

**The Economic Effects on Michigan of the
Behr America, Inc. Facility Location Decision**

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

**University of Michigan
December 21, 1999**

Abstract

Behr America, Inc. is considering building a 60,000 square-foot facility in Troy, Michigan to house its North American headquarters, research, development, engineering, testing, sales, and marketing activities. The facility would employ 105 people by 2004. We estimate that by 2019, this location will have generated a total of 202 jobs in the state. Total state government revenues through 2019, net of MEGA costs and adjusted for inflation, would increase by \$18,367,000 (1999 dollars) due to the location of Behr America, Inc.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Behr America, Inc. building a 60,000 square-foot facility in Troy, Michigan to house its North American headquarters, research, development, engineering, testing, sales, and marketing activities (SIC 8731). Investment activity would take place between 2000 and 2002, with an investment of \$33.8 million, and production would begin in July 2001. The facility would employ 105 people by 2004.

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 2000 to 2019, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2002 to 2019 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 construction activity is expected to generate a total of 138 jobs in 2000 and 29 jobs in 2001; almost all of these jobs are temporary. In 2004, the first year of full operations, an additional 229 jobs are generated in the state. We estimate that by 2019, this location will have generated a total of 202 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 1.9 over the period 2004 to 2019. 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 Behr America, Inc. were to locate in Michigan under the incentive program, state

personal income in 2004 would be higher by \$22.1 million (in current dollars) than it would be without the facility, and in 2019 it would be \$38.2 million higher. Adjusted for inflation, these numbers in 1999 dollars would be \$15.8 million in 2004 and \$18.9 million in 2019.

The gain in economic activity results in higher state government revenues. We estimate that in 2004, the first year of full operations, the facility would generate \$1,768,000 in additional gross state government revenue, and that the MEGA package would provide a \$457,000 incentive to Behr America, Inc. Thus, the Behr America, Inc. facility location would increase state government revenues in 2004 by \$1,311,000, net of MEGA incentive costs.

Over the period 2000 to 2019, gross state government revenue is projected to increase by \$41,096,000 (in current dollars) due to the location of Behr America, Inc. The MEGA incentive package for Behr America, Inc. is forecast to cost \$10,767,000 over the period, resulting in a net increase in state government revenue of \$30,329,000. Adjusted for inflation, the total net increase in state government revenue from 2000 to 2019 would be \$18,367,000 in 1999 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 or 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 Behr America, Inc. Facility Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2000	2001	2002	2003	2004	2005	2010	2015	2019	Total 2000-2019
Total Employment	138	83	223	239	229	216	190	193	202	—
Manufacturing	25	4	1	0	0	0	0	0	0	—
Nonmanufacturing	113	79	222	239	229	216	190	193	202	—
Retail Trade	23	15	44	47	45	42	38	37	39	—
Services	33	42	145	159	155	150	141	143	148	—
Other	57	22	33	33	29	24	11	13	15	—
In current dollars (thousands):										
Personal income	6,000	5,800	17,700	20,900	22,100	22,900	26,600	32,200	38,200	513,700
Gross state revenue	480	464	1,416	1,672	1,768	1,832	2,128	2,576	3,056	41,096
MEGA cost	0	0	390	446	457	475	576	700	817	10,767
State revenue net of MEGA cost*	480	464	1,026	1,226	1,311	1,357	1,552	1,876	2,239	30,329
Adjusted for inflation (thousands of 1999 dollars):										
Personal income	4,939	4,382	14,079	15,869	15,800	15,977	16,333	17,627	18,904	310,217
Gross state revenue	395	351	1,126	1,270	1,264	1,278	1,306	1,410	1,513	24,817
MEGA cost	0	0	310	339	327	332	353	383	405	6,450
State revenue net of MEGA cost*	395	351	816	931	937	946	953	1,027	1,108	18,367

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