The Economic Effects on Michigan of the General Motors Corporation, Willow Run Plant Facility Retention Decision

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Abstract

General Motors Corporation is considering placing a new product line – a 6-speed rear wheel drive transmission – at the Willow Run Plant in Ypsilanti Township, Michigan. The facility would employ 842 existing Michigan-based GM employees by 2007. We estimate that by 2024, this retention will have maintained a total of 3,510 jobs in the state. Total state government revenues through 2024, net of MEGA costs and adjusted for inflation, would be greater by $299,223,000 (2002 dollars) due to the retention of the General Motors Corporation employees.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of General Motors Corporation placing a new product line – a 6-speed rear wheel drive transmission – at the Willow Run Plant in Ypsilanti Township, Michigan (SIC 3711). Investment activity would take place between 2005 and 2006, with an investment of $308.9 million. The facility would employ 842 existing Michigan-based GM employees by 2007.

The estimates of the benefits include the total number of jobs retained in Michigan (by major industry, including spin-off jobs), and the associated personal income and state government revenue retained as a result. Benefits net of the MEGA incentive package, from 2005 to 2024, are shown in the attached table. The MEGA incentive package includes relief from 50 percent of the single business tax for the period 2005 to 2024; it also includes a tax credit to the company for the same period equal to 50 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 retained at the facility itself plus spin-off jobs retained. 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 investment activity is expected to generate a total of 1,331 jobs in 2005 and 234 jobs in 2006; almost all of these jobs are temporary. In 2008, the first year of full operations, 3,578 jobs are maintained in the state. We estimate that by 2024, this retention will have maintained a total of 3,510 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 retention averages 3.9 over the period 2008 to 2024. Sectoral detail on the employment retention 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 General Motors Corporation were to locate the proposed project in Michigan under the incentive program, state personal income in 2008 would be higher by $262.7 million (in current dollars) than it would be without the facility, and in 2024 it would be $453.8 million higher. Adjusted for inflation, these numbers in 2002 dollars would be $188.5 million in 2008 and $243 million in 2024.

The retention of economic activity results in higher state government revenues. We estimate that in 2008, the first year of full operations, the retention of the facility would maintain $21,016,000 in gross state government revenue, and that the MEGA package would provide a $1,117,000 incentive to General Motors Corporation. Thus, the General Motors Corporation facility retention would maintain $19,899,000 in state government revenues in 2008, net of MEGA incentive costs.

Over the period 2005 to 2024, gross state government revenue is projected to be higher by $504,408,000 (in current dollars) due to the retention of the employees at the General Motors Corporation facility. The MEGA incentive package for General Motors Corporation is forecast to cost $27,240,000 over the period, resulting in a net retention of state government revenue of $477,168,000. Adjusted for inflation, the total net retention of state government revenue from 2005 to 2024 would be $299,223,000 in 2002 dollars. These calculations do not include any revenue losses due to the Investment Tax Credit. If the costs of the tax credit were included, the net revenue retention by 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, Willow Run Plant Facility Retention
Net Benefits with the Incentive Package

Economic/Fiscal Indicator	2005	2006	2007	2008	2010	2015	2020	2024	Total 2005-2024
Total Employment	2,497	2,343	3,021	3,578	3,313	3,145	3,332	3,510	—
Manufacturing	729	873	1,221	1,378	1,307	1,262	1,284	1,302	—
Nonmanufacturing	1,768	1,470	1,800	2,200	2,006	1,883	2,048	2,208	—
Retail Trade	325	318	412	488	436	393	417	443	—
Services	530	517	613	749	643	596	700	805	—
Other	913	635	775	963	927	894	931	960	—
In current dollars (thousands):									
Personal income	138,500	154,800	212,600	262,700	278,200	317,200	385,600	453,800	6,305,100
Gross state revenue	11,080	12,384	17,008	21,016	22,256	25,376	30,848	36,304	504,408
MEGA cost	725	780	1,095	1,117	1,164	1,371	1,641	1,891	27,240
State revenue net of MEGA cost*	10,355	11,604	15,913	19,899	21,092	24,005	29,207	34,413	477,168
Adjusted for inflation (thousands of 2002 dollars):									
Personal income	108,161	115,946	156,348	188,513	191,020	202,573	224,362	242,995	3,954,612
Gross state revenue	8,653	9,276	12,508	15,081	15,281	16,206	17,949	19,440	316,369
MEGA cost	566	584	806	802	799	876	955	1,013	17,146
State revenue net of MEGA cost*	8,087	8,692	11,702	14,279	14,482	15,330	16,994	18,427	299,223

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