

**The Economic Effects on Michigan of the General Motors
Powertrain Division-Warren Facility Retention Decision**

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Abstract

General Motors is considering locating a new, 6-speed, front-wheel drive transmission line at its existing Warren, Michigan Powertrain facility. Beginning in 2006, the facility would retain 518 existing General Motors jobs. We estimate that by 2025, this project will have resulted in the retention of a total of 2,241 jobs in the state. Total state government revenues through 2025, net of MEGA costs and adjusted for inflation, of \$213,656,000 (2004 dollars) would be retained due to the project.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of General Motors locating a new, 6-speed, front-wheel drive transmission line at its existing Warren, Michigan Powertrain facility (SIC 3711). Investment activity would take place between 2004 and 2007, with an investment of \$276.5 million. Beginning in 2006, the facility would retain 518 existing General Motors jobs.

The estimates of the benefits include the total number of jobs retained in Michigan (by major industry, including spin-off jobs), and the associated retained personal income and state government revenue. Benefits net of the MEGA incentive package, from 2004 to 2025, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2006 to 2025 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 retained 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 investment activity is expected to generate a total of 392 jobs in 2004, 745 jobs in 2005, and 134 jobs in 2006; almost all of these jobs are temporary. In 2008, the first year of full operations without investment activity, 2,197 jobs are retained in the state. We estimate that by 2025, this project will have retained a total of 2,241 jobs in the state. The total number of jobs retained (direct plus spin-off) for every direct job retained constitutes the "employment multiplier." The employment multiplier for the retention averages 4.0 over the period 2008 to 2025. 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 Powertrain Division-Warren were to retain its operations in

Michigan under the incentive program, state personal income in 2008 would be higher by \$166.2 million (in current dollars) than it would be without the retention, and in 2025 it would be \$296.7 million higher. Adjusted for inflation, these numbers in 2004 dollars would be \$128.3 million in 2008 and \$168.8 million in 2025.

The retention of economic activity results in higher state government revenues than would exist absent the project. We estimate that in 2008, the first year of full operations without investment activity, the retained facility would generate \$12,781,000 in gross state government revenue, and that the MEGA package would provide a \$545,000 incentive to General Motors Powertrain Division-Warren. Thus, the General Motors Powertrain Division-Warren retention would maintain state government revenues of \$12,236,000 in 2008, net of MEGA incentive costs.

Over the period 2004 to 2025, gross state government revenue of \$331,055,000 (in current dollars) is projected to be retained due to the General Motors Powertrain Division-Warren project. The MEGA incentive package for General Motors Powertrain Division-Warren is forecast to cost \$15,620,000 over the period, resulting in a net retention of \$315,435,000 in state government revenue. Adjusted for inflation, the total net retention of state government revenue from 2004 to 2025 would be \$213,656,000 in 2004 dollars.

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, expansion, and retention decisions.

**Economic and Fiscal Effects on Michigan of the General Motors Powertrain Division-Warren Facility Retention
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2004	2005	2006	2007	2008	2010	2015	2020	2025	Total 2004-2025
Total Employment	392	745	2,561	2,328	2,197	2,040	1,970	2,104	2,241	—
Manufacturing	16	99	942	881	848	809	787	803	817	—
Nonmanufacturing	376	646	1,619	1,447	1,349	1,231	1,183	1,301	1,424	—
Retail Trade	50	89	359	319	296	265	245	263	284	—
Services	54	229	607	500	448	389	375	447	529	—
Other	272	328	653	628	605	577	563	591	611	—
In current dollars (thousands):										
Personal income	18,000	40,300	157,800	162,400	166,200	173,100	197,800	242,000	296,700	4,305,000
Gross state revenue	1,384	3,099	12,135	12,489	12,781	13,312	15,211	18,610	22,816	331,055
MEGA cost	0	0	436	544	545	548	699	929	1,302	15,620
State revenue net of MEGA cost*	1,384	3,099	11,699	11,945	12,236	12,764	14,512	17,681	21,514	315,435
Adjusted for inflation (thousands of 2004 dollars):										
Personal income	18,000	35,134	130,220	128,822	128,328	129,421	137,777	153,213	168,817	2,913,630
Gross state revenue	1,384	2,702	10,014	9,906	9,869	9,953	10,595	11,782	12,982	224,058
MEGA cost	0	0	360	431	421	410	487	588	741	10,402
State revenue net of MEGA cost*	1,384	2,702	9,654	9,475	9,448	9,543	10,108	11,194	12,241	213,656

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