

# Economic and Fiscal Impacts of the Micron Semiconductor Facilities in Upstate New York

Presented by:

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# Introduction

- Micron Technology, Inc., to build and equip several large semiconductor facilities in Clay, New York (near Syracuse)
- Invest approximately \$99.6 billion for capital expenditures (land, buildings, machinery, and equipment) and about \$1.5 billion for infrastructure (utility construction) and other expenditures over two phases from 2025-2044
- Ramp up operations to long-term levels throughout the investment period
- On behalf of Empire State Development (ESD), REMI performed an economic and fiscal impact analysis at the state and local levels over the period 2025-2055
- Results have been cited by public officials including President Joe Biden, New York Senators Chuck Schumer and Kirsten Gillibrand, and New York Governor Kathy Hochul

# Study Approach

- REMI utilized a multi-region, 70-industry Tax-PI model of New York State
- Two impact sources:
  1. Investment (**capital, infrastructure, and other expenditures**), expected to last 20 years from 2025-2044
  2. Ongoing **operations**, which includes the direct employment and compensation, ongoing R&D spending, and both in-state resident and out-of-state visiting contractors (2026-2055)
- Both sources occur in two phases with Phase 1 starting in 2025 and Phase 2 starting in 2035
- Impacts on employment, output, GDP, disposable personal income, population, and state and local government revenue; and fiscal benefit-cost analysis relative to the incentive package



# Model Inputs: Investment

Spending Type	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2055	Average	2025-2034 Average
Land & Building	2.1	3.1	2.8	0.8	2.0	1.2	0.3	1.6	2.5	4.5	-	0.7	2.1
Machinery & Equipment	0.1	0.8	1.0	3.6	3.0	4.6	5.0	3.4	3.3	1.9	-	0.9	2.7
Utility Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	0.0	0.1
<b>Total</b>	<b>2.3</b>	<b>4.0</b>	<b>3.9</b>	<b>4.5</b>	<b>5.1</b>	<b>5.9</b>	<b>5.4</b>	<b>5.1</b>	<b>5.9</b>	<b>6.5</b>	<b>-</b>	<b>1.6</b>	<b>4.9</b>

**Phase 1.** Capital Expenditures are categorized as (1) Land & Building and (2) Machinery & Equipment. Infrastructure and Other Expenditures are categorized as (3) Utility Construction (i.e., Water and sewer system upgrades, Infrastructure Grant, Site Development, and Façade Grant). This table displays the spending for each category from 2025-2034 and in 2055, entered as demand for the corresponding industry.

Note: Units in Billions of Nominal Dollars. Components may not sum to totals due to rounding.

Spending Type	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2055	Average	2035-2044 Average
Land & Building	2.1	2.9	3.4	1.7	-	-	-	-	-	-	-	0.3	1.0
Machinery & Equipment	5.0	4.5	4.2	4.9	5.7	5.0	4.6	2.7	2.7	2.7	-	1.4	4.2
Utility Construction	0.1	0.1	0.1	0.1	-	-	-	-	-	-	-	0.0	0.0
<b>Total</b>	<b>7.0</b>	<b>7.5</b>	<b>7.5</b>	<b>6.6</b>	<b>5.7</b>	<b>5.0</b>	<b>4.6</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>-</b>	<b>1.7</b>	<b>5.2</b>

**Phase 2.** This table displays the spending for each category from 2035-2044, and in 2055, entered as demand for the corresponding industry, which is the same as in Phase 1.

Note: Units in Billions of Nominal Dollars. Components may not sum to totals due to rounding.

*what does REMI say? <sup>sm</sup>*

# Model Inputs: Operations Employment



Variable	2026	2027	2028	2029	2030	2036	2037	2038	2039	2040	2055	Average
Employment - Semiconductor and related device manufacturing	1,570	2,381	2,979	3,685	4,223	6,488	7,021	7,426	7,558	7,825	8,211	6,271
Employment - Management of companies and enterprises	208	326	320	273	314	482	521	552	562	581	610	477
Employment - Administrative and support services	94	125	122	82	95	146	156	166	169	174	184	146

Note: Units in Jobs. Components may not sum to totals due to rounding.

The table above displays **direct employment** for different industries from 2026-2030 and 2036-2040, and in 2055, the final analysis year. Direct employment for Engineers, Quality Engineers, and Technicians, classified in the Semiconductor and related device manufacturing industry, would ramp up over 20 years starting in 2026, after which it would remain constant at 8,211. Direct employment for Management, classified in the Management of companies and enterprises industry, would ramp up over 20 years starting in 2026, after which it would remain constant at 610. Direct employment in Administrative / Other Management, classified in the Administrative and support services industry, would ramp up over 20 years starting in 2026, after which it would remain constant at 184.



# Model Inputs: Contractor Employment

Industry	2026	2036	2055	Average
In-State Contractors				
Semiconductor machinery manufacturing	2,000	4,079	4,079	3,277
Services to buildings and dwellings	1,000	1,693	1,693	1,415
Out-of-State Contractors				
Semiconductor machinery manufacturing	1,000	1,924	1,924	1,564

Note: Units in Jobs. Components may not sum to totals due to rounding.

The table above displays the numbers of **contractors** by location and industry in 2026, 2036, and 2055, the final analysis year. The number of contractors would remain constant at 4,000 from 2026-2035, grow to 7,697 in 2036, and remain constant afterwards.

# Model Inputs: Other Spending

Commodity	2026	2036	2055	Average
Accommodations	65.0	153.0	223.3	143.1
Purchased meals and beverages	19.5	45.9	67.0	42.9
Ground transportation	13.0	30.6	44.7	28.6

Note: Units in Millions of Nominal Dollars. Components may not sum to totals due to rounding.

The table above displays the **contractor consumer spending** by category in 2026, 2036, and 2055, the final analysis year. Aggregate out-of-state visiting contractor consumer spending during on-site would be \$97.5 million in 2026, growing by the projected inflation rate from 2026-2035. The number would rise to \$229.5 million in 2036, and would grow by the projected inflation rate thereafter.

Variable	2026	2027	2028	2029	2030	2035	2036	2037	2038	2039	2055	Average
Spending	2.6	4.9	7.3	16.3	31.3	161.5	185.7	216.8	234.9	241.0	367.6	213.5

Note: Units in Millions of Nominal Dollars. Components may not sum to totals due to rounding.

The table above displays **R&D spending** from 2026-2030 and 2035-2039, and in 2055, the final analysis year. The R&D spending would ramp up to an annual value of \$301.3 million by 2045, growing by the projected inflation rate thereafter.

# Results: Overview

- Average annual employment impact of 45,418 jobs, with almost 40,000 in Central New York and an associated state-level multiplier over four
- Average annual increase in real economic output and real state GDP of over \$16 billion and \$9 billion respectively
- Average annual population impact of almost 60,000 individuals
- Average annual increase of more than \$5 billion in real disposable personal income
- Present value (PV) of \$7.1 billion in additional real state government revenue generated given a 3% discount rate
- PV of \$10.7 billion in additional real local government revenue generated, with about 85% in Central New York
- Fiscal benefit-cost ratio of state government revenue impact PV relative to state government incentives PV of 2.0





# Results: Employment

Category	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
<b>New York</b>												
<b>Employment</b>	15,468	40,272	40,268	30,724	38,260	38,829	58,961	61,989	55,611	48,511	50,911	45,418
<b>Direct</b>	8,992	15,229	14,680	8,217	13,018	13,033	17,696	19,297	14,640	9,763	9,005	11,182
<b>Direct Operation</b>	-	1,872	2,832	3,421	4,040	4,680	7,116	7,698	8,144	8,289	9,005	6,894
<b>Indirect</b>	1,436	6,534	6,428	5,589	6,225	6,336	10,701	10,888	10,349	9,774	9,431	8,294
<b>Induced</b>	5,040	18,510	19,160	16,918	19,016	19,460	30,564	31,804	30,622	28,975	32,474	25,943
<b>Central New York</b>												
<b>Employment</b>	14,367	36,293	36,236	26,069	33,406	33,821	52,007	55,071	48,782	41,798	44,943	39,975
<b>Direct</b>	8,964	15,085	14,505	7,650	12,557	12,455	17,187	18,849	14,132	9,196	9,005	10,922
<b>Direct Operation</b>	-	1,872	2,832	3,421	4,040	4,680	7,116	7,698	8,144	8,289	9,005	6,894
<b>Indirect</b>	1,281	6,251	6,152	5,380	5,951	6,037	10,327	10,496	10,017	9,507	9,231	8,047
<b>Induced</b>	4,121	14,957	15,579	13,040	14,898	15,329	24,493	25,727	24,633	23,095	26,707	21,006

Note: Units in Jobs. Components may not sum to totals due to rounding.



# Results: Other Economic Impacts

Category	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
New York												
Output	2.8	10.2	10.5	9.4	11.0	12.0	19.4	20.3	19.4	18.4	22.8	16.7
GDP	1.6	5.6	5.9	5.2	6.2	6.9	11.0	11.6	11.2	10.5	13.2	9.6
Disposable Personal Income	0.9	2.7	2.9	2.6	3.1	3.9	5.6	6.1	5.9	5.7	8.3	5.4
Population	4,285	14,112	21,178	24,212	29,216	48,429	56,050	62,791	66,605	68,072	84,530	59,575
Central New York												
Output	2.6	9.1	9.5	8.1	9.6	10.4	17.3	18.2	17.3	16.2	20.7	14.9
GDP	1.5	5.0	5.3	4.5	5.4	6.1	9.9	10.5	10.0	9.4	11.9	8.6
Disposable Personal Income	0.8	2.3	2.5	2.1	2.6	3.3	4.8	5.2	5.1	4.8	7.3	4.7
Population	4,056	12,992	19,368	21,607	26,038	43,203	50,094	56,278	59,595	60,642	76,264	53,388

Note: Units for Output, GDP, and Disposable Personal Income in Billions of 2025 Dollars. Units for Population in Individuals. Components may not sum to totals due to rounding.



# Results: Fiscal Benefit-Cost Analysis

Category	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average	PV (3%)
<b>State Government Revenue</b>	17.4	110.9	230.3	237.6	219.3	329.3	329.4	443.0	463.3	443.5	544.7	378.5	7,114.4
Personal Income	12.7	76.9	158.3	160.4	149.5	218.6	220.9	298.9	310.3	294.3	359.1	251.5	
Corporation and Business	1.8	10.9	22.4	22.7	21.1	30.9	31.3	42.3	43.9	41.6	50.8	35.6	
Sales, Excise and User	2.2	19.1	41.3	46.1	40.8	68.2	65.5	86.0	92.7	92.1	115.8	78.2	
Property Transfers	0.6	3.8	7.8	7.9	7.4	10.8	10.9	14.7	15.3	14.5	17.7	12.4	
Other Taxes and Fees	0.0	0.3	0.6	0.6	0.5	0.8	0.8	1.0	1.1	1.0	1.2	0.9	
<b>Local Government Revenue</b>	96.4	322.9	348.7	303.9	359.1	647.2	608.6	618.1	625.8	626.3	800.2	565.5	10,727.5
<b>New York State Incentives</b>	-	147.5	231.0	225.3	250.4	321.7	272.6	286.7	287.6	252.1	-	150.9	3,544.3
<b>Fiscal Benefit-Cost Ratio (State)</b>													2.0

Note: Units in Millions of 2025 Dollars. Components may not sum to totals due to rounding.