

**The Economic Effects on Michigan
of the Engineered Machined Products Facility Expansion Decision**

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Abstract

Engineered Machined Products is considering expanding its current facility and building a second facility adjacent to its current one to produce pumps for automotive and heavy truck components. The expanded facility would employ 175 people by 2002. We estimate that by 2015, this expansion will have generated a total of 304 jobs in the state. Total state government revenues through 2015, net of MEGA costs and adjusted for inflation, would increase by \$14,280,000 (1998 dollars) due to the expansion of Engineered Machined Products.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Engineered Machined Products expanding its current facility and building a second facility adjacent to its current one to produce pumps for automotive and heavy truck components (SIC 3561). Investment activity would take place between 1999 and 2001, with an investment of \$5.25 million, and production would begin in April 1999. The new facility would employ 175 people by 2002.

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 2015, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 1999 through 2003 equal to 4.4 percent of the payroll (gross wages) of employees hired at the facility as a result of the expansion, and equal to 2.2 percent for the period 2004 through 2015. The payroll tax credit represents 100 percent of the maximum employment credit available to a company for the period 1999 through 2003, and equals 50 percent of the maximum credit for the period 2004 through 2015.

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 26 jobs in 1999 and 31 jobs in 2000; almost all of these jobs are temporary. In 2002, the first year of full operations, an additional 286 jobs are generated in the state. We estimate that by 2015, this facility addition will have generated a total of 304 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 1.6 over the period 2002 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 Engineered Machined Products were to expand in Michigan under the incentive program, state personal income in 2002 would be higher by \$15.5 million (in current dollars) than it would be without the facility, and in 2015 it would be \$27.4 million higher. Adjusted for inflation, these numbers in 1998 dollars would be \$11.4 million in 2002 and \$14.9 million in 2015.

The gain in economic activity results in higher state government revenues. We estimate that in 2002, the first year of full operations, the facility would generate \$1,240,000 in additional gross state government revenue, and that the MEGA package would provide a \$217,000 incentive to Engineered Machined Products. Thus, the Engineered Machined Products facility expansion would increase state government revenues in 2002 by \$1,023,000, net of MEGA incentive costs.

Over the period 1999 to 2015, gross state government revenue is projected to increase by \$25,648,000 (in current dollars) due to the expansion of Engineered Machined Products. The MEGA incentive package for Engineered Machined Products is forecast to cost \$3,155,000 over the period, resulting in a net increase in state government revenue of \$22,493,000. Adjusted for inflation, the total net increase in state government revenue from 1999 to 2015 would be \$14,280,000 in 1998 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 Engineered Machined Products Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	1999	2000	2001	2002	2005	2010	2015	Total 1999-2015
Total Employment	140	228	278	286	275	279	304	—
Manufacturing	66	117	165	175	175	175	175	—
Nonmanufacturing	74	111	113	111	100	104	129	—
Retail Trade	17	28	32	32	29	27	30	—
Services	22	35	38	35	31	33	45	—
Other	35	48	43	44	40	44	54	—
In current dollars (thousands):								
Personal income	5,700	10,500	13,900	15,500	17,700	21,600	27,400	320,600
Gross state revenue	456	840	1,112	1,240	1,416	1,728	2,192	25,648
MEGA cost	72	143	193	217	158	188	226	3,155
State revenue net of MEGA cost*	384	697	919	1,023	1,258	1,540	1,966	22,493
Adjusted for inflation (thousands of 1998 dollars):								
Personal income	4,681	8,221	10,462	11,358	11,931	13,127	14,929	204,162
Gross state revenue	374	658	837	909	954	1,050	1,194	16,333
MEGA cost	59	112	145	159	106	114	123	2,053
State revenue net of MEGA cost*	315	546	692	750	848	936	1,071	14,280

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