

**The Economic Effects on Michigan
of the General Motors Corporation Facility Location Decision**

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Abstract

General Motors Corporation is considering building a new automobile assembly facility in Lansing, Michigan. The new, high-productivity plant would incorporate modular production practices. The facility would employ 1,511 people by 2004. We estimate that by 2021, this location will have generated a total of 32,839 jobs in the state. Total state government revenues through 2021, net of MEGA costs and adjusted for inflation, would increase by \$2,090,727,000 (1999 dollars) due to the location of the new General Motors Corporation facility.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of General Motors Corporation's building a new automobile assembly facility in Lansing (SIC 3711). The new, high-productivity plant would incorporate modular production practices. Investment activity would take place between 1999 and 2001, with an investment of \$510 million, and production would begin in January 2002. The new facility would employ 1,511 people by 2004.

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 1999 to 2021, are shown in the attached table. The MEGA incentive package includes relief from 100 percent of the single business tax for the period 2002 to 2021, and a tax credit to the company for the same period equal to the state income tax rate on the payroll (gross wages) of employees hired at the facility as a result of the project. The payroll tax credit represents 100 percent of the maximum employment credit available to a company.

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 of the facility is expected to generate a total of 507 jobs in 1999, 2,252 jobs in 2000, and 834 jobs in 2001; almost all of these jobs are temporary. In 2004, the first year of full operations, an additional 27,212 jobs are generated in the state. We estimate that by 2021, this facility addition will have generated a total of 32,839 additional jobs in the state. Sectoral detail on the employment gains is 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 General Motors Corporation were to locate its new facility in Michigan under the incentive program, state personal income in 2004 would be higher by \$1.59 billion (in current dollars) than it would be without the facility, and in 2021 it would be \$3.78 billion higher. Adjusted for inflation, these numbers in 1999 dollars would be \$1.17 billion in 2004 and \$1.8 billion in 2021.

The gain in economic activity results in higher state government revenues. We estimate that in 2004, the first year of full operations, the facility would generate \$126,800,000 in additional gross state government revenue, and that the MEGA package would provide a \$4,884,000 incentive to General Motors Corporation. Thus, the General Motors Corporation facility location would increase state government revenues in 2004 by \$121,916,000, net of MEGA incentive costs.

Over the period 1999 to 2021, gross state government revenue is projected to increase by \$3,738,560,000 (in current dollars) due to the location of the new General Motors Corporation facility. The MEGA incentive package for General Motors Corporation is forecast to cost \$123,905,000 over the period, resulting in a net increase in state government revenue of \$3,614,655,000. Adjusted for inflation, the total net increase in state government revenue from 1999 to 2021 would be \$2,090,727,000 in 1999 dollars. These calculations do not include any revenue losses due to the property tax abatement or the Capital Acquisition Deduction. If the cost of the abatement or the CAD 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 General Motors Corporation Facility Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	1999	2000	2002	2003	2004	2005	2010	2015	2021	Total 1999-2021
Total Employment	507	2,252	9,452	13,478	27,212	26,798	25,865	28,457	32,839	—
Manufacturing	15	249	3,321	4,559	8,716	8,467	7,811	7,944	8,258	—
Nonmanufacturing	492	2,003	6,131	8,919	18,496	18,331	18,054	20,513	24,581	—
Retail Trade	58	266	1,457	2,022	4,066	3,897	3,457	3,714	4,239	—
Wholesale Trade	10	223	745	1,131	2,387	2,364	2,340	2,512	2,769	—
Services	82	474	2,360	3,398	7,154	6,919	6,746	8,133	10,588	—
Other	342	1,040	1,569	2,368	4,889	5,151	5,511	6,154	6,985	—
In current dollars (thousands):										
Personal income	20,100	99,700	500,700	772,300	1,585,000	1,718,000	2,119,100	2,728,700	3,775,300	46,732,000
Gross state revenue	1,608	7,976	40,056	61,784	126,800	137,440	169,528	218,296	302,024	3,738,560
MEGA cost	0	0	3,284	4,024	4,884	4,958	5,838	6,926	8,528	123,905
State revenue net of MEGA cost*	1,608	7,976	36,772	57,760	121,916	132,482	163,690	211,370	293,496	3,614,655
Adjusted for inflation (thousands of 1999 dollars):										
Personal income	20,100	83,840	397,633	584,599	1,165,882	1,202,253	1,319,405	1,514,098	1,798,024	27,047,677
Gross state revenue	1,608	6,707	31,811	46,768	93,270	96,180	105,552	121,128	143,842	2,163,814
MEGA cost	0	0	2,608	3,046	3,592	3,470	3,635	3,843	4,062	73,087
State revenue net of MEGA cost*	1,608	6,707	29,203	43,722	89,678	92,710	101,917	117,285	139,780	2,090,727

*These estimates do not include any state government revenue losses due to the property tax abatement or the CAD deduction.