

**The Economic Effects on Michigan of the
Royal Plastics Facility Expansion Decision**

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Abstract

Royal Plastics, a manufacturer of plastic injection-molded products for the automotive, furniture, and other industries, is considering expanding its operations in Jamestown Township, Michigan. The facility would employ an additional 828 people by 2006. We estimate that by 2022, this expansion will have generated a total of 1,256 jobs in the state. Total state government revenues through 2022, net of MEGA costs and adjusted for inflation, would increase by \$57,238,000 (2002 dollars) due to the expansion of Royal Plastics.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Royal Plastics, a manufacturer of plastic injection-molded products for the automotive, furniture, and other industries, expanding its operations in Jamestown Township, Michigan (SIC 3089). Investment activity would take place between 2003 and 2007, with an investment of \$34 million. The facility would employ an additional 828 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 2022, are shown in the attached table. The MEGA incentive package includes relief from 100 percent of the single business tax for the period 2003 to 2006; it also includes a tax credit to the company for the period 2003 to 2022 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 25 jobs in 2003, 98 jobs in 2004, 9 jobs in 2005, 96 jobs in 2006, and 1 job in 2007; almost all of these jobs are temporary. In 2008, the first year of full operations without investment activity, an additional 1,193 jobs are generated in the state. We estimate that by 2022, this expansion will have generated a total of 1,256 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 1.4 over the period 2008 to 2022. 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 Royal Plastics were to expand its operations in Michigan under the incentive program, state personal income in 2008 would be higher by \$65.2 million (in current dollars) than it would be without the expansion, and in 2022 it would be \$108.2 million higher. Adjusted for inflation, these numbers in 2002 dollars would be \$43 million in 2008 and \$57.2 million in 2022.

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 \$5,216,000 in additional gross state government revenue, and that the MEGA package would provide a \$924,000 incentive to Royal Plastics. Thus, the Royal Plastics expansion would increase state government revenues in 2008 by \$4,292,000, net of MEGA incentive costs.

Over the period 2003 to 2022, gross state government revenue is projected to increase by \$116,376,000 (in current dollars) due to the expansion of Royal Plastics. The MEGA incentive package for Royal Plastics is forecast to cost \$22,289,000 over the period, resulting in a net increase in state government revenue of \$94,087,000. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2022 would be \$57,238,000 in 2002 dollars. These calculations do not include any revenue losses due to the Investment Tax Credit or the property tax abatement. If the costs of the tax credit and the tax abatement 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 Royal Plastics Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2003	2004	2005	2006	2007	2008	2010	2015	2020	2022	Total 2003-2022
Total Employment	402	721	907	1,376	1,248	1,193	1,140	1,146	1,226	1,256	—
Manufacturing	212	379	566	841	828	828	828	828	828	828	—
Nonmanufacturing	190	342	341	535	420	365	312	318	398	428	—
Retail Trade	43	70	80	117	98	87	75	69	78	83	—
Services	70	102	109	153	116	94	73	80	117	134	—
Other	77	170	152	265	206	184	164	169	203	211	—
In current dollars (thousands):											
Personal income	15,800	31,000	41,200	64,800	64,500	65,200	67,800	79,500	99,100	108,200	1,454,700
Gross state revenue	1,264	2,480	3,296	5,184	5,160	5,216	5,424	6,360	7,928	8,656	116,376
MEGA cost	282	570	835	1,285	889	924	1,001	1,215	1,465	1,579	22,289
State revenue net of MEGA cost*	982	1,910	2,461	3,899	4,271	4,292	4,423	5,145	6,463	7,077	94,087
Adjusted for inflation (thousands of 2002 dollars):											
Personal income	12,498	23,469	29,624	45,523	43,691	43,001	43,530	47,760	54,384	57,214	886,130
Gross state revenue	1,000	1,878	2,370	3,642	3,495	3,440	3,483	3,821	4,351	4,577	70,890
MEGA cost	223	432	600	903	602	609	643	730	804	835	13,652
State revenue net of MEGA cost*	777	1,446	1,770	2,739	2,893	2,831	2,840	3,091	3,547	3,742	57,238

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