

**The Economic Effects on Michigan  
of the A. O. Smith Plant Location Decision**

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### Abstract

*The A. O. Smith company is considering locating an automotive parts manufacturing plant in Michigan, which by 1997 would employ 247 people. We estimate that by 2006, this facility will have generated a total of 870 jobs in the state. Total state government revenues through 2006, net of MEGA costs and adjusted for inflation, would be increased by \$25,678,000 (1995 dollars) due to the presence of the A. O. Smith facility.*

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of the A. O. Smith company's locating an automotive parts manufacturing plant (SIC 3714) in the state. The new facility would be built in 1995 and 1996, with an investment of \$64.855 million, and would begin production in mid-1996. The plant would employ 247 workers by 1997 and is expected to generate annual sales of \$90 million that year.

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 2006, are shown in the attached table. The MEGA incentive package includes a tax credit to the company equal to the income tax withheld from the plant's employees for the period 1997-2006.

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 132 jobs in 1995, 355 in 1996, and 113 in 1997; almost all of these jobs are temporary. In 1998, the first full year of production without investment activity, an additional 802 jobs are generated in the state. We estimate that by 2006, this facility will have generated a total of 870 jobs in the state. 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 plant were to locate in Michigan under the incentive program, state personal

income in 1998 would be higher by \$40.8 million (in current dollars) than it would be without the plant, and in 2006 it would be \$66 million higher. Adjusted for inflation, these numbers in 1995 dollars would be \$30.2 million in 1998 and \$39.8 million in 2006.

The gain in economic activity results in higher state government revenues. In 1995 and 1996, the construction of the plant and investment in machinery and equipment would generate \$352,000 and \$1,864,000 respectively 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 in 1997, the additional economic activity resulting from the operation of this plant and the investment in machinery and equipment would generate \$3,208,000 in additional state government revenue, and that the MEGA package would provide a \$409,000 incentive to A. O. Smith. Thus, the A. O. Smith facility would generate an additional \$2,799,000 in revenue to state government in 1997, net of MEGA incentive costs. We estimate that in 1998, the first full year of production without investment activity, the operation of the plant would generate \$3,264,000 in additional state government revenue, and that the MEGA package would provide a \$431,000 incentive to A. O. Smith. Thus, the A. O. Smith facility would generate an additional \$2,833,000 in revenue to state government in 1998, net of MEGA incentive costs.

Over the period 1995-2006, gross state government revenue is projected to increase by \$43,240,000 due to the presence of the A. O. Smith facility. The MEGA incentive package for A. O. Smith is forecast to cost \$5,167,000 over the period, resulting in a net increase in state government revenue of \$38,073,000. Adjusted for inflation, the total net increase in state government revenue from 1995 to 2006 would be \$25,678,000 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 A. O. Smith Plant

Net Benefits with the Incentive Package

Economic/Fiscal Indicator	1995	1996	1997	1998	1999	2000	2005	2006	Total 1995-2006
Total employment	132	595	902	802	790	788	852	870	—
Manufacturing	5	151	339	306	298	292	290	291	—
Durables	4	142	322	292	286	281	279	279	—
Nondurables	1	9	17	14	12	11	11	12	—
Nonmanufacturing	127	444	563	496	492	496	562	579	—
Retail trade	16	97	134	112	109	108	116	119	—
Services	22	145	217	185	181	179	203	212	—
Other	89	202	212	199	202	209	243	248	—
In current dollars (thousands):									
Personal income	4,400	23,300	40,100	40,800	43,600	46,300	62,100	66,000	540,500
Gross state revenue	352	1,864	3,208	3,264	3,488	3,704	4,968	5,280	43,240
MEGA cost*	0	0	409	431	454	477	606	636	5,167
State revenue net of MEGA cost	352	1,864	2,799	2,833	3,034	3,227	4,362	4,644	38,073
Adjusted for inflation (thousands of 1995 dollars):									
Personal income	4,400	20,871	34,060	30,247	31,452	32,443	37,362	39,778	370,657
Gross state revenue	352	1,670	2,725	2,420	2,516	2,596	2,989	3,182	29,652
MEGA cost*	0	0	379	384	388	393	410	414	3,974
State revenue net of MEGA cost	352	1,670	2,346	2,036	2,128	2,203	2,579	2,768	25,678

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