

Input-Output Scenario

5 Industries in New Mexico

Emsi Q1 2017 Data Set

March 2017

FOUR CORNERS ECONOMIC DEVELOPMENT

5101 College Blvd.
Farmington, New Mexico 87402



Parameters

Regions

Code	Description
35	New Mexico

Industry Scenario

Code	Description	Change Type	Change Value
212111	Bituminous Coal and Lignite Surface Mining	Jobs	-290
212112	Bituminous Coal Underground Mining	Jobs	-69
213113	Support Activities for Coal Mining	Jobs	-10
221112	Fossil Fuel Electric Power Generation	Jobs	-273
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	Jobs	-100

Input-Output Year

2015

Aggregate Changes

<p>\$-145,775,410</p> <p>Change in Earnings 1.83 Multiplier</p>	<p>-2,255</p> <p>Change in Jobs 3.04 Multiplier</p>	<p>\$-68,365,010</p> <p>Change in Taxes on Production and Imports (TPI)</p>
<p>Based upon actual data, wages would decrease by an additional:</p> <p>\$20,960,646 Mining Salaries \$ 1,595,259 PNM Salaries</p> <p>Adjusted Change in Earnings:</p> <p>\$-168,331,315</p>		<p>Loss of NM State Income Taxes on directly affected Lost Employee Wages (married)</p> <p>\$ - 1,838,206</p> <p>Lost GRT on employee spending*</p> <p>\$ - 1,702,585</p> <p>Adjusted Lost Taxes:</p> <p>\$-71,905,801</p>

* Assumes 50% of employee net income is spent on GRT taxable items and services

Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Crop and Animal Production	-3
21	Mining, Quarrying, and Oil and Gas Extraction	-425
22	Utilities	-279
23	Construction	-120
31	Manufacturing	-32
42	Wholesale Trade	-45
44	Retail Trade	-174
48	Transportation and Warehousing	-57
51	Information	-16
52	Finance and Insurance	-52
53	Real Estate and Rental and Leasing	-57
54	Professional, Scientific, and Technical Services	-98
55	Management of Companies and Enterprises	-12
56	Administrative and Support and Waste Management and Remediation Services	-79
61	Educational Services	-30
62	Health Care and Social Assistance	-181
71	Arts, Entertainment, and Recreation	-27
72	Accommodation and Food Services	-140
81	Other Services (except Public Administration)	-180
90	Government	-246

Scenario Results - Occupation

SOC	Occupation	Change in Jobs	
11-0000	Management Occupations	-140	
13-0000	Business and Financial Operations Occupations	-91	
15-0000	Computer and Mathematical Occupations	-25	
17-0000	Architecture and Engineering Occupations	-63	
19-0000	Life, Physical, and Social Science Occupations	-14	
21-0000	Community and Social Service Occupations	-24	
23-0000	Legal Occupations	-13	
25-0000	Education, Training, and Library Occupations	-103	
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-48	
29-0000	Healthcare Practitioners and Technical Occupations	-68	
31-0000	Healthcare Support Occupations	-38	
33-0000	Protective Service Occupations	-42	
35-0000	Food Preparation and Serving Related Occupations	-133	
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-64	
39-0000	Personal Care and Service Occupations	-84	
41-0000	Sales and Related Occupations	-196	
43-0000	Office and Administrative Support Occupations	-258	
45-0000	Farming, Fishing, and Forestry Occupations	-3	
47-0000	Construction and Extraction Occupations	-351	
49-0000	Installation, Maintenance, and Repair Occupations	-225	
51-0000	Production Occupations	-126	
53-0000	Transportation and Material Moving Occupations	-144	
55-0000	Military occupations	0	
99-0000	Unclassified Occupation	-4	

















Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-13
Male 14-18	-12
Female 19-21	-32
Male 19-21	-43
Female 22-24	-47
Male 22-24	-59
Female 25-34	-173
Male 25-34	-294
Female 35-44	-167
Male 35-44	-301
Female 45-54	-192
Male 45-54	-311
Female 55-64	-170
Male 55-64	-306
Female 65-99	-53
Male 65-99	-83

























Changes to Bituminous Coal and Lignite Surface Mining

<p>\$-58,172,579</p> <p>Change in Earnings 1.89 Multiplier</p>	<p>-880</p> <p>Change in Jobs 3.04 Multiplier</p>	<p>\$-21,677,304</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Crop and Animal Production	-2
21	Mining, Quarrying, and Oil and Gas Extraction	-332 
22	Utilities	-2
23	Construction	-45 
31	Manufacturing	-14 
42	Wholesale Trade	-22 
44	Retail Trade	-70 
48	Transportation and Warehousing	-26 
51	Information	-6
52	Finance and Insurance	-21 
53	Real Estate and Rental and Leasing	-23 
54	Professional, Scientific, and Technical Services	-33 
55	Management of Companies and Enterprises	-7
56	Administrative and Support and Waste Management and Remediation Services	-26 
61	Educational Services	-12 
62	Health Care and Social Assistance	-72 
71	Arts, Entertainment, and Recreation	-11 
72	Accommodation and Food Services	-49 
81	Other Services (except Public Administration)	-32 
90	Government	-77 

Scenario Results - Occupation

SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-51 
13-0000	Business and Financial Operations Occupations	-30 
15-0000	Computer and Mathematical Occupations	-8 
17-0000	Architecture and Engineering Occupations	-17 
19-0000	Life, Physical, and Social Science Occupations	-4 
21-0000	Community and Social Service Occupations	-9 
23-0000	Legal Occupations	-4 
25-0000	Education, Training, and Library Occupations	-34 
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-14 
29-0000	Healthcare Practitioners and Technical Occupations	-27 
31-0000	Healthcare Support Occupations	-15 
33-0000	Protective Service Occupations	-15 
35-0000	Food Preparation and Serving Related Occupations	-47 
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-24 
39-0000	Personal Care and Service Occupations	-32 
41-0000	Sales and Related Occupations	-74 
43-0000	Office and Administrative Support Occupations	-88 
45-0000	Farming, Fishing, and Forestry Occupations	-1 
47-0000	Construction and Extraction Occupations	-210 
49-0000	Installation, Maintenance, and Repair Occupations	-65 
51-0000	Production Occupations	-33 
53-0000	Transportation and Material Moving Occupations	-75 
55-0000	Military occupations	0 
99-0000	Unclassified Occupation	-3 















Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-5
Male 14-18	-4
Female 19-21	-12
Male 19-21	-17
Female 22-24	-18
Male 22-24	-24
Female 25-34	-65
Male 25-34	-127
Female 35-44	-62
Male 35-44	-123
Female 45-54	-69
Male 45-54	-121
Female 55-64	-60
Male 55-64	-123
Female 65-99	-20
Male 65-99	-30

























Changes to Bituminous Coal Underground Mining

<p>\$-11,528,536</p> <p>Change in Earnings 1.93 Multiplier</p>	<p>-189</p> <p>Change in Jobs 2.73 Multiplier</p>	<p>\$-4,631,438</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Crop and Animal Production	0
21	Mining, Quarrying, and Oil and Gas Extraction	-77 
22	Utilities	0
23	Construction	-9 
31	Manufacturing	-3 
42	Wholesale Trade	-4 
44	Retail Trade	-14 
48	Transportation and Warehousing	-5 
51	Information	-1
52	Finance and Insurance	-4 
53	Real Estate and Rental and Leasing	-5 
54	Professional, Scientific, and Technical Services	-7 
55	Management of Companies and Enterprises	-1
56	Administrative and Support and Waste Management and Remediation Services	-5 
61	Educational Services	-2
62	Health Care and Social Assistance	-14 
71	Arts, Entertainment, and Recreation	-2
72	Accommodation and Food Services	-10 
81	Other Services (except Public Administration)	-6 
90	Government	-17 

Scenario Results - Occupation

SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-11 
13-0000	Business and Financial Operations Occupations	-6 
15-0000	Computer and Mathematical Occupations	-2 
17-0000	Architecture and Engineering Occupations	-4 
19-0000	Life, Physical, and Social Science Occupations	-1 
21-0000	Community and Social Service Occupations	-2 
23-0000	Legal Occupations	-1 
25-0000	Education, Training, and Library Occupations	-7 
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-3 
29-0000	Healthcare Practitioners and Technical Occupations	-5 
31-0000	Healthcare Support Occupations	-3 
33-0000	Protective Service Occupations	-3 
35-0000	Food Preparation and Serving Related Occupations	-9 
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-5 
39-0000	Personal Care and Service Occupations	-6 
41-0000	Sales and Related Occupations	-15 
43-0000	Office and Administrative Support Occupations	-18 
45-0000	Farming, Fishing, and Forestry Occupations	0 
47-0000	Construction and Extraction Occupations	-48 
49-0000	Installation, Maintenance, and Repair Occupations	-14 
51-0000	Production Occupations	-7 
53-0000	Transportation and Material Moving Occupations	-16 
55-0000	Military occupations	0 
99-0000	Unclassified Occupation	0 





Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-1
Male 14-18	-1
Female 19-21	-2
Male 19-21	-3
Female 22-24	-3
Male 22-24	-5
Female 25-34	-14
Male 25-34	-28
Female 35-44	-13
Male 35-44	-28
Female 45-54	-14
Male 45-54	-29
Female 55-64	-13
Male 55-64	-26
Female 65-99	-4
Male 65-99	-6

Changes to Support Activities for Coal Mining

<p>\$-694,439</p> <p>Change in Earnings 1.32 Multiplier</p>	<p>-14</p> <p>Change in Jobs 1.43 Multiplier</p>	<p>\$-73,977</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Crop and Animal Production	0
21	Mining, Quarrying, and Oil and Gas Extraction	-10 
22	Utilities	0
23	Construction	0
31	Manufacturing	0
42	Wholesale Trade	0
44	Retail Trade	-1 
48	Transportation and Warehousing	0
51	Information	0
52	Finance and Insurance	0
53	Real Estate and Rental and Leasing	0
54	Professional, Scientific, and Technical Services	0
55	Management of Companies and Enterprises	0
56	Administrative and Support and Waste Management and Remediation Services	0
61	Educational Services	0
62	Health Care and Social Assistance	-1 
71	Arts, Entertainment, and Recreation	0
72	Accommodation and Food Services	-1 
81	Other Services (except Public Administration)	0
90	Government	0

Scenario Results - Occupation

SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-2 
13-0000	Business and Financial Operations Occupations	-1 
15-0000	Computer and Mathematical Occupations	0
17-0000	Architecture and Engineering Occupations	0
19-0000	Life, Physical, and Social Science Occupations	0
21-0000	Community and Social Service Occupations	0
23-0000	Legal Occupations	0
25-0000	Education, Training, and Library Occupations	0
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	0
29-0000	Healthcare Practitioners and Technical Occupations	0
31-0000	Healthcare Support Occupations	0
33-0000	Protective Service Occupations	0
35-0000	Food Preparation and Serving Related Occupations	-1 
37-0000	Building and Grounds Cleaning and Maintenance Occupations	0
39-0000	Personal Care and Service Occupations	0
41-0000	Sales and Related Occupations	-1 
43-0000	Office and Administrative Support Occupations	-2 
45-0000	Farming, Fishing, and Forestry Occupations	0
47-0000	Construction and Extraction Occupations	-4 
49-0000	Installation, Maintenance, and Repair Occupations	-1 
51-0000	Production Occupations	-1 
53-0000	Transportation and Material Moving Occupations	-1 
55-0000	Military occupations	0
99-0000	Unclassified Occupation	0

















Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	0
Male 14-18	0
Female 19-21	0
Male 19-21	0
Female 22-24	0
Male 22-24	-1 
Female 25-34	0
Male 25-34	-4 
Female 35-44	0
Male 35-44	-2 
Female 45-54	0
Male 45-54	-2 
Female 55-64	0
Male 55-64	-3 
Female 65-99	0
Male 65-99	0

Changes to Fossil Fuel Electric Power Generation

<p>\$-68,166,397</p> <p>Change in Earnings 1.85 Multiplier</p>	<p>-1,024</p> <p>Change in Jobs 3.75 Multiplier</p>	<p>\$-40,626,671</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Crop and Animal Production	-1
21	Mining, Quarrying, and Oil and Gas Extraction	-6
22	Utilities	-277 
23	Construction	-65 
31	Manufacturing	-13 
42	Wholesale Trade	-17 
44	Retail Trade	-82 
48	Transportation and Warehousing	-25 
51	Information	-9
52	Finance and Insurance	-24 
53	Real Estate and Rental and Leasing	-27 
54	Professional, Scientific, and Technical Services	-56 
55	Management of Companies and Enterprises	-3
56	Administrative and Support and Waste Management and Remediation Services	-46 
61	Educational Services	-15 
62	Health Care and Social Assistance	-86 
71	Arts, Entertainment, and Recreation	-13 
72	Accommodation and Food Services	-74 
81	Other Services (except Public Administration)	-38 
90	Government	-146 

Scenario Results - Occupation

SOC	Occupation	Change in Jobs	
11-0000	Management Occupations	-68	
13-0000	Business and Financial Operations Occupations	-50	
15-0000	Computer and Mathematical Occupations	-14	
17-0000	Architecture and Engineering Occupations	-38	
19-0000	Life, Physical, and Social Science Occupations	-8	
21-0000	Community and Social Service Occupations	-12	
23-0000	Legal Occupations	-8	
25-0000	Education, Training, and Library Occupations	-59	
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-30	
29-0000	Healthcare Practitioners and Technical Occupations	-33	
31-0000	Healthcare Support Occupations	-18	
33-0000	Protective Service Occupations	-23	
35-0000	Food Preparation and Serving Related Occupations	-72	
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-32	
39-0000	Personal Care and Service Occupations	-42	
41-0000	Sales and Related Occupations	-94	
43-0000	Office and Administrative Support Occupations	-133	
45-0000	Farming, Fishing, and Forestry Occupations	-1	
47-0000	Construction and Extraction Occupations	-74	
49-0000	Installation, Maintenance, and Repair Occupations	-105	
51-0000	Production Occupations	-66	
53-0000	Transportation and Material Moving Occupations	-43	
55-0000	Military occupations	0	
99-0000	Unclassified Occupation	-1	

Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-7
Male 14-18	-6
Female 19-21	-17
Male 19-21	-19
Female 22-24	-24
Male 22-24	-23
Female 25-34	-85
Male 25-34	-114
Female 35-44	-84
Male 35-44	-127
Female 45-54	-98
Male 45-54	-134
Female 55-64	-88
Male 55-64	-131
Female 65-99	-27
Male 65-99	-40



















Changes to Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance

<p>\$-7,213,458</p> <p>Change in Earnings 1.34 Multiplier</p>	<p>-148</p> <p>Change in Jobs 1.48 Multiplier</p>	<p>\$-1,355,620</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Crop and Animal Production	0
21	Mining, Quarrying, and Oil and Gas Extraction	0
22	Utilities	0
23	Construction	-1
31	Manufacturing	-1
42	Wholesale Trade	-1
44	Retail Trade	-7 ■
48	Transportation and Warehousing	-1
51	Information	-1
52	Finance and Insurance	-2
53	Real Estate and Rental and Leasing	-2
54	Professional, Scientific, and Technical Services	-3 ■
55	Management of Companies and Enterprises	0
56	Administrative and Support and Waste Management and Remediation Services	-3 ■
61	Educational Services	-1
62	Health Care and Social Assistance	-8 ■
71	Arts, Entertainment, and Recreation	-1
72	Accommodation and Food Services	-6 ■
81	Other Services (except Public Administration)	-104 ■
90	Government	-5 ■

Scenario Results - Occupation

SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-8 
13-0000	Business and Financial Operations Occupations	-3 
15-0000	Computer and Mathematical Occupations	-1 
17-0000	Architecture and Engineering Occupations	-1 
19-0000	Life, Physical, and Social Science Occupations	0
21-0000	Community and Social Service Occupations	-1 
23-0000	Legal Occupations	0
25-0000	Education, Training, and Library Occupations	-3 
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-1 
29-0000	Healthcare Practitioners and Technical Occupations	-3 
31-0000	Healthcare Support Occupations	-2 
33-0000	Protective Service Occupations	-1 
35-0000	Food Preparation and Serving Related Occupations	-6 
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-3 
39-0000	Personal Care and Service Occupations	-3 
41-0000	Sales and Related Occupations	-14 
43-0000	Office and Administrative Support Occupations	-18 
45-0000	Farming, Fishing, and Forestry Occupations	0
47-0000	Construction and Extraction Occupations	-5 
49-0000	Installation, Maintenance, and Repair Occupations	-47 
51-0000	Production Occupations	-20 
53-0000	Transportation and Material Moving Occupations	-6 
55-0000	Military occupations	0
99-0000	Unclassified Occupation	0

Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-1 
Male 14-18	-2 
Female 19-21	-2 
Male 19-21	-7 
Female 22-24	-2 
Male 22-24	-8 
Female 25-34	-9 
Male 25-34	-25 
Female 35-44	-7 
Male 35-44	-19 
Female 45-54	-8 
Male 45-54	-22 
Female 55-64	-7 
Male 55-64	-17 
Female 65-99	-4 
Male 65-99	-8 

Appendix A - Data Sources and Calculations

Input-Output Data

The input-output model in this report is Emsi's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several Emsi in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

State Data Sources

This report uses state data from the following agencies: New Mexico Department of Labor, Bureau of Economic Research and Analysis