

**The Economic Effects on Michigan of the
Integrated Sensing Systems Expansion**

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

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Abstract

Integrated Sensing Systems, Inc. is considering an expansion to their existing operations in Ypsilanti Township, Michigan. This facility would research, design, and manufacture Micro Electro Mechanical Systems (MEMS) and their applications in sensing systems. The new facility would employ up to 119 people by the end of 2006. We estimate that by 2007, this location will have generated a total of 242 jobs in the state. Total state government revenues through 2007, net of MEGA costs and adjusted for inflation, would increase by \$3.7 million (2001 dollars) due to the Integrated Sensing Systems Expansion.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Integrated Sensing Systems, Inc.'s expansion in Ypsilanti Township. Investment activity would take place between 2001 and 2006 with an investment of \$5.3 million. The facility would employ an additional 119 people and would be at full production by 2002.

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 2001 to 2007, are shown in the attached table. The MEGA incentive package includes a tax credit to the company equal to 75 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2002 to 2007.

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 2006, the first year of full operations, an additional 256 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 1.1 over the period 2001 to 2007. 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 Integrated Sensing Systems, Inc. were to expand in Michigan under the incentive program, state personal income in 2006 would be higher by \$16.7 million (in current dollars) than it would be without the facility, and in 2007, it would be \$17.5 million higher. Adjusted for inflation, these numbers in 2001 dollars would be \$15.2 million in 2006 and \$15.6 million in 2007.

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 \$1.4 million in additional gross state revenue, and that the MEGA package would provide a \$207,000 incentive to Integrated Sensing Systems, Inc. Thus, the new Integrated Sensing Systems, Inc. facility would increase state revenues in 2007 by \$1.2 million, net of MEGA costs.

Over the period 2001 to 2007 state government revenue is projected to increase by \$4.7 million (in current dollars) due to the new Integrated Sensing Systems, Inc. facility. The MEGA incentive package for Integrated Sensing Systems, Inc. is forecast to cost \$700,000 over the period, resulting in a net increase in state government revenue of \$4 million. Adjusted for inflation, the total net increase in state government revenue from 2001 to 2007 would be \$3.7 million in 2001 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.

**Integrated Sensing Systems Expansion
Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2001	2002	2003	2004	2005	2006	2007	Total
Total Employment	11	24	71	128	185	256	242	
Manufacturing	0	11	33	61	89	124	121	
Non-Manufacturing	11	13	38	67	96	132	121	
Retail Trade	1	3	9	16	23	31	29	
Services	2	5	16	29	42	58	53	
Other	8	5	13	22	31	43	39	
In Current Dollars (Thousands):								
Personal Income	\$488	\$1,312	\$3,937	\$7,416	\$11,510	\$16,720	\$17,550	\$58,933
Gross State Revenue	39	105	315	593	921	1,338	1,404	4,715
Mega Cost	0	15	46	89	136	200	207	693
State Revenue Net of MEGA Cost*	\$39	\$90	\$269	\$504	\$785	\$1,138	\$1,197	\$4,022
Adjusted for Inflation (Thousands of 2001 Dollars):								
Personal Income	\$488	\$1,288	\$3,791	\$7,001	\$10,653	\$15,172	\$15,614	\$54,007
Gross State Revenue	39	103	303	560	852	1,214	1,249	4,320
Mega Cost	0	15	44	84	126	181	184	634
State Revenue Net of MEGA Cost*	\$39	\$88	\$259	\$476	\$726	\$1,033	\$1,065	\$3,686

* 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.