

**The Economic Effects on Michigan of the
Siemens Automotive Corporation Facility Expansion Decision**

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Abstract

Siemens Automotive Corporation is considering leasing a newly constructed 250,000 square-foot building in Auburn Hills, Michigan to house its vehicle and application engineering facility. The building would be located on its current North American headquarters campus, and would include a state-of-the-art research and development testing facility. The new facility would employ an additional 800 people by 2005. We estimate that by 2015, this expansion will have generated a total of 1,231 jobs in the state. Total state government revenues through 2015, net of MEGA costs and adjusted for inflation, would increase by \$76,502,000 (2001 dollars) due to the expansion of Siemens Automotive Corporation.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Siemens Automotive Corporation leasing a newly constructed 250,000 square-foot building in Auburn Hills, Michigan to house its vehicle and application engineering facility (SIC 3714). The building would be located on its current North American headquarters campus, and would include a state-of-the-art research and development testing facility. Investment activity would take place between 2001 and 2005, with an investment of \$68.51 million. The facility would employ an additional 800 people by 2005.

The estimates of the benefits include the total number of jobs created in Michigan (by major industry, including spin-off jobs), and the associated personal income and state government revenue. Benefits net of the MEGA incentive package, from 2003 to 2015, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2003 to 2015 equal to 75 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility as a result of the project.

The total employment effects, reported in the first line of the table, include the direct jobs created at the facility itself plus spin-off jobs. The spin-off jobs are generated from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. The construction activity is expected to generate a total of 77 jobs in 2003; almost all of these jobs are temporary. In 2005, the first year of full operations, an additional 1,638 jobs are generated in the state. We estimate that by 2015, this expansion will have generated a total of 1,231 additional jobs in the state. The total number of jobs created (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the expansion averages 1.7 over the period 2005 to 2015. Sectoral detail on the employment gains is also shown in the table.

Personal income is shown in the next section of the table. Personal income is defined as the income of Michigan residents from all sources, after deduction of contributions to social

insurance programs but before deduction of income tax and other personal taxes. As shown in the table, if Siemens Automotive Corporation were to expand in Michigan under the incentive program, state personal income in 2005 would be higher by \$120 million (in current dollars) than it would be without the facility, and in 2015 it would be \$165.6 million higher. Adjusted for inflation, these numbers in 2001 dollars would be \$94.5 million in 2005 and \$105.2 million in 2015.

The gain in economic activity results in higher state government revenues. We estimate that in 2005, the first year of full operations, the facility would generate \$9,600,000 in additional gross state government revenue, and that the MEGA package would provide a \$1,691,000 incentive to Siemens Automotive Corporation. Thus, the Siemens Automotive Corporation facility expansion would increase state government revenues in 2005 by \$7,909,000, net of MEGA incentive costs.

Over the period 2003 to 2015, gross state government revenue is projected to increase by \$132,512,000 (in current dollars) due to the expansion of Siemens Automotive Corporation. The MEGA incentive package for Siemens Automotive Corporation is forecast to cost \$23,333,000 over the period, resulting in a net increase in state government revenue of \$109,179,000. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2015 would be \$76,502,000 in 2001 dollars. These calculations do not include any revenue losses due to the property tax abatement. If the costs of the tax abatement were included, the net revenue gain to state government would be slightly less.

None of these estimates include the nonmeasurable effects that would produce additional economic and fiscal benefits for Michigan, such as the intangible advantages of influencing other location and expansion decisions.

**Economic and Fiscal Effects on Michigan of the Siemens Automotive Corporation Facility Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2003	2004	2005	2010	2015	Total 2003-2015
Total Employment	291	802	1,638	1,288	1,231	—
Manufacturing	100	400	800	800	800	—
Nonmanufacturing	191	402	838	488	431	—
Retail Trade	39	126	259	203	195	—
Services	48	161	333	177	147	—
Other	104	115	246	108	89	—
In current dollars (thousands):						
Personal income	20,800	57,600	120,000	142,900	165,600	1,656,400
Gross state revenue	1,664	4,608	9,600	11,432	13,248	132,512
MEGA cost	202	816	1,691	2,012	2,415	23,333
State revenue net of MEGA cost*	1,462	3,792	7,909	9,420	10,833	109,179
Adjusted for inflation (thousands of 2001 dollars):						
Personal income	18,797	48,078	94,472	98,543	105,168	1,160,088
Gross state revenue	1,504	3,846	7,558	7,883	8,414	92,807
MEGA cost	182	681	1,331	1,387	1,534	16,305
State revenue net of MEGA cost*	1,322	3,165	6,227	6,496	6,880	76,502

*These estimates do not include any state government revenue losses due to the Investment Tax Credit or the property tax abatement.