

**The Economic Effects on Michigan of
the Plastech Facility Location Decision**

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Abstract

Plastech is considering building a new manufacturing complex in Frenchtown Township, Michigan in three phases that would be used to produce injection-molded products. The facility would employ an additional 900 people by 2006. We estimate that by 2016, this location will have generated a total of 1,898 jobs in the state. Total state government revenues through 2016, net of MEGA costs and adjusted for inflation, would increase by \$61,871,000 (2002 dollars) due to the location of Plastech.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Plastech building a new manufacturing complex in Frenchtown Township, Michigan in three phases that would be used to produce injection-molded products (SIC 326). Investment activity would take place between 2003 and 2006, with an investment of \$111.6 million. The facility would employ an additional 900 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 2003 to 2016, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2004 to 2016 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 262 jobs in 2003, 54 jobs in 2005, and 373 jobs in 2006; almost all of these jobs are temporary. In 2007, the first year of full operations without investment activity, an additional 1,945 jobs are generated in the state. We estimate that by 2016, this location will have generated a total of 1,898 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 location averages 2.1 over the period 2007 to 2016. 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 Plastech were to locate its operations in Michigan under the incentive program, state

personal income in 2007 would be higher by \$105 million (in current dollars) than it would be without the location, and in 2016 it would be \$143.1 million higher. Adjusted for inflation, these numbers in 2002 dollars would be \$72.1 million in 2007 and \$87.7 million in 2016.

The gain in economic activity results in higher state government revenues. We estimate that in 2007, the first year of full operations without investment activity, the new facility would generate \$8,075,000 in additional gross state government revenue, and that the MEGA package would provide a \$1,072,000 incentive to Plastech. Thus, the Plastech location would increase state government revenues in 2007 by \$7,003,000, net of MEGA incentive costs.

Over the period 2003 to 2016, gross state government revenue is projected to increase by \$108,890,000 (in current dollars) due to the location of Plastech. The MEGA incentive package for Plastech is forecast to cost \$15,139,000 over the period, resulting in a net increase in state government revenue of \$93,751,000. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2016 would be \$61,871,000 in 2002 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 Plastech Facility Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2003	2004	2005	2006	2007	2010	2015	2016	Total 2003-2016
Total Employment	262	678	1,058	2,399	1,945	1,810	1,867	1,898	—
Manufacturing	22	325	486	995	934	900	903	908	—
Nonmanufacturing	240	353	572	1,404	1,011	910	964	990	—
Retail Trade	29	73	111	253	192	158	156	159	—
Services	61	120	183	449	310	253	277	290	—
Other	150	160	278	702	509	499	531	541	—
In current dollars (thousands):									
Personal income	12,000	29,100	49,200	115,700	105,000	113,600	136,400	143,100	1,416,000
Gross state revenue	923	2,238	3,783	8,898	8,075	8,736	10,489	11,004	108,890
MEGA cost	0	334	483	1,041	1,072	1,213	1,569	1,658	15,139
State revenue net of MEGA cost*	923	1,904	3,300	7,857	7,003	7,523	8,920	9,346	93,751
Adjusted for inflation (thousands of 2002 dollars):									
Personal income	9,519	22,143	36,089	83,460	72,101	74,790	85,078	87,676	933,773
Gross state revenue	732	1,703	2,775	6,418	5,545	5,752	6,542	6,742	71,807
MEGA cost	0	255	354	751	736	799	978	1,016	9,936
State revenue net of MEGA cost*	732	1,448	2,421	5,667	4,809	4,953	5,564	5,726	61,871

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