

**The Economic Effects on Michigan of
the Guardian Fiberglass, Inc., Facility Expansion Decision**

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

University of Michigan

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Abstract

Guardian Fiberglass, Inc., is considering an expansion of its facility in Albion, Michigan, to put in a new line that would produce fiberglass insulation. The facility would employ an additional 150 people by 2010. We estimate that by 2017, this expansion will have generated a total of 288 jobs in the state. Total state government revenues through 2017, net of MEGA costs and adjusted for inflation, would increase by \$10,910,000 (2004 dollars) due to the expansion of Guardian Fiberglass, Inc.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan if Guardian Fiberglass, Inc., expands its facility in Albion, Michigan (SIC 3296). The expansion would consist of adding a new line to produce fiberglass insulation. Investment activity would take place in 2005, with an investment of \$31.5 million. The facility would employ an additional 150 people by 2010.

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 2005 to 2017, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2006 to 2017 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 173 jobs in 2005; almost all of these jobs are temporary. In 2010, the first year of full operations, an additional 291 jobs are generated in the state. We estimate that by 2017, this expansion will have generated a total of 288 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 1.9 over the period 2010 to 2017. 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 Guardian Fiberglass, Inc., were to expand its operations in Michigan under the incentive program, state personal income in 2010 would be higher by \$19.1 million (in current

dollars) than it would be without the expansion, and in 2017 it would be \$24.6 million higher. Adjusted for inflation, these numbers in 2004 dollars would be \$13.3 million in 2010 and \$15.5 million in 2017.

The gain in economic activity results in higher state government revenues. We estimate that in 2010, the first year of full operations, the expanded facility would generate \$1,469,000 in additional gross state government revenue, and that the MEGA package would provide a \$185,000 incentive to Guardian Fiberglass, Inc. Thus, the Guardian Fiberglass, Inc., expansion would increase state government revenues in 2010 by \$1,284,000, net of MEGA incentive costs.

Over the period 2005 to 2017, gross state government revenue is projected to increase by \$18,518,000 (in current dollars) due to the expansion of Guardian Fiberglass, Inc. The MEGA incentive package for Guardian Fiberglass, Inc., is forecast to cost \$2,373,000 over the period, resulting in a net increase in state government revenue of \$16,145,000. Adjusted for inflation, the total net increase in state government revenue from 2005 to 2017 would be \$10,910,000 in 2004 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 Guardian Fiberglass, Inc., Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2005	2006	2007	2008	2009	2010	2015	2017	Total 2005-2017
Total Employment	173	262	256	248	253	291	282	288	—
Manufacturing	16	130	126	124	130	150	150	150	—
Nonmanufacturing	157	132	130	124	123	141	132	138	—
Retail Trade	20	29	28	26	25	29	26	26	—
Services	44	47	43	38	37	43	38	41	—
Other	93	56	59	60	61	69	68	71	—
In current dollars (thousands):									
Personal income	8,500	13,300	14,400	15,100	16,200	19,100	22,600	24,600	240,800
Gross state revenue	654	1,023	1,107	1,161	1,246	1,469	1,738	1,892	18,518
MEGA cost	0	145	151	151	160	185	235	262	2,373
State revenue net of MEGA cost*	654	878	956	1,010	1,086	1,284	1,503	1,630	16,145
Adjusted for inflation (thousands of 2004 dollars):									
Personal income	6,535	10,148	10,383	10,711	11,125	13,293	14,622	15,496	162,596
Gross state revenue	503	780	798	824	855	1,022	1,124	1,192	12,504
MEGA cost	0	111	109	107	110	129	152	165	1,594
State revenue net of MEGA cost*	503	669	689	717	745	893	972	1,027	10,910

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