently shares ownership with four other utilities.

This study examines net economic changes resulting from the anticipated closure of SJGS. The modeling results examine the impact on consumers and the economy in PNM's service territory. Prior studies have indicated the importance of the SJGS and the San Juan Coal Mine (the Mine) to the regional economy and the potential impact on San Juan County jobs and incomes that would result from a closure. This study does not reexamine the impacts on San Juan County, but looks at the economic impacts on PNM's service territory.

PNM plans to replace the lost electricity generation capacity with generating assets fueled by natural gas, solar power, and batteries. PNM estimates that these changes in their electricity generation infrastructure would lower electricity prices for customers in their service territory.

In order to assess the impacts of retiring and replacing the SJGS in 2022, REMI uses a 160-sector PI+ model of New Mexico that breaks out PNM's service territory from the rest of the state, where the SJGS is located. The study covers 2019-2053, the end of which is when the SJGS would have otherwise been retired. REMI considers five categories of direct impacts: (1) the SJGS retirement; (2) the investment in and operation of the replacement generating assets; (3) PNM's electricity price change; (4) Energy Transition Act (ETA) assistance funds for San Juan County; and (5) changes in mine reclamation and plant decommissioning spending at the San Juan site.

REMI reports several key economic and demographic impacts of retiring the SJGS in 2022 on the PNM service territory over the period 2022-2053. On average, total employment increases by 409 jobs, Gross Regional Product (GRP) increases by \$91.3 million, disposable personal income per household increases by \$134, and the population increases by 1,181 people.

Figure 0.1 shows annual employment impacts for the PNM service territory, including total employment as well as employment in the five most impacted sectors.

Figure 0.1: Annual Employment Impacts (Total & Top 5 Impacted Sectors)

Units: Jobs

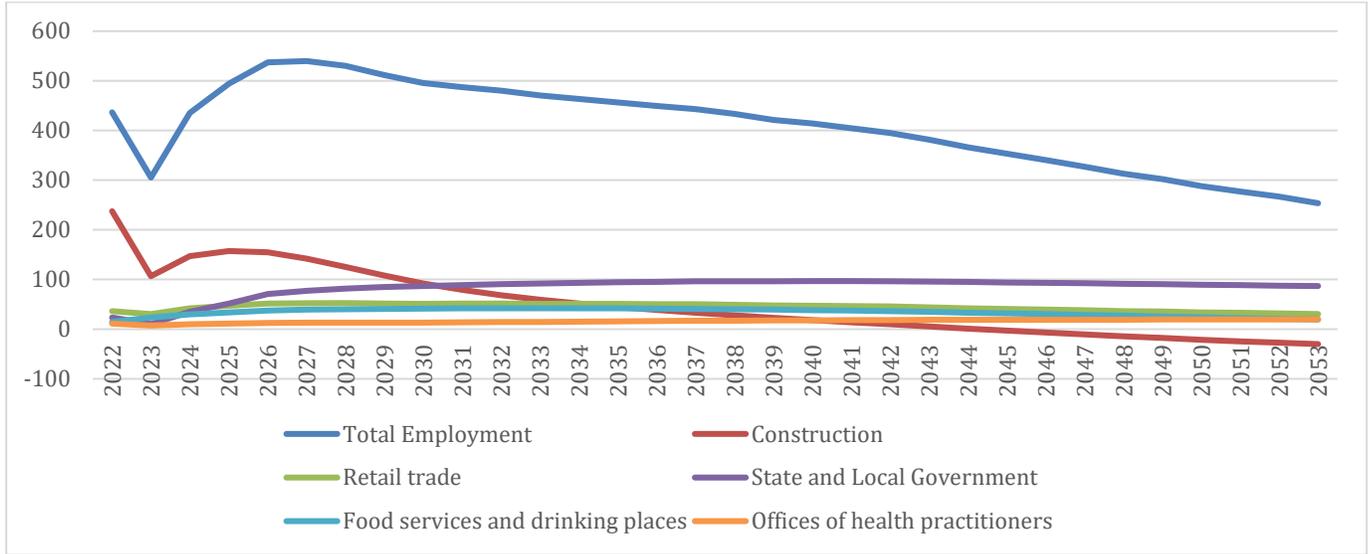


Figure 0.2 breaks out the annual PNM service territory GRP impacts by the different direct impact components.

Figure 0.2: Annual GRP Impacts (Total & By Direct Impact Component)

Units: Millions of 2019 Dollars

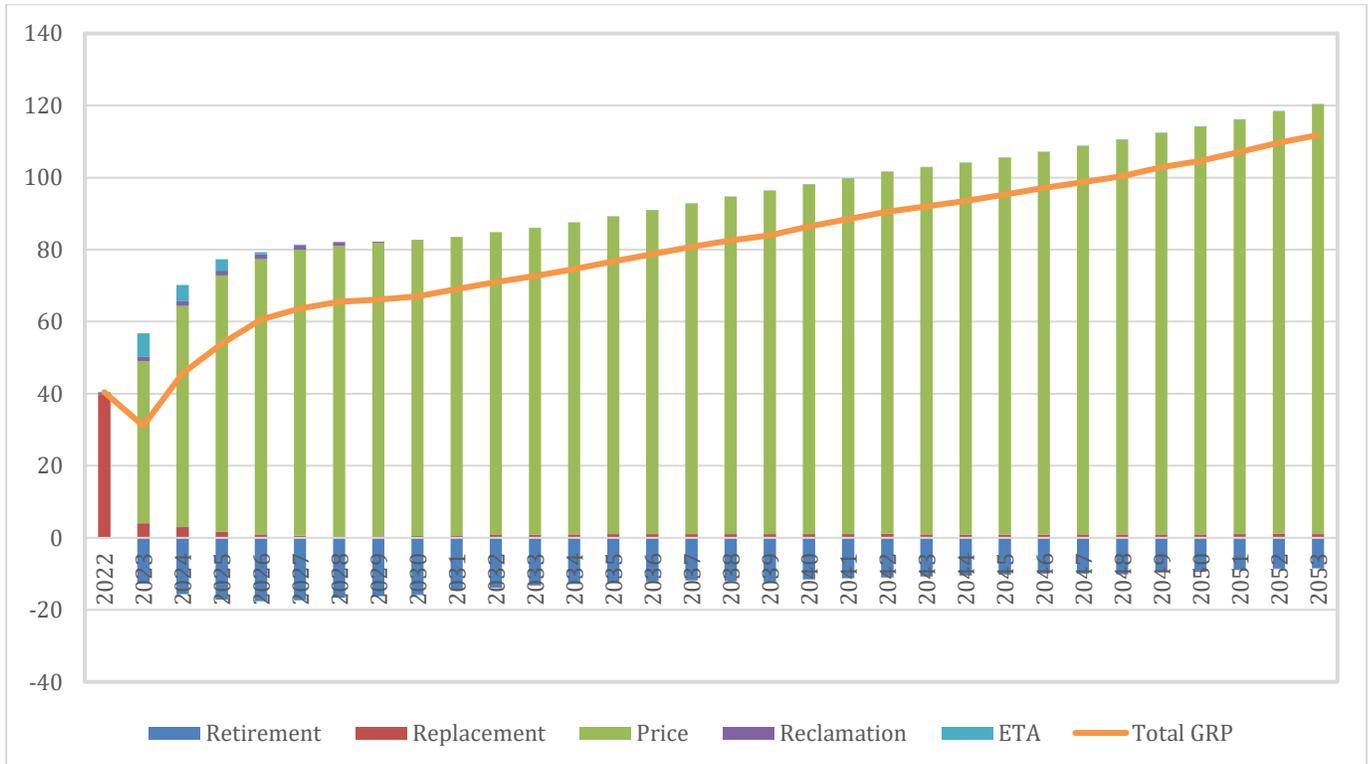


Figure 0.3 shows the annual impacts on real disposable personal income per household.

Figure 0.3: Annual Disposable Personal Income per Household Impacts

Units: 2019 Dollars

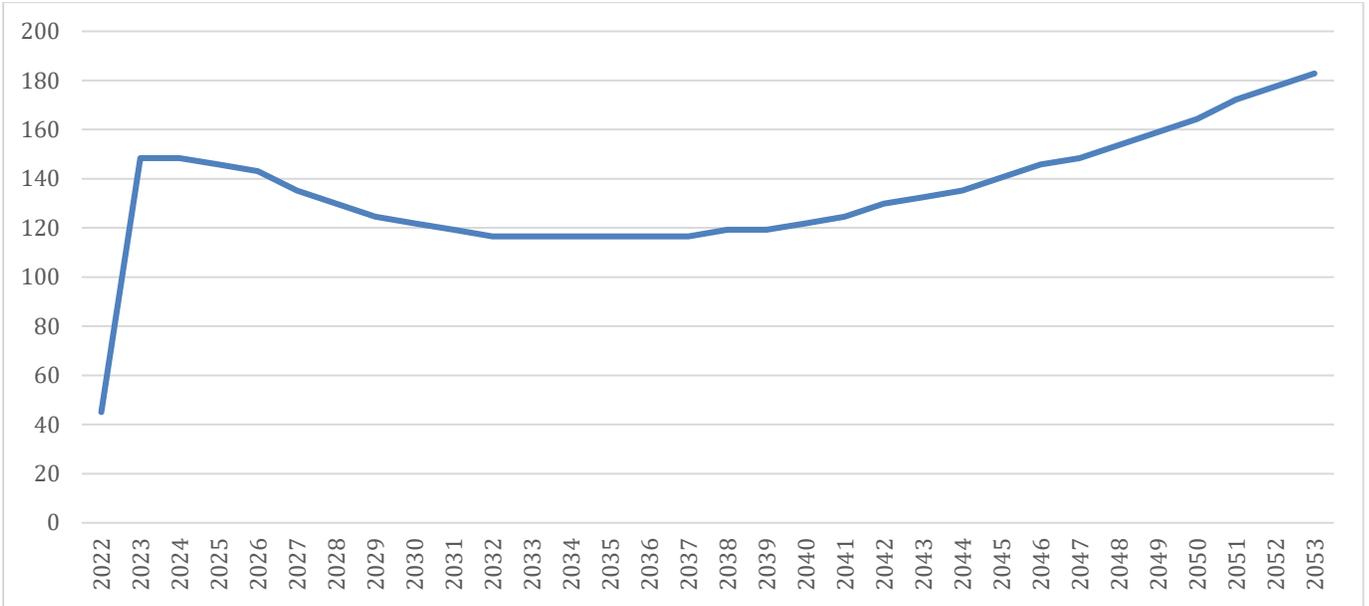
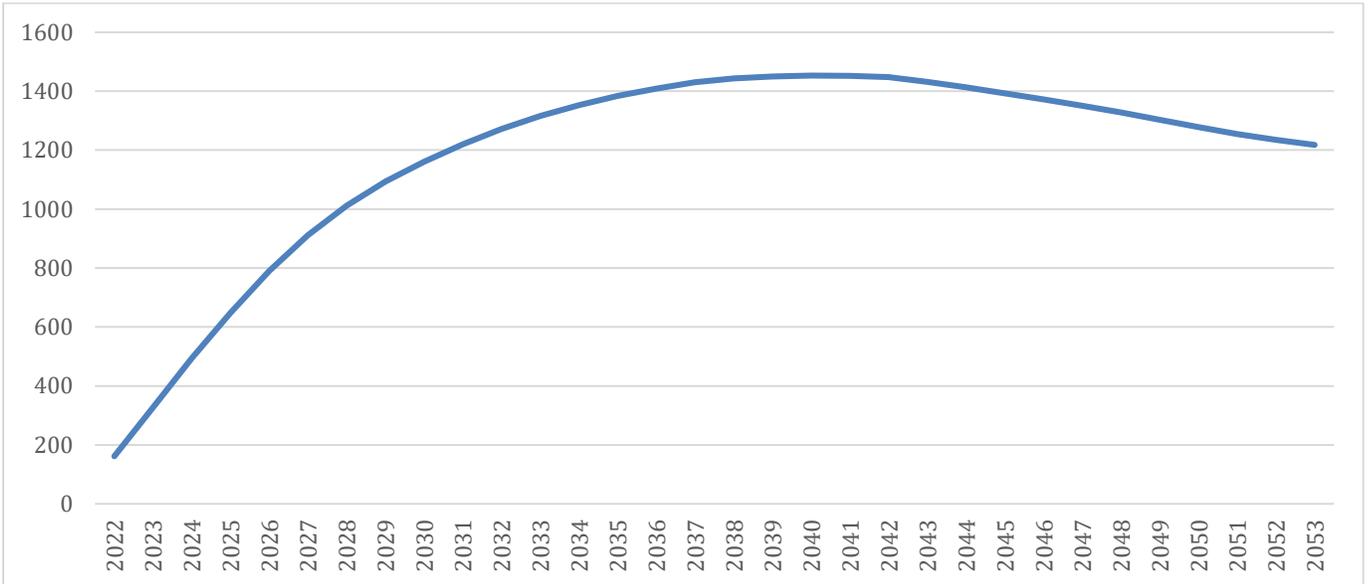


Figure 0.4 shows the annual population impacts.

Figure 0.4: Annual Population Impacts

Units: Individuals



Introduction

The Public Service Company of New Mexico (PNM) has engaged Regional Economic Models, Inc. (REMI) to analyze the economic and demographic impacts of retiring its coal-fired San Juan Generating Station (SJGS), located in San Juan County, New Mexico, in 2022 instead of the planned retirement year of 2053. The SJGS is fueled by coal from a single-source mine that is also located in San Juan County and owned by the San Juan Coal Company (SJCC); the SJCC mine would also be retired.

Prior studies have indicated the importance of the SJGS and the San Juan Coal Mine (the Mine) to the regional economy and the potential impact on San Juan County jobs and incomes that would result from a closure. This study does not reexamine the impacts on San Juan County, but looks at the economic impacts on PNM's service territory.

PNM plans to replace the SJGS's lost electricity generation capacity with generating assets across New Mexico that are fueled by natural gas, solar power, and batteries. PNM estimates that these changes in their electricity generation infrastructure will result in lower electricity prices than would be the case with continued operation of SJGS for customers in their service territory. The service territory covers eight counties in New Mexico and includes the cities of Albuquerque and Santa Fe. This reflects the sustained outlook for low prices of natural gas and for low costs of gas-fired generation resources, renewable energy and battery storage. Also, recent securitization legislation has lowered the costs of the closure to PNM ratepayers.

This report considers the impacts on the PNM service territory of the SJGS and SJCC mine retirements, the investments in and operation of the replacement generating assets, and the changes in electricity prices, as well as state funding for Energy Transition Act (ETA) assistance funds to be provided to San Juan County and PNM's change in reclamation spending at the SJGS site. Over the period 2022-2053, the impacts are generally positive, with gains in employment, Gross Regional Product (GRP), disposable personal income per household, and population.

Methodology

REMI Methodology

In order to assess the economic and demographic impacts of retiring and replacing the SJGS in 2022, REMI uses a 160-sector PI+ v2.2 model with two regions: the PNM Service Territory (comprised of Bernalillo, Santa Fe, Sandoval, Valencia, Luna, Grant, Lincoln, and San Miguel Counties) and the Rest of New Mexico (comprised of all counties in New Mexico not in the PNM Service Territory). Notably, the Rest of New Mexico region includes San Juan County, in which the SJGS and the SJCC mine are currently located. More detailed information about the PI+ model is available in Appendix II.

The study period begins in 2019 and ends in 2053, when the SJGS would have otherwise been retired.

REMI considers five categories of direct impacts: (1) the SJGS and SJCC mine retirements; (2) the investment in and operation of the replacement generating assets; (3) PNM's electricity price change; (4) ETA assistance funds for San Juan County; and (5) PNM's change in reclamation spending at the SJGS site.

PNM Data

PNM provided information regarding current employment, wages and associated labor costs for SJGS and the coal mine. In addition, forecasts of fuel purchases and operating and maintenance (O&M) expenditures for SJGS, the coal mine and the replacement resources were also estimated by PNM. REMI used this information to design the comparison cases of (1) SJGS-continues operation and (2) SJGS retires in 2022. Other data inputs included changes to plant decommissioning expenditure amounts and timing and the same for coal mine reclamation expenditures. Recent legislation in New Mexico established assistance funds to provide economic development and training to the affected area. PNM estimated those would total \$22 million.

PNM estimated the changes in the cost of electricity production between the SJGS-continues case and the closure case. PNM did not have projections of total retail electricity prices for those future years. In the SJGS-continues case, prices were assumed to rise at 1.5% through the study period. The cost savings were applied as a reduction to that baseline price. That generation cost reduction represented 5.47% of total projected revenue.

The estimates for these items reflect the operation/retirement of the entire plant (Units #1 and #4), not just the PNM ownership percentage. More detail is available in Appendix III and in the discussions below.

Direct Impacts: SJGS & SJCC Mine Retirements

Retiring the SJGS includes eliminating all of its direct output and employment, intermediate inputs, and investment spending. PNM provides data on total SJGS output, total SJGS employment, total SJGS wages, and total SJGS investment spending. PNM also provides data on total output, total employment, and total wages for the SJGS's key intermediate input: fuel purchases of coal from the SJCC mine. The data can be found in Appendix III Table A3.1.

Direct Impacts: Replacement Generating Assets

The electricity generation capacity lost in the SJGS retirement is replaced by three different types of generating assets: natural gas, solar power, and batteries. PNM provides data by region on the initial and ongoing investment spending in these assets as well as the operations and maintenance spending. The data can be found in Appendix III Tables A3.2-4.

Direct Impacts: Electricity Price

As a result of the SJGS retirement and the introduction of replacement assets, PNM estimates that electricity costs for their industrial, commercial, and residential customers in the PNM Service Territory would be lower than under the scenario in which SJGS continues operating. The net change estimate shows costs would be higher by approximately 5.47% starting in 2023 under the assumption that SJGS would continue operations beyond 2022. This is represented by a change in fuel costs for businesses and household electricity prices for residential customers.

Direct Impacts: ETA Assistance Funds

PNM provides data on the ETA assistance funds to be provided to San Juan County in the three years following the SJGS retirement. A total of \$22 million is provided over the period 2023-2025, with 50% paid in 2023, 30% in 2024, and 20% in 2025. This is represented by increases in local government spending in the Rest of New Mexico. It is assumed to be funded 50% through a transfer from the state government general fund and 50% through an increase in personal income taxes.

Direct Impacts: Reclamation Spending

PNM provides data on the change in their reclamation spending at the SJGS site as a result of the early retirement. This is represented by a change in spending in the waste management sector in the Rest of New Mexico. The data can be found in Appendix III Table A3.5.

Results

This section reports several key economic and demographic impacts of retiring the SJGS in 2022 on the PNM Service Territory over the period 2022-2053, specifically on employment, GRP, disposable personal income, and population.

Employment

Figure 3.1 shows annual employment impacts for the PNM Service Territory during the period 2022-2053, including total employment as well as employment in the five most impacted sectors. Figure 3.2 shows annual employment impacts in the five most impacted occupations. Table 3.1 displays the annual average employment impacts.

Figure 3.1: Annual Employment Impacts (Total & Top 5 Impacted Sectors)

Units: Jobs

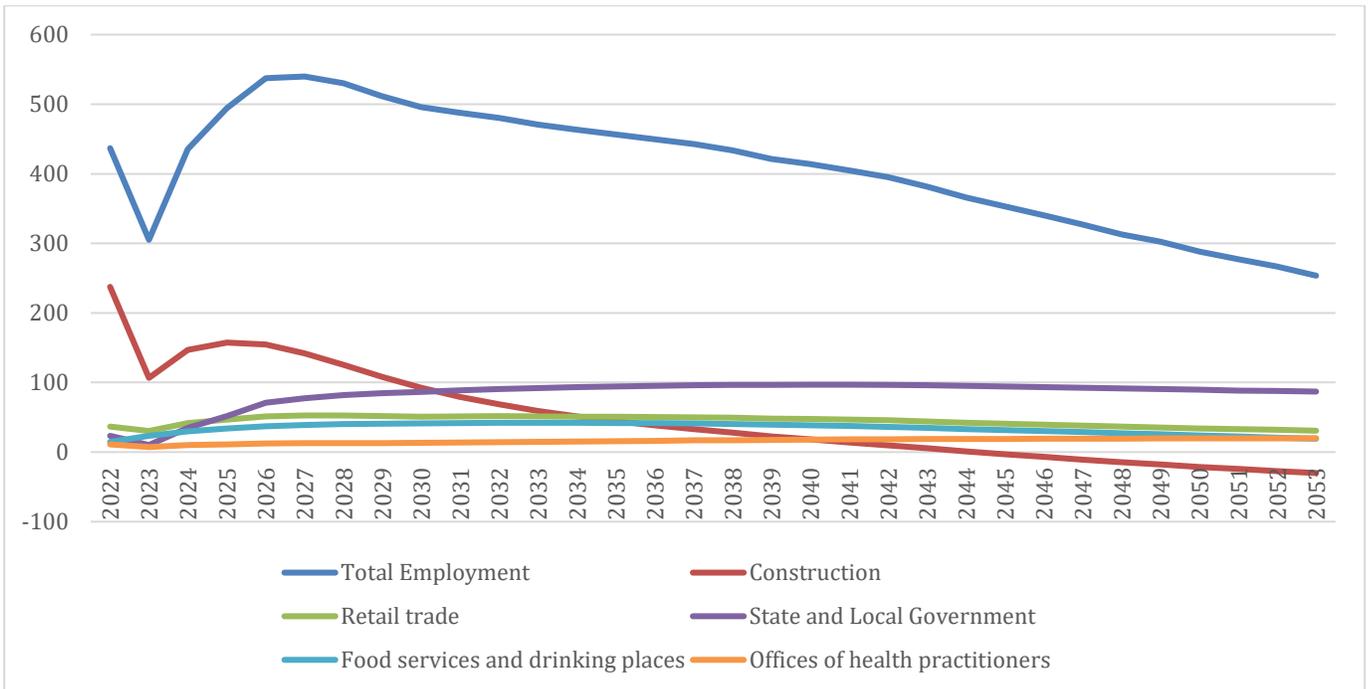


Figure 3.2: Annual Employment Impacts (Top 5 Impacted Occupations)

Units: Jobs

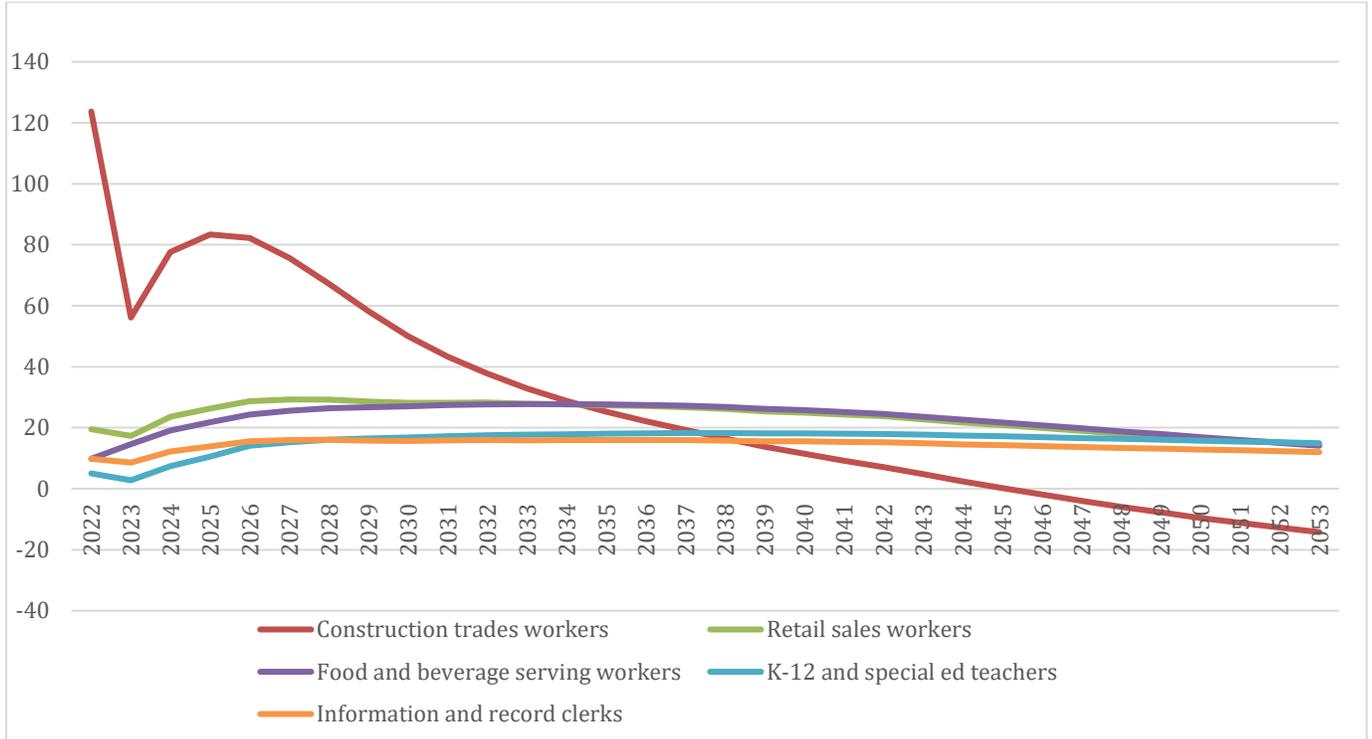


Table 3.1: Average Employment Impacts

Units: Jobs

Category	Average
Total Employment	409
<i>Top 5 Impacted Sectors</i>	
State and Local Government	83
Construction	50
Retail trade	44
Food services and drinking places	34
Offices of health practitioners	16
<i>Top 5 Impacted Occupations</i>	
Construction trades workers	28
Retail sales workers	23
Food and beverage serving workers	23
K-12 and special ed teachers	16
Information and record clerks	14

On average, the impact on total employment is 409 jobs. Approximately 53% of these jobs accrue in the five most impacted sectors, which include the public sector and the private construction, retail, restaurant, and health practitioner sectors. These sectors are large and generally population-driven, so the increase in population discussed below creates significant new demand. In turn, this demand creates the need for new jobs, especially in the rather labor-intensive retail and restaurant sectors. Four of the top five most impacted occupations are directly tied to their main industry (many teachers are associated with the public sector). The only occupation on the list not associated closely with one particular sector is information and record clerks, which is a general administrative kind of position that is distributed across many sectors.

As shown in Figure 3.1, the employment spike in 2022 is driven primarily by the construction sector as the replacement assets are built. Then, over the next several years, the economic stimulus driven in large part by increased business competitiveness (see discussion below) takes full effect and also creates a second more gradual construction boom driven by additional induced business investment. The construction impact does wane thereafter, while the other sectors show relatively stable employment gains.

Gross Regional Product

Figure 3.3 shows annual GRP impacts for the PNM Service Territory during the period 2022-2053, including total GRP as well as value-added in the five most impacted sectors. Table 3.2 displays the annual average GRP and value-added impacts. Figure 3.4 breaks out the annual total GRP impacts by the different direct impact components.

Figure 3.3: Annual Value-Added Impacts (Total & Top 5 Impacted Sectors)

Units: Millions of 2019 Dollars

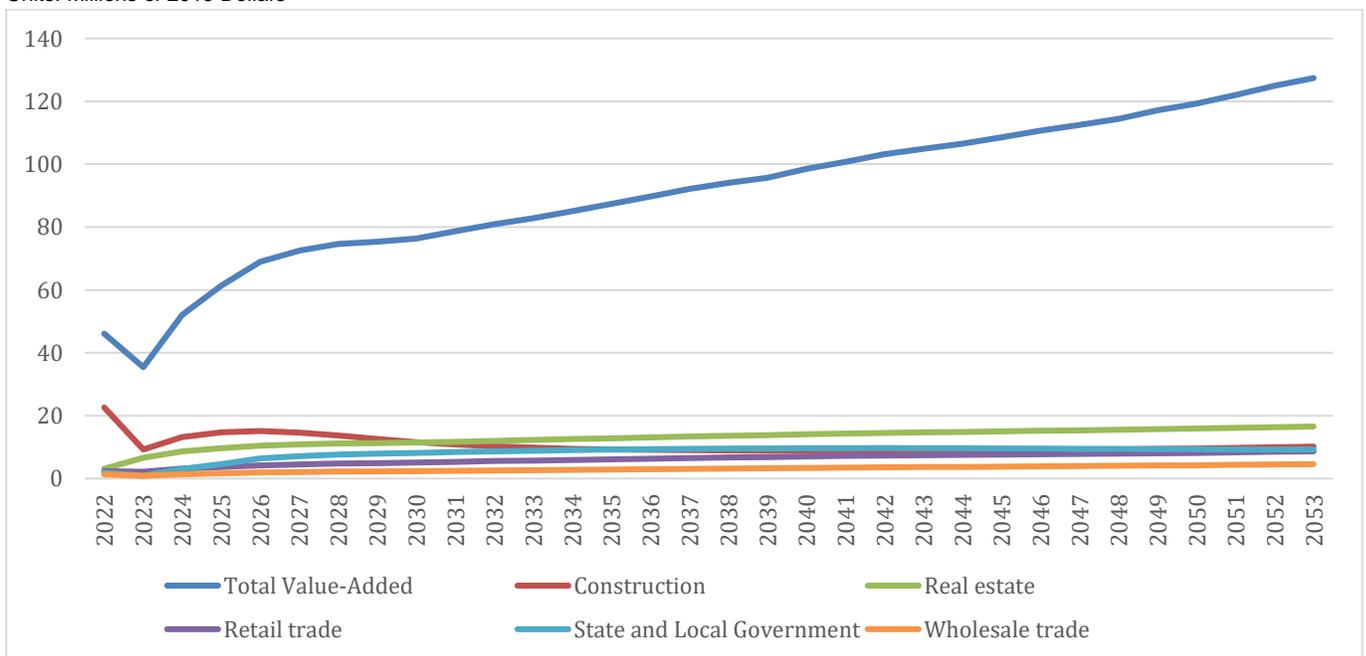


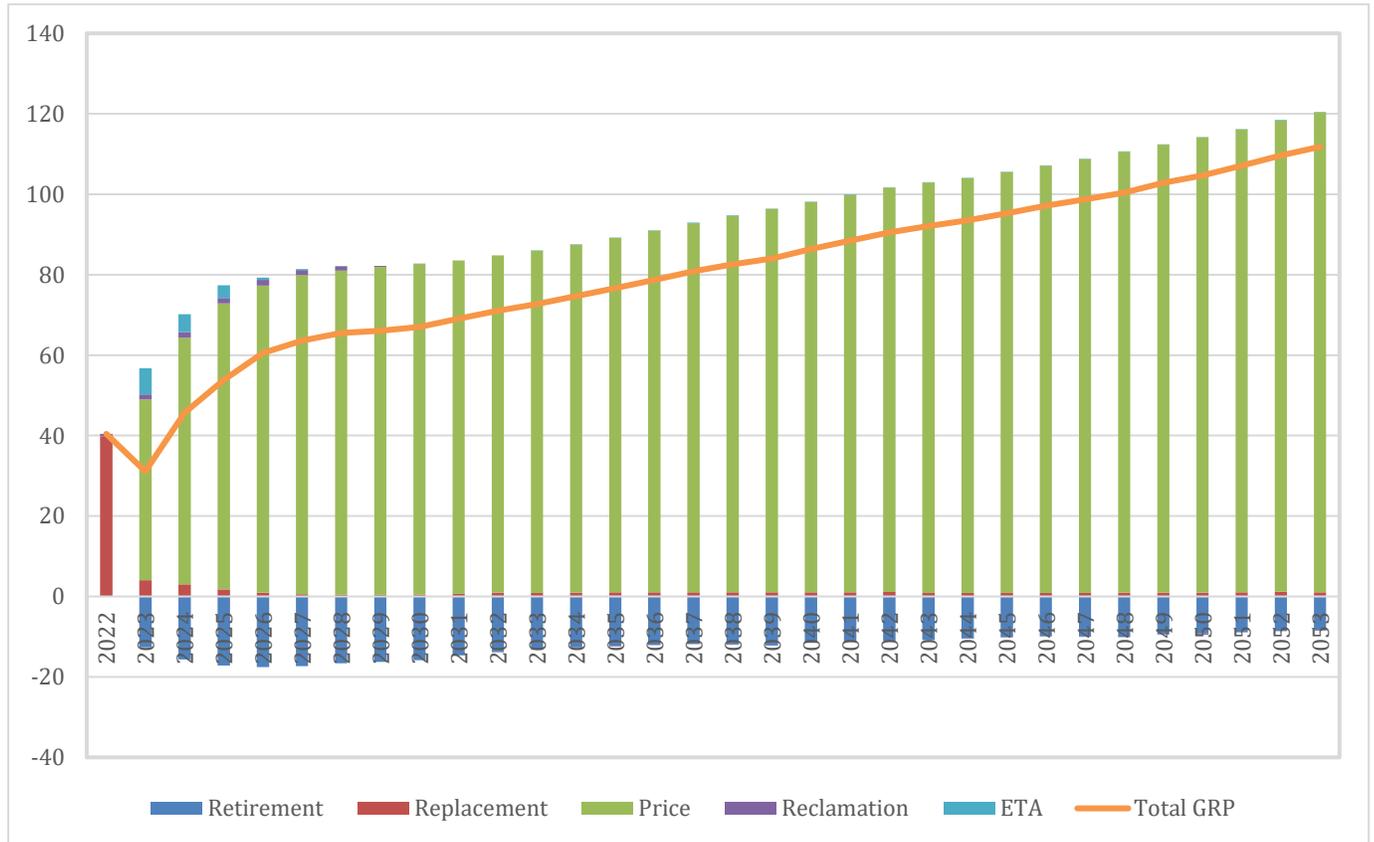
Table 3.2: Average Value-Added Impacts

Units: Millions of 2019 Dollars

Category	Average
Total Value-Added	91.3
<i>Top 5 Impacted Sectors</i>	
Real estate	12.9
Construction	10.7
State and Local Government	8.2
Retail trade	6.2
Wholesale trade	3.1

Figure 3.4: Annual GRP Impacts (Total & By Direct Impact Component)

Units: Millions of 2019 Dollars



On average, the impact on GRP is \$91.3 million. Approximately 45% of this accrues as value-added increases in the top 5 most impacted sectors. Real estate and wholesale trade replace restaurants and health practitioners in the five most impacted sectors. They are also large sectors, but they are less labor-intensive. Wholesale trade is closely tied to retail, and real estate is closely tied to the increase in population as new residents need a place to live.

As shown in Figure 3.4, the increase in GRP is driven primarily by the anticipated decrease in the price of electricity in the PNM service territory, caused in part by the switch to locally abundant and inexpensive natural gas as a fuel source. The lower price has a positive impact both on businesses and consumers. For businesses, it lowers their fuel costs, and thereby their overall production costs. This allows them to be more cost-competitive relative to other domestic and international regions, allowing current businesses to expand and attracting new businesses to the region. It also allows them to lower consumer prices for the goods and services they produce. For consumers, they see a direct decrease in their electricity prices. These price decreases allow them to expand their consumption, which creates additional demand for businesses in the region.

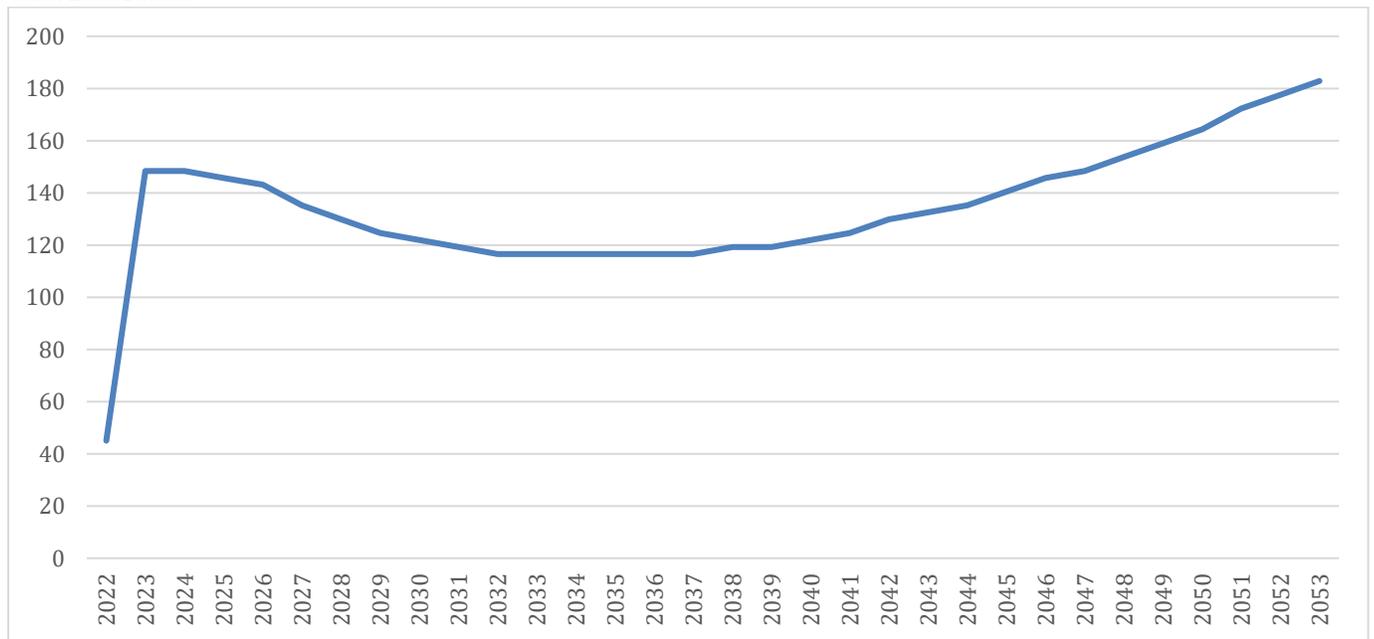
In looking at the service territory effects, the impact of the SJGS and SJCC mine retirements outweighs the impact of investment in and operation of the replacement generating assets. However, the impact of the price decrease dominates both. The ETA assistance funds and change in reclamation spending make relatively small contributions to the overall impact outside of San Juan County.

Disposable Personal Income

Figure 3.5 shows annual disposable personal income per household¹ impacts for the PNM Service Territory during the period 2022-2053.

Figure 3.5: Annual Disposable Personal Income per Household Impacts

Units: 2019 Dollars



¹ The model produces disposable personal income per capita impacts, which are then multiplied by a factor of 2.65 to generate household-level impacts. This multiplication factor is the U.S. Census Bureau's "Persons per household, 2013-2017" measure for the state of New Mexico, which is published under the "Families & Living Arrangements" heading at <https://www.census.gov/quickfacts/fact/table/nm/PST045218>.

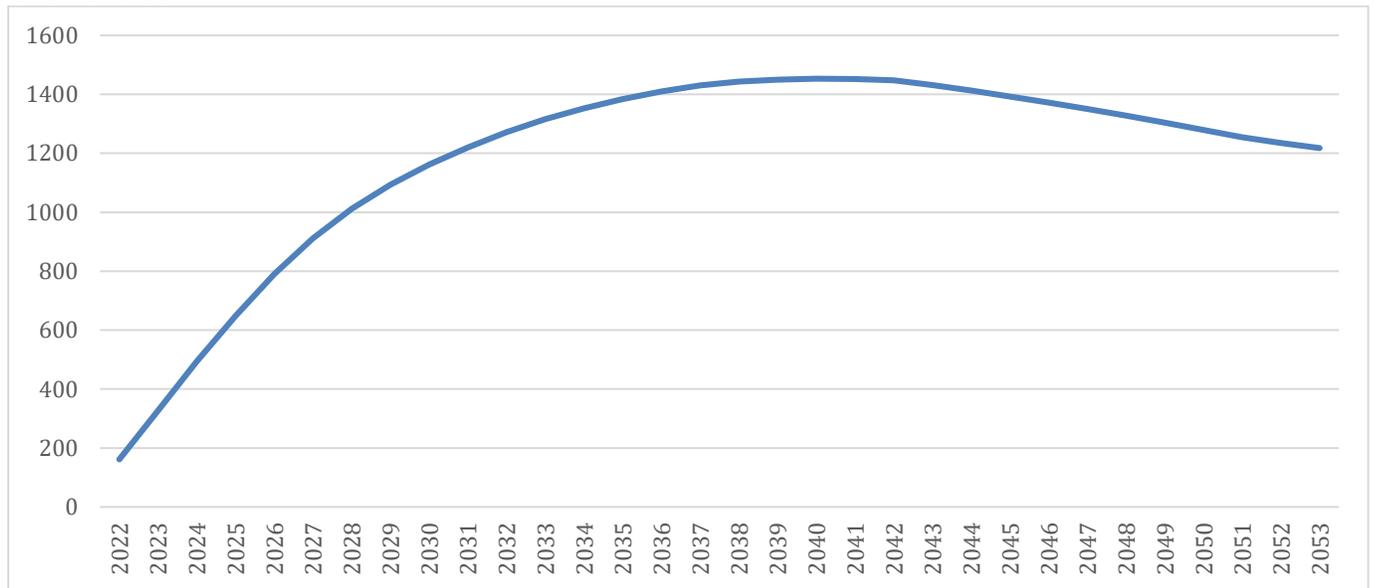
On average, the impact on disposable personal income per household is \$134. This is driven primarily by an increase in total labor income per household, as the increase in employment raises labor demand, putting upward pressure on wage rates.

Population

Figure 3.6 shows annual population impacts for the PNM Service Territory during the period 2022-2053.

Figure 3.6: Annual Population Impacts

Units: Individuals



On average, the impact on population is 1,181 people. This increase is primarily driven by economically motivated in-migration. The more competitive business environment and higher level of consumption create job opportunities, which attract workers to move into the region. In turn, this influx drives further increases in consumption demand.

Appendix I: Glossary

Output: The amount of production, including all intermediate goods purchased as well as value added (compensation and profit). This can also be thought of as sales or supply.

Employment: Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work for all sectors.

Intermediate Inputs: The goods and services that are used as inputs into the production of final goods and services.

Fuel Cost: The sectoral fuel cost in the region relative to the nation. In the PI+ model, there are three fuel types: electricity, natural gas, and petroleum.

GRP: Gross Regional Product. The market value of goods and services produced by labor and property in a given region.

Value-Added: The gross output of a sector less its intermediate inputs; the contribution of a sector to GRP.

Disposable Personal Income: Personal Income is the income received by persons from all sources. Disposable Personal Income is Personal Income net of taxes; it is the income available to persons for spending or saving.

Appendix II: REMI Model Framework

PI+ is a structural economic forecasting and policy analysis model. The following core framework applies to all REMI model builds. The model integrates input-output, computable general equilibrium, econometric and economic geography methodologies. The model is dynamic, with forecasts and simulations generated on an annual basis and behavioral responses to compensation, price, and other economic factors.

The model consists of thousands of simultaneous equations with a structure that is relatively straightforward. The exact number of equations used varies depending on the extent of industry, demographic, demand, and other detail in the specific model being used. The overall structure of the model can be summarized in five major blocks: (1) Output and Demand, (2) Labor and Capital Demand, (3) Population and Labor Supply, (4) Compensation, Prices, and Costs, and (5) Market Shares. The blocks and their key interactions are shown in Figures 1 and 2.

Figure A2.1: REMI Model Linkages

REMI Model Linkages (Excluding Economic Geography Linkages)

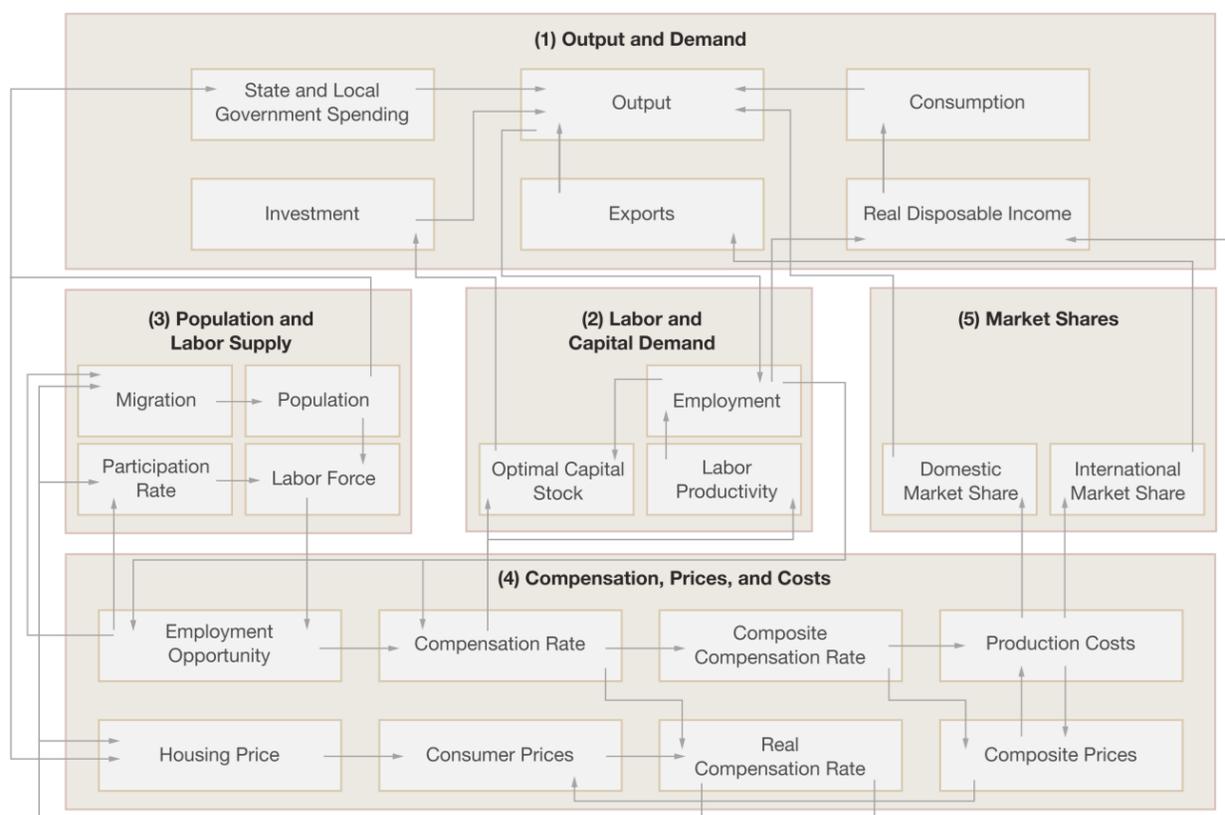
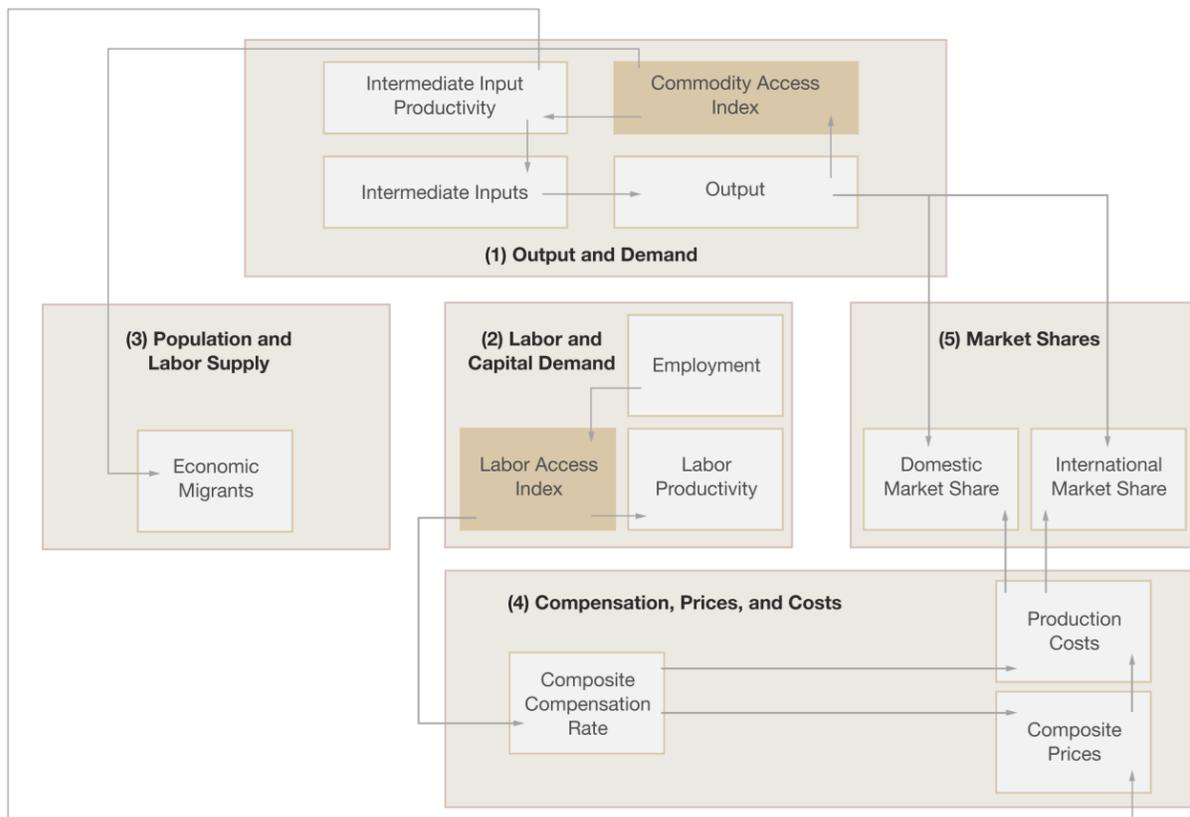


Figure A2.2: Economic Geography Linkages



The Output and Demand block consists of output, demand, consumption, investment, government spending, exports, and imports, as well as feedback from output change due to the change in the productivity of intermediate inputs. The Labor and Capital Demand block includes labor intensity and productivity as well as demand for labor and capital. Labor force participation rate and migration equations are in the Population and Labor Supply block. The Compensation, Prices, and Costs block includes composite prices, determinants of production costs, the consumption price deflator, housing prices, and the compensation equations. The proportion of local, inter-regional, and export markets captured by each region is included in the Market Shares block.

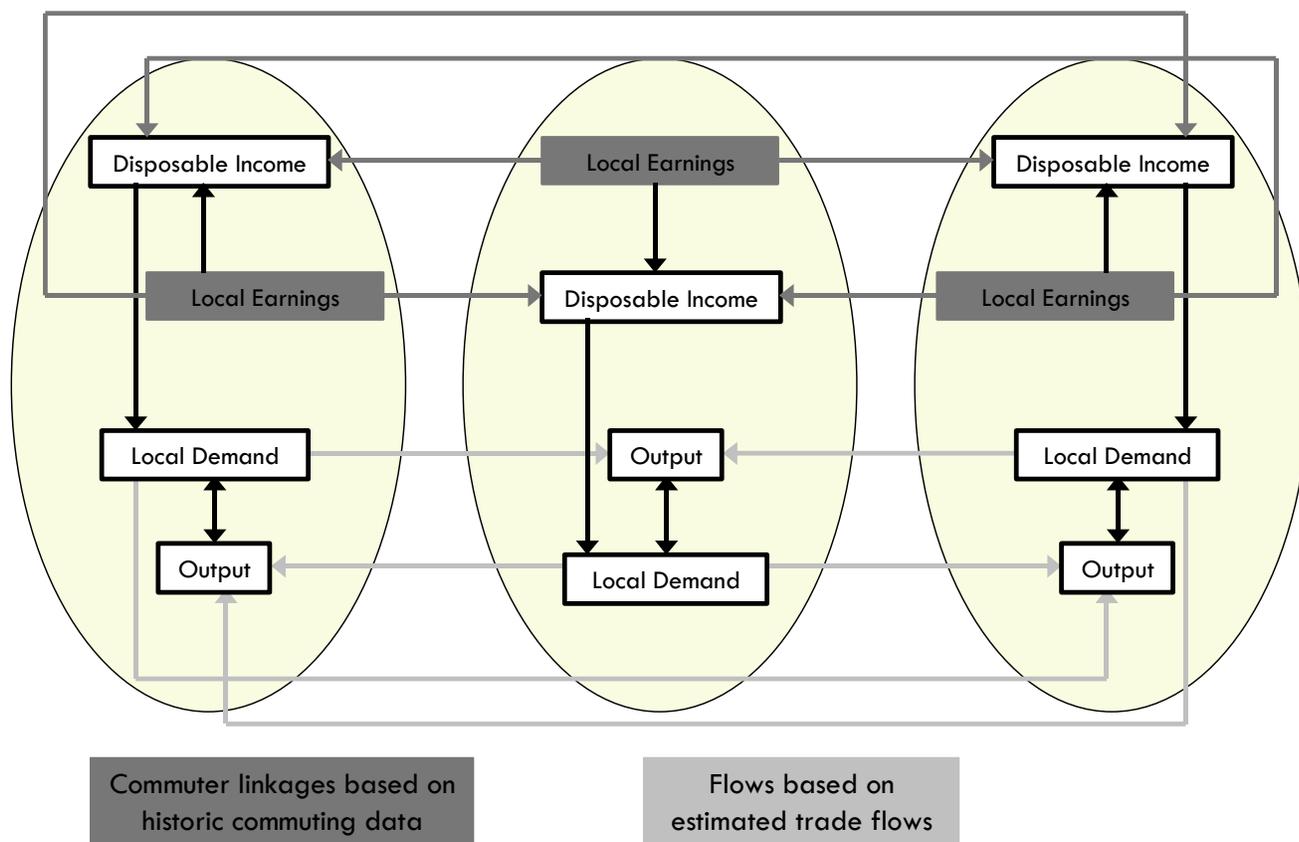
Models can be built as single region, multi-region, or multi-region national models. A region is defined broadly as a sub-national area, and could consist of a state, province, county, or city, or any combination of sub-national areas.

Single-region models consist of an individual region, called the home region. The rest of the nation is also represented in the model. However, since the home region is only a small part of the total nation, the changes in the region do not have an endogenous effect on the variables in the rest of the nation.

Multi-regional models have interactions among regions, such as trade and commuting flows. These interactions include trade flows from each region to each of the other regions. These flows are illustrated for a three-region model in Figure 3.

Figure A2.3: Trade and Commuter Flow Linkages

Trade and Commuter Flow Linkages



Multiregional national models also include a central bank monetary response that constrains labor markets. Models that only encompass a relatively small portion of a nation are not endogenously constrained by changes in exchange rates or monetary responses.

Block 1. Output and Demand

This block includes output, demand, consumption, investment, government spending, import, commodity access, and export concepts. Output for each industry in the home region is determined by industry demand in all regions in the nation, the home region's share of each market, and international exports from the region.

For each industry, demand is determined by the amount of output, consumption, investment, and capital demand on that industry. Consumption depends on real disposable income per capita, relative prices, differential income elasticities, and population. Input productivity depends on access to inputs because a larger choice set of inputs means it is more likely that the input with the specific characteristics required for the job will be found. In the capital stock adjustment process, investment occurs to fill the difference between optimal and actual capital stock for residential, non-residential, and equipment investment. Government spending changes are determined by changes in the population.

Block 2. Labor and Capital Demand

The Labor and Capital Demand block includes the determination of labor productivity, labor intensity, and the optimal capital stocks. Industry-specific labor productivity depends on the availability of workers with differentiated skills for the occupations used in each industry. The occupational labor supply and commuting costs determine firms' access to a specialized labor force.

Labor intensity is determined by the cost of labor relative to the other factor inputs, capital and fuel. Demand for capital is driven by the optimal capital stock equation for both non-residential capital and equipment. Optimal capital stock for each industry depends on the relative cost of labor and capital, and the employment weighted by capital use for each industry. Employment in private industries is determined by the value added and employment per unit of value added in each industry.

Block 3. Population and Labor Supply

The Population and Labor Supply block includes detailed demographic information about the region. Population data is given for age, gender, and race, with birth and survival rates for each group. The size and labor force participation rate of each group determines the labor supply. These participation rates respond to changes in employment relative to the potential labor force and to changes in the real after-tax compensation rate. Migration includes retirement, military, international, and economic migration. Economic migration is determined by the relative real after-tax compensation rate, relative employment opportunity, and consumer access to variety.

Block 4. Compensation, Prices and Costs

This block includes delivered prices, production costs, equipment cost, the consumption deflator, consumer prices, the price of housing, and the compensation equation. Economic geography concepts account for the productivity and price effects of access to specialized labor, goods, and services.

These prices measure the price of the industry output, taking into account the access to production locations. This access is important due to the specialization of production that takes place within each industry, and because transportation and transaction costs of distance are significant. Composite prices for each industry are then calculated based on the production costs of supplying regions, the effective distance to these regions, and the index of access to the variety of outputs in the industry relative to the access by other uses of the product.

The cost of production for each industry is determined by the cost of labor, capital, fuel, and intermediate inputs. Labor costs reflect a productivity adjustment to account for access to specialized labor, as well as underlying compensation rates. Capital costs include costs of non-residential structures and equipment, while fuel costs incorporate electricity, natural gas, and residual fuels.

The consumption deflator converts industry prices to prices for consumption commodities. For potential migrants, the consumer price is additionally calculated to include housing prices. Housing prices change from their initial level depending on changes in income and population density.

Compensation changes are due to changes in labor demand and supply conditions and changes in the national compensation rate. Changes in employment opportunities relative to the labor force and occupational demand change determine compensation rates by industry.

Block 5. Market Shares

The market shares equations measure the proportion of local and export markets that are captured by each industry. These depend on relative production costs, the estimated price elasticity of demand, and the effective distance between the home region and each of the other regions. The change in share of a specific area in any region depends on changes in its delivered price and the quantity it produces compared with the same factors for competitors in that market. The share of local and external markets then drives the exports from and imports to the home economy.

Appendix III: Input Data

Direct Impacts: SJGS & SJCC Mine Retirements

Table A3.1: SJGS & SJCC Mine Output, Employment, and Wages, and SJGS Investment

Units: Output, Wages, and Investment in Millions of Nominal Dollars, Employment in Jobs

Year	SJGS				SJCC Mine		
	Output	Employment	Wages	Investment	Output	Employment	Wages
2023	56.9	218	28.6	5.5	111.7	250	34.0
2024	57.8	218	29.8	5.6	112.2	250	35.8
2025	58.6	218	31.0	5.6	112.8	250	37.8
2026	59.5	218	32.3	5.7	113.3	250	40.0
2027	60.4	218	33.7	5.8	113.9	250	42.2
2028	61.3	218	35.1	5.9	114.5	250	44.6
2029	65.2	218	36.2	7.1	115.1	250	46.6
2030	69.0	218	37.4	8.4	115.6	250	48.8
2031	64.1	218	38.6	7.5	116.2	250	51.0
2032	65.1	218	39.8	6.3	116.8	250	53.2
2033	66.0	218	41.0	6.4	117.4	250	55.6
2034	67.0	218	42.2	6.5	118.0	250	58.0
2035	68.0	218	43.4	6.5	118.6	250	60.5
2036	69.1	218	44.6	6.6	119.1	250	63.0
2037	70.1	218	45.9	6.7	119.7	250	65.6
2038	74.5	218	47.1	8.1	120.3	250	68.4
2039	78.9	218	48.5	9.7	120.9	250	71.3
2040	73.3	218	49.8	8.5	121.5	250	74.3
2041	74.4	218	51.3	7.2	122.2	250	77.5
2042	75.5	218	52.7	7.3	122.8	250	80.8
2043	76.6	218	54.2	7.4	123.4	250	84.2
2044	77.8	218	55.8	7.5	124.0	250	87.8
2045	79.0	218	57.4	7.6	124.6	250	91.6

2046	80.1	218	59.1	7.7	125.2	250	95.5
2047	85.2	218	60.8	9.2	125.9	250	99.6
2048	90.2	218	62.5	11.0	126.5	250	104.0
2049	83.8	218	64.4	9.8	127.1	250	108.5
2050	85.1	218	66.2	8.7	127.8	250	113.2
2051	86.3	218	68.5	5.0	128.4	250	118.6
2052	87.6	218	70.8	0.7	129.0	250	124.3
2053	89.0	218	73.2	0.5	129.7	250	130.3

Direct Impacts: Replacement Generating Assets

Table A3.2: Natural Gas Assets Construction, Operations & Maintenance, and Investment

Units: Millions of Nominal Dollars

Note: RNM denotes the Rest of New Mexico region, and PNM denotes the PNM Service Territory region.

Year	Construction		Operations & Maintenance		Investment	
	RNM	PNM	RNM	PNM	RNM	PNM
2022	33.1	8.3	0.0	0.0	0.0	0.0
2023	0.0	0.0	6.2	0.4	0.4	0.1
2024	0.0	0.0	6.3	0.4	0.4	0.1
2025	0.0	0.0	6.4	0.4	0.4	0.1
2026	0.0	0.0	6.5	0.4	0.4	0.1
2027	0.0	0.0	6.6	0.4	0.4	0.1
2028	0.0	0.0	6.7	0.4	0.4	0.1
2029	0.0	0.0	6.8	0.4	0.4	0.1
2030	0.0	0.0	6.9	0.4	0.4	0.1
2031	0.0	0.0	7.0	0.4	0.4	0.1
2032	0.0	0.0	7.1	0.4	0.4	0.1
2033	0.0	0.0	7.2	0.5	0.4	0.1
2034	0.0	0.0	7.3	0.5	0.5	0.1
2035	0.0	0.0	7.5	0.5	0.5	0.1
2036	0.0	0.0	7.6	0.5	0.5	0.1
2037	0.0	0.0	7.7	0.5	0.5	0.1

2038	0.0	0.0	7.8	0.5	0.5	0.1
2039	0.0	0.0	7.9	0.5	0.5	0.1
2040	0.0	0.0	8.0	0.5	0.5	0.1
2041	0.0	0.0	8.2	0.5	0.5	0.1
2042	0.0	0.0	8.3	0.5	0.5	0.1
2043	0.0	0.0	8.4	0.5	0.5	0.1
2044	0.0	0.0	8.5	0.5	0.6	0.1
2045	0.0	0.0	8.7	0.5	0.6	0.1
2046	0.0	0.0	8.8	0.5	0.6	0.1
2047	0.0	0.0	8.9	0.6	0.6	0.1
2048	0.0	0.0	9.0	0.6	0.6	0.2
2049	0.0	0.0	9.2	0.6	0.6	0.2
2050	0.0	0.0	9.3	0.6	0.6	0.2
2051	0.0	0.0	9.5	0.6	0.6	0.2
2052	0.0	0.0	9.6	0.6	0.7	0.2
2053	0.0	0.0	9.7	0.6	0.7	0.2

Table A3.3: Solar Power Assets Construction, Operations & Maintenance, and Investment

Units: Millions of Nominal Dollars

Note: RNM denotes the Rest of New Mexico region, and PNM denotes the PNM Service Territory region.

Year	<i>Construction</i>		<i>Operations & Maintenance</i>		<i>Investment</i>	
	RNM	PNM	RNM	PNM	RNM	PNM
2022	96.3	19.3	0.0	0.0	0.0	0.0
2023	0.0	0.0	1.6	0.1	0.2	0.1
2024	0.0	0.0	1.6	0.1	0.2	0.1
2025	0.0	0.0	1.6	0.1	0.2	0.1
2026	0.0	0.0	1.7	0.1	0.2	0.1
2027	0.0	0.0	1.7	0.1	0.2	0.1
2028	0.0	0.0	1.7	0.1	0.2	0.1
2029	0.0	0.0	1.8	0.1	0.2	0.1
2030	0.0	0.0	1.8	0.1	0.2	0.1

2031	0.0	0.0	1.8	0.1	1.2	0.3
2032	0.0	0.0	1.9	0.1	0.2	0.1
2033	0.0	0.0	1.9	0.1	0.2	0.1
2034	0.0	0.0	1.9	0.1	0.3	0.1
2035	0.0	0.0	2.0	0.1	0.3	0.1
2036	0.0	0.0	2.0	0.1	0.3	0.1
2037	0.0	0.0	2.1	0.1	0.3	0.1
2038	0.0	0.0	2.1	0.1	0.3	0.1
2039	0.0	0.0	2.1	0.1	0.3	0.1
2040	0.0	0.0	2.2	0.1	0.3	0.1
2041	0.0	0.0	2.2	0.1	1.4	0.4
2042	0.0	0.0	2.3	0.1	0.3	0.1
2043	0.0	0.0	2.3	0.1	0.3	0.1
2044	0.0	0.0	2.4	0.1	0.3	0.1
2045	0.0	0.0	2.4	0.2	0.3	0.1
2046	0.0	0.0	2.5	0.2	0.3	0.1
2047	0.0	0.0	2.5	0.2	0.3	0.1
2048	0.0	0.0	2.6	0.2	0.3	0.1
2049	0.0	0.0	2.6	0.2	0.3	0.1
2050	0.0	0.0	2.7	0.2	0.3	0.1
2051	0.0	0.0	2.7	0.2	1.7	0.4
2052	0.0	0.0	2.8	0.2	0.4	0.1
2053	0.0	0.0	2.8	0.2	0.4	0.1

Table A3.4: Battery Power Assets Construction, Operations & Maintenance, and Investment

Units: Millions of Nominal Dollars

Note: RNM denotes the Rest of New Mexico region, and PNM denotes the PNM Service Territory region.

Year	Construction		Operations & Maintenance		Investment	
	RNM	PNM	RNM	PNM	RNM	PNM
2022	12.0	6.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.5	0.03	0.2	0.1

2024	0.0	0.0	0.5	0.03	0.2	0.1
2025	0.0	0.0	0.5	0.03	0.2	0.1
2026	0.0	0.0	0.5	0.03	0.2	0.1
2027	0.0	0.0	0.5	0.03	0.2	0.1
2028	0.0	0.0	0.5	0.03	0.2	0.1
2029	0.0	0.0	0.5	0.03	0.2	0.1
2030	0.0	0.0	0.6	0.03	0.2	0.1
2031	0.0	0.0	0.6	0.04	0.2	0.1
2032	0.0	0.0	0.6	0.04	4.9	1.2
2033	0.0	0.0	0.6	0.04	0.2	0.1
2034	0.0	0.0	0.6	0.04	0.3	0.1
2035	0.0	0.0	0.6	0.04	0.3	0.1
2036	0.0	0.0	0.6	0.04	0.3	0.1
2037	0.0	0.0	0.6	0.04	0.3	0.1
2038	0.0	0.0	0.7	0.04	0.3	0.1
2039	0.0	0.0	0.7	0.04	0.3	0.1
2040	0.0	0.0	0.7	0.04	0.3	0.1
2041	0.0	0.0	0.7	0.04	0.3	0.1
2042	0.0	0.0	0.7	0.04	6.0	1.5
2043	0.0	0.0	0.7	0.05	0.3	0.1
2044	0.0	0.0	0.7	0.05	0.3	0.1
2045	0.0	0.0	0.8	0.05	0.3	0.1
2046	0.0	0.0	0.8	0.05	0.3	0.1
2047	0.0	0.0	0.8	0.05	0.3	0.1
2048	0.0	0.0	0.8	0.05	0.3	0.1
2049	0.0	0.0	0.8	0.1	0.3	0.1
2050	0.0	0.0	0.8	0.1	0.3	0.1
2051	0.0	0.0	0.8	0.1	0.4	0.1
2052	0.0	0.0	0.9	0.1	7.3	1.8
2053	0.0	0.0	0.9	0.1	0.4	0.1

Direct Impacts: Reclamation Spending

Table A3.5: Change in PNM Reclamation Spending

Units: Millions of Nominal Dollars

Year	Reclamation Spending
2019	1.2
2020	2.4
2021	4.4
2022	16.4
2023	31.4
2024	30.0
2025	27.6
2026	30.3
2027	29.9
2028	24.8
2029	1.1
2030	-0.1
2031	-0.2
2032	-0.2
2033	-0.3
2034	-0.9
2035	-1.0
2036	-1.1
2037	-1.1
2038	1.0
2039	-2.1
2040	-2.2
2041	-2.2
2042	-2.3
2043	-2.3
2044	-2.4
2045	-2.4

2046	-2.5
2047	-2.5
2048	-2.6
2049	-2.6
2050	-18.1
2051	-5.4
2052	-5.0
2053	-7.0