The Economic Effects on Michigan of the Shiloh Plant Location Decision

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Abstract

Shiloh Industries is considering locating its stampings and processed steel plant in Michigan, which by 1998 would employ 153 people. We estimate that by 2017, this facility will have generated a total of 377 jobs in the state. Total state government revenues through 2017, net of MEGA costs and adjusted for inflation, would be increased by $25,121,000 (1995 dollars) due to the location of the Shiloh plant.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Shiloh Industries' locating a stampings and processed steel plant (SIC 3469) in the state. A new facility would be built between 1995 and 1996, with an investment of $30 million, and would begin production in mid-1996. The facility would employ 153 workers by 1998.

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 1995 to 2017, are shown in the attached table. The MEGA incentive package includes relief from the single business tax for the period 1998-2005 and a tax credit to the company equal to the income tax withheld from the plant's employees for the period 1998-2017.

The total employment effects, reported in the first line of the table, include the direct jobs created at the plant 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 201 jobs in 1995 and 118 in 1996; almost all of these jobs are temporary. In 1998, the first year of full production, an additional 316 jobs are generated in the state. We estimate that by 2017, this facility will have generated a total of 377 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 activity ranges from 2.0 to 2.5 over the period 1998-2017. 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 the facility were to locate in Michigan under the incentive program, state personal income in 1998 would be higher by $17.3 million (in current dollars) than it would be without the facility, and in 2017 it would be $47.6 million higher. Adjusted for inflation, these numbers in 1995 dollars would be $14 million in 1998 and $20.5 million in 2017.

The gain in economic activity results in higher state government revenues. In 1995, the construction of the plant and investment in machinery and equipment would generate $560,000 (in current dollars) in additional gross state revenue. Since there are no MEGA incentives offered to the construction companies, these values are also the impact on net state revenue. We estimate that the additional economic activity resulting from the operation of this plant and the investment in machinery and equipment would generate $968,000 in additional gross state government revenue in 1996 and $1,040,000 in 1997. We estimate that in 1998, the first year of full production, the operation of the plant would generate $1,384,000 in additional gross state government revenue, and that the MEGA package would provide a $243,000 incentive to Shiloh. Thus, the Shiloh facility would generate an additional $1,141,000 in revenue to state government in 1998, net of MEGA incentive costs.

Over the period 1995-2017, gross state government revenue is projected to increase by $51,072,000 (in current dollars) due to the location of the Shiloh plant. The MEGA incentive package for Shiloh is forecast to cost $9,224,000 over the period, resulting in a net increase in state government revenue of $41,848,000. Adjusted for inflation, the total net increase in state government revenue from 1995 to 2017 would be $25,121,000 in 1995 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 Shiloh Plant Location Decision

Net Benefits with the Incentive Package

Economic/Fiscal Indicator	1995	1996	1997	1998	1999	2000	2005	2010	2017	Total 1995-2017
Total employment	201	271	247	316	309	305	316	348	377	—
Manufacturing	17	98	122	160	158	156	154	158	164	—
Nonmanufacturing	184	173	125	156	151	149	162	190	213	—
Retail trade	27	39	30	38	37	36	36	41	46	—
Services	44	58	45	59	57	55	59	70	82	—
Other	113	76	50	59	57	58	67	79	85	—
In current dollars (thousands):										
Personal income	7,000	12,100	13,000	17,300	18,400	19,500	25,200	33,300	47,600	638,400
Gross state revenue	560	968	1,040	1,384	1,472	1,560	2,016	2,664	3,808	51,072
MEGA cost*	0	0	0	243	256	269	602	431	597	9,224
State revenue net of MEGA cost	560	968	1,040	1,141	1,216	1,291	1,414	2,233	3,211	41,848
Adjusted for inflation (thousands of 1995 dollars):										
Personal income	7,000	10,082	12,169	14,030	14,479	14,878	16,363	18,291	20,461	384,531
Gross state revenue	560	807	974	1,122	1,158	1,190	1,309	1,464	1,637	30,762
MEGA cost*	0	0	0	216	219	221	407	240	252	5,641
State revenue net of MEGA cost	560	807	974	906	939	969	902	1,224	1,385	25,121

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