

**The Economic Effects on Michigan of
the Karmann Manufacturing LLC Facility Location Decision**

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

**University of Michigan
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Abstract

Karmann Manufacturing LLC is considering locating a new production facility in Plymouth Township, Michigan to build convertible roof systems, including a retractable hard-top system and a unique convertible roof system, for various automotive manufacturers. The facility would employ an additional 251 people by 2007. We estimate that by 2016, this location will have generated a total of 608 jobs in the state. Total state government revenues through 2016, net of MEGA costs and adjusted for inflation, would increase by \$25,142,000 (2003 dollars) due to the location of Karmann Manufacturing LLC.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Karmann Manufacturing LLC locating a new production facility in Plymouth Township, Michigan to build convertible roof systems, including a retractable hard-top system and a unique convertible roof system, for various automotive manufacturers (SIC 3714). Investment activity would take place between 2004 and 2009, with an investment of \$8.2 million. The facility would employ an additional 251 people by 2007.

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 2004 to 2016, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2005 to 2016 equal to 85 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 31 jobs in 2004; almost all of these jobs are temporary. In 2009, the first year of full operations without investment activity, an additional 643 jobs are generated in the state. We estimate that by 2016, this location will have generated a total of 608 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 2.4 over the period 2009 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 Karmann Manufacturing LLC were to locate its operations in Michigan under the incentive program, state personal income in 2009 would be higher by \$45.3 million (in current dollars) than it would be without the location, and in 2016 it would be \$55.3 million higher. Adjusted for inflation, these numbers in 2003 dollars would be \$31.8 million in 2009 and \$35.4 million in 2016.

The gain in economic activity results in higher state government revenues. We estimate that in 2009, the first year of full operations without investment activity, the new facility would generate \$3,483,000 in additional gross state government revenue, and that the MEGA package would provide a \$351,000 incentive to Karmann Manufacturing LLC. Thus, the Karmann Manufacturing LLC location would increase state government revenues in 2009 by \$3,132,000, net of MEGA incentive costs.

Over the period 2004 to 2016, gross state government revenue is projected to increase by \$40,672,000 (in current dollars) due to the location of Karmann Manufacturing LLC. The MEGA incentive package for Karmann Manufacturing LLC is forecast to cost \$4,339,000 over the period, resulting in a net increase in state government revenue of \$36,333,000. Adjusted for inflation, the total net increase in state government revenue from 2004 to 2016 would be \$25,142,000 in 2003 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 Karman Manufacturing LLC Facility Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2004	2005	2006	2007	2008	2009	2010	2015	2016	Total 2004-2016
Total Employment	31	231	584	695	670	643	623	604	608	—
Manufacturing	5	100	250	298	290	283	278	272	272	—
Nonmanufacturing	26	131	334	397	380	360	345	332	336	—
Retail Trade	4	31	75	88	82	77	73	66	67	—
Services	10	48	119	137	125	114	106	101	104	—
Other	12	52	140	172	173	169	166	165	165	—
In current dollars (thousands):										
Personal income	1,600	11,900	32,000	41,900	44,100	45,300	46,400	53,300	55,300	528,900
Gross state revenue	123	915	2,461	3,222	3,391	3,483	3,568	4,099	4,253	40,672
MEGA cost	0	79	214	325	337	351	369	479	507	4,339
State revenue net of MEGA cost*	123	836	2,247	2,897	3,054	3,132	3,199	3,620	3,746	36,333
Adjusted for inflation (thousands of 2003 dollars):										
Personal income	1,314	9,361	24,553	31,366	31,947	31,837	32,329	34,725	35,449	365,768
Gross state revenue	101	720	1,888	2,412	2,457	2,448	2,486	2,670	2,726	28,128
MEGA cost	0	62	164	243	244	247	257	312	325	2,986
State revenue net of MEGA cost*	101	658	1,724	2,169	2,213	2,201	2,229	2,358	2,401	25,142

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