

**The Economic Effects on Michigan
of the Shape Corporation Plant Location Decision**

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Abstract

The Shape Corporation is considering locating in Michigan a new rollforming plant that will produce high-strength steel bumper beams and door beams for automobile manufacturers, along with other rollformed products for existing and new customers. By 1999, the facility would employ 400 people. We estimate that by 2016, this location will have generated a total of 1,738 jobs in the state. Total state government revenues through 2016, net of MEGA costs and adjusted for inflation, would be increased by \$84,671,000 (1996 dollars) due to the location of the Shape Corporation.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of the Shape Corporation's locating in Michigan a new rollforming plant that will produce high-strength steel bumper beams and door beams for automobile manufacturers, along with other rollformed products for existing and new customers (SIC 3449). Construction activity would take place in 1996 and 1999, with an investment of \$21 million, and production would begin in April 1997. The facility would employ 400 workers by 1999.

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 1996 to 2016, are shown in the attached table. The MEGA incentive package includes relief from 65 percent of the single business tax for the period 1997-2006 and a tax credit to the company for the period 1997-2016 equal to 4.4 percent of the payroll (gross wages) of employees hired at the facility as a result of the project. The payroll tax credit represents 100 percent of the maximum employment credit available to a company.

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 of the facility and investment in machinery and equipment is expected to generate a total of 135 jobs in 1996 and 96 jobs in 1999; almost all of these jobs are temporary. In 2000, the first year of full production without construction activity, an additional 1,444 jobs are generated in the state. We estimate that by 2016, this facility will have generated a total of 1,738 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 3.9 over the period 2000-2016. 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 the Shape Corporation were to locate in Michigan under the incentive program, state personal income in 2000 would be higher by \$73.9 million (in current dollars) than it would be without the facility, and in 2016 it would be \$183.7 million higher. Adjusted for inflation, these numbers in 1996 dollars would be \$51.6 million in 2000 and \$77.1 million in 2016.

The gain in economic activity results in higher state government revenues. The construction of the facility and investment in machinery and equipment would generate \$400,000 in 1996 (in current dollars) in additional gross state revenue. Since there are no MEGA incentives offered in 1996, this value is also the impact on net state revenue. We estimate that in 2000, the first year of full production without construction activity, the operation of the facility would generate \$5,912,000 in additional gross state government revenue, and that the MEGA package would provide an \$859,000 incentive to the Shape Corporation. Thus, the Shape Corporation facility would generate an additional \$5,053,000 in revenue to state government in 2000, net of MEGA incentive costs.

Over the period 1996-2016, gross state government revenue is projected to increase by \$177,288,000 (in current dollars) due to the location of the Shape Corporation. The MEGA incentive package for the Shape Corporation is forecast to cost \$17,450,000 over the period, resulting in a net increase in state government revenue of \$159,838,000. Adjusted for inflation, the total net increase in state government revenue from 1996 to 2016 would be \$84,671,000 in 1996 dollars. These calculations do not include any revenue losses due to the property tax abatement. If the cost of the 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 Shape Corporation Plant Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	1996	1997	1998	1999	2000	2005	2010	2016	Total 1996-2016
Total Employment	135	465	919	1,531	1,444	1,461	1,585	1,738	—
Manufacturing	14	155	310	549	527	496	504	521	—
Nonmanufacturing	121	310	609	982	917	965	1,081	1,217	—
Retail Trade	20	64	124	197	184	179	198	226	—
Services	32	128	246	379	356	358	405	471	—
Other	69	118	239	406	377	428	478	520	—
In current dollars (thousands):									
Personal income	5,000	18,100	38,800	69,200	73,900	100,200	132,600	183,700	2,216,100
Gross state revenue	400	1,448	3,104	5,536	5,912	8,016	10,608	14,696	177,288
MEGA cost*	0	221	442	786	859	1,055	848	1,121	17,450
State revenue net of MEGA cost	400	1,227	2,662	4,750	5,053	6,961	9,760	13,575	159,838
Adjusted for inflation (thousands of 1996 dollars):									
Personal income	5,000	15,604	30,884	51,891	51,615	59,685	68,040	77,062	1,201,406
Gross state revenue	400	1,249	2,471	4,151	4,129	4,775	5,443	6,165	96,113
MEGA cost*	0	213	409	699	734	741	490	512	11,442
State revenue net of MEGA cost	400	1,036	2,062	3,452	3,395	4,034	4,953	5,653	84,671

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