

**The Economic Effects on Michigan of
the Musashi Auto Parts–Michigan, Inc., Facility Expansion Decision**

**George A. Fulton
Peter Nicolas
Donald R. Grimes**

**University of Michigan
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Abstract

Musashi Auto Parts–Michigan, Inc., is considering a 90,000-sq.-ft. expansion of its facility in Battle Creek, Michigan (30,000 sq. ft. immediately and then another 60,000 sq. ft. in Phase II in 2007). With this expansion, Musashi would machine and assemble front and rear differentials for Honda. The facility would employ an additional 178 people by 2006. We estimate that by 2014, this expansion will have generated a total of 346 jobs in the state. Total state government revenues through 2014, net of MEGA costs and adjusted for inflation, would increase by \$10,513,000 (2004 dollars) due to the expansion of Musashi Auto Parts–Michigan, Inc.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan if Musashi Auto Parts–Michigan, Inc., constructs a 90,000-sq.-ft. expansion (30,000 sq. ft. immediately and then another 60,000 sq. ft. in Phase II in 2007) of its facility in Battle Creek, Michigan (SIC 3363). Investment activity would take place between 2005 and 2007, with an investment of \$26.6 million. The facility would employ an additional 178 people by 2006.

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 2005 to 2014, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2005 to 2014 equal to 100 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 investment activity is expected to generate a total of 72 jobs in 2005, 21 jobs in 2006, and 66 jobs in 2007; almost all of these jobs are temporary. In 2008, the first year of full operations without investment activity, an additional 363 jobs are generated in the state. We estimate that by 2014, this expansion will have generated a total of 346 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 1.9 over the period 2008 to 2014. 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 Musashi Auto Parts–Michigan, Inc., were to expand its operations in Michigan under the incentive program, state personal income in 2008 would be higher by \$21.7 million (in current dollars) than it would be without the expansion, and in 2014 it would be \$25.4 million higher. Adjusted for inflation, these numbers in 2004 dollars would be \$15 million in 2008 and \$16.3 million in 2014.

The gain in economic activity results in higher state government revenues. We estimate that in 2008, the first year of full operations without investment activity, the expanded facility would generate \$1,669,000 in additional gross state government revenue, and that the MEGA package would provide a \$197,000 incentive to Musashi Auto Parts–Michigan, Inc. Thus, the Musashi Auto Parts–Michigan, Inc., expansion would increase state government revenues in 2008 by \$1,472,000, net of MEGA incentive costs.

Over the period 2005 to 2014, gross state government revenue is projected to increase by \$17,326,000 (in current dollars) due to the expansion of Musashi Auto Parts–Michigan, Inc. The MEGA incentive package for Musashi Auto Parts–Michigan, Inc., is forecast to cost \$2,057,000 over the period, resulting in a net increase in state government revenue of \$15,269,000. Adjusted for inflation, the total net increase in state government revenue from 2005 to 2014 would be \$10,513,000 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 and expansion decisions.

**Economic and Fiscal Effects on Michigan of the Musashi Auto Parts-Michigan, Inc., Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2005	2006	2007	2008	2010	2014	Total 2005-2014
Total Employment	384	421	450	363	345	346	—
Manufacturing	151	186	180	178	178	178	—
Nonmanufacturing	233	235	270	185	167	168	—
Retail Trade	45	48	49	38	34	33	—
Services	82	85	83	63	56	59	—
Other	106	102	138	84	77	76	—
In current dollars (thousands):							
Personal income	17,200	21,100	24,500	21,700	22,300	25,400	225,300
Gross state revenue	1,323	1,623	1,884	1,669	1,715	1,953	17,326
MEGA cost	121	185	191	197	211	254	2,057
State revenue net of MEGA cost*	1,202	1,438	1,693	1,472	1,504	1,699	15,269
Adjusted for inflation (thousands of 2004 dollars):							
Personal income	13,766	15,816	17,521	14,963	15,083	16,287	155,009
Gross state revenue	1,059	1,216	1,347	1,151	1,160	1,252	11,920
MEGA cost	97	139	136	136	143	163	1,407
State revenue net of MEGA cost*	962	1,077	1,211	1,015	1,017	1,089	10,513

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