## The Economic Effects on Michigan of the Hess Industries, Inc., Expansion Decision

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## Abstract

Hess Industries, Inc., is considering expanding its operations in Michigan to add offices for additional engineering staff and to increase production capacity for tools, dies, portable presses, and spin forming equipment. By 1998, the expanded facility would employ an additional 90 people. We estimate that by 2017, this expansion will have generated a total of 346 jobs in the state. Total state government revenues through 2017, net of MEGA costs and adjusted for inflation, would be increased by \$14,307,000 (1995 dollars) due to the expansion of Hess Industries, Inc.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Hess Industries, Inc.'s expanding its operations in the state to add offices for additional engineering staff and increased production capacity for tools, dies, portable presses, and spin forming equipment (SIC 3542). The expansion would take place in 1996, with an investment of \$6.1 million, and production would begin in early 1997. The expanded facility would employ an additional 90 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 1996 to 2017, are shown in the attached table. The MEGA incentive package includes relief from the single business tax for the period 1998-2017 and a tax credit to the company for the same period equal to 3.3 percent of the payroll (gross wages) of employees hired at the facility as a result of the project. The payroll tax credit represents 75 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 81 jobs in 1996; almost all of these jobs are temporary. In 1998, the first year of full production, an additional 245 jobs are generated in the state. We estimate that by 2017, this facility will have generated a total of 346 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 3.1 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 Hess Industries, Inc., were to expand in Michigan under the incentive program, state personal income in 1998 would be higher by \$11.2 million (in current dollars) than it would be without the facility, and in 2017 it would be \$40.1 million higher. Adjusted for inflation, these numbers in 1995 dollars would be \$8.2 million in 1998 and \$15.1 million in 2017.

The gain in economic activity results in higher state government revenues. The construction of the facility and investment in machinery and equipment would generate \$240,000 in 1996 (in current dollars) in additional gross state revenue. Since there are no MEGA incentives offered to the construction companies, this value is also the impact on net state revenue. We estimate that the additional economic activity resulting from the operation of this facility would generate \$552,000 in additional gross state government revenue in 1997. Since the MEGA incentive package does not begin until 1998, this value is also the impact on net state revenue. We estimate that in 1998, the first year of full production, the operation of the facility would generate \$896,000 in additional gross state government revenue, and that the MEGA package would provide a \$267,000 incentive to Hess Industries, Inc. Thus, the Hess Industries, Inc., facility would generate an additional \$629,000 in revenue to state government in 1998, net of MEGA incentive costs.

Over the period 1996-2017, gross state government revenue is projected to increase by \$37,848,000 (in current dollars) due to the expansion of Hess Industries, Inc. The MEGA incentive package for Hess Industries, Inc., is forecast to cost \$7,755,000 over the period, resulting in a net increase in state government revenue of \$30,093,000. Adjusted for inflation, the total net increase in state government revenue from 1996 to 2017 would be \$14,307,000 in .995 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 .vould 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 Hess Industries, Inc., Expansion Decision Net Benefits with the Incentive Package

Economic/Fiscal Indicator	1996	1997	1998	1999	2000	2005	2010	2017	Total 1996-2017
Total employment	81	164	245	240	240	255	290	346	
Manufacturing	5	89	104	100	86	95	97	102	
Nonmanufacturing	9/	96	141	140	142	160	193	244	ļ
Retail trade	6	22	34	32	32	34	4.1	- 15	
Services	17	39	59	57	. 57	63	78	102	
Other	20	35	48	51	53	63	74	16	ľ
In current dollars (thousands):									
Personal income	3,000	6,900	11,200	12,300	13.500	18.500	25.400	40 100	473 100
Gross state revenue	240	552	968	984	1.080	1,480	20162	3000	37.848
MEGA cost*	0	0	267	275	285	345	416	542	7755
State revenue net of MEGA cost	240	552	629	709	795	1,135	1,616	2,666	30.093
Adjusted for inflation									
(thousands of 1995 dollars):									-
Personal income	2,399	5,268	8,247	8,383	8.865	10.534	12.287	15.095	236.052
Gross state revenue	192	421	099	0.29	709	843	983	1 208	18 056
MEGA cost*	0	0	238	235	235	234	23.1	2200	16,730
State revenue net of MEGA cost	192	421	422	435	474	609	757	070	17.307
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\*These estimates do not include any state government revenue losses due to the property tax abatement.