

**The Economic Effects on Michigan of the  
Smiths Aerospace Test and Design Laboratory**

Prepared by the Michigan Economic Development Corporation utilizing Regional  
Economic Models, Incorporated (REMI) software.

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### Abstract

*Smiths Aerospace is considering locating a laboratory in Cascade Township, Michigan. This facility would design, study and test avionics systems and components, mainly for future military aircraft. The new facility would employ up to 120 people by the end of 2005. We estimate that by 2011, this location will have generated a total of 214 jobs in the state. Total state government revenues through 2011, net of MEGA costs and adjusted for inflation, would increase by \$4.6 million (2003 dollars) due to the location of the Smiths Aerospace Test and Design Laboratory.*

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Smiths Aerospace locating a laboratory in Cascade Township. Investment activity would take place between 2003 and 2006 with an investment of \$3.2 million. The facility would employ an additional 120 people and would be at full production by 2005.

The estimates of the benefits attributable to the project 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 2003 to 2011, are shown in the attached table. The MEGA incentive package includes a tax credit to the company equal to 100 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2003 to 2011.

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 created from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. In 2005, the first year of full operations, an additional 230 jobs are generated in the state. The total number of jobs (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the expansion averages 1.72 over the period 2003 to 2011. Sectoral detail on the employment 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 Smiths Aerospace were to locate in Michigan under the incentive program, state personal income in 2005 would be higher by \$9.9 million (in current dollars) than it would be without the facility, and in 2011, it would be \$13.5 million higher. Adjusted for inflation, these numbers in 2003 dollars would be \$9.5 million in 2005 and \$11.4 million in 2011.

The gain in economic activity results in higher government revenues. We estimate that in 2007, the first year of full operations without investment activity, the facility would

generate \$889,000 in additional gross state revenue, and that the MEGA package would provide a \$284,000 incentive to Smiths Aerospace. Thus, the new Smiths Aerospace facility would increase state revenues in 2007 by 605,000, net of MEGA costs.

Over the period 2003 to 2011 state government revenue is projected to increase by \$7.5 million (in current dollars) due to the new Smiths Aerospace facility. The MEGA incentive package for Smiths Aerospace is forecast to cost \$2.4 million over the period, resulting in a net increase in state government revenue of \$5.1 million. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2011 would be \$4.6 million in 2003 dollars. These calculations do not include any revenue losses due to the property tax abatement or the investment tax credit. If the costs of the abatement and the tax credit were included, the net revenue gain to state government would be slightly less.

None of the 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.

**Smiths Aerospace**  
**Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Total Employment	113	193	230	226	222	219	217	217	214	
Manufacturing	2	3	3	3	2	1	1	1	0	
Non-Manufacturing	111	190	227	223	220	218	216	216	214	
Retail Trade	14	23	27	27	25	25	25	25	24	
Services	82	146	175	173	172	172	171	171	170	
Other	15	21	25	23	23	21	20	20	20	
In Current Dollars (Thousands):										
Personal Income	\$4,181	\$7,751	\$9,918	\$10,530	\$11,110	\$11,690	\$12,330	\$12,970	\$13,520	\$94,000
Gross State Revenue	334	620	793	842	889	935	986	1,038	1,082	7,519
Mega Cost	114	211	263	273	284	295	307	320	333	2,398
State Revenue Net of MEGA Cost*	\$220	\$409	\$530	\$569	\$605	\$640	\$679	\$718	\$749	\$5,121
Adjusted for Inflation (Thousands of 2003 Dollars):										
Personal Income	\$4,181	\$7,589	\$9,504	\$9,875	\$10,196	\$10,497	\$10,832	\$11,148	\$11,370	\$85,192
Gross State Revenue	334	607	760	790	816	840	866	892	910	6,815
Mega Cost	114	206	252	256	260	265	270	275	280	2,178
State Revenue Net of MEGA Cost*	\$220	\$401	\$508	\$534	\$556	\$575	\$596	\$617	\$630	\$4,637

\* These estimates do not include any state government revenue losses due to the Investment Tax Credit, the Renaissance Zone Credit or the property tax abatement.

**Smiths Aerospace**  
**Summary Estimates**  
(all estimates in 2003 dollars)

<b>TOTAL JOBS CREATED</b>	214
Direct	120
Indirect	94
<b>NET POSITIVE STATE REVENUE IMPACT</b>	\$4,637,000
Revenue Foregone	\$2,178,000
Revenue Gain	\$6,815,000
Personal Income Generated Over Life of MEGA Agreement	\$85,192,000
Average Weekly Wage	\$1,000
Statewide Employment Multiplier	1.72