

**The Economic Effects on Michigan
of the Bosal Industries Facility Location Decision**

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Abstract

Bosal Industries is considering establishing a facility in Michigan which will manufacture exhaust systems for the automotive industry. By the year 2000, the facility would employ 110 people. We estimate that by 2016, this location will have generated a total of 253 jobs in the state. Total state government revenues through 2016, net of MEGA costs and adjusted for inflation, would be increased by \$11,323,000 (1997 dollars) due to the location of Bosal Industries.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Bosal Industries' locating a facility in the state which will manufacture exhaust systems for the automotive industry (SIC 3440). Investment activity would take place between 1998 and 2000, with an investment of \$7.8 million, and operations would begin in May 1998. The facility would employ 110 workers by 2000.

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 1998 to 2016, are shown in the attached table. The MEGA incentive package includes a tax credit to the company equal to 4.4 percent of the payroll (gross wages) of employees hired at the facility as a result of the project for the period 1999-2001, and equal to 2.2 percent for the period 2002-2016. The payroll tax credit represents 100 percent of the maximum employment credit available to a company for the period 1999-2001, and represents 50 percent for the period 2002-2016.

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 is expected to generate a total of 42 jobs in 1998, 2 jobs in 1999, and 1 job in 2000; almost all of these jobs are temporary. In 2000, the first year of full operations, an additional 210 jobs are generated in the state. We estimate that by 2016 this facility will have generated a total of 253 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 location averages 2.0 over the period 2000-2016. 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 Bosal Industries were to locate in Michigan under the incentive program, state personal income in 2000 would be higher by \$9 million (in current dollars) than it would be without the facility, and in 2016 it would be \$20.9 million higher. Adjusted for inflation, these numbers in 1997 dollars would be \$6.9 million in 2000 and \$11 million in 2016.

The gain in economic activity results in higher state government revenues. We estimate that in 2000, the first year of full operations, the facility would generate \$720,000 in additional gross state government revenue, and that the MEGA package would provide a \$166,000 incentive to Bosal Industries. Thus, the Bosal Industries facility location would generate an additional \$554,000 in revenue to state government in 2000, net of MEGA incentive costs.

Over the period 1997-2016, gross state government revenue is projected to increase by \$20,648,000 (in current dollars) due to the location of Bosal Industries. The MEGA incentive package for Bosal Industries is forecast to cost \$2,226,000 over the period, resulting in a net increase in state government revenue of \$18,422,000. Adjusted for inflation, the total net increase in state government revenue from 1997 to 2016 would be \$11,323,000 in 1997 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 Bosal Industries Facility Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	1998	1999	2000	2005	2010	2015	2016	Total 1998-2016
Total employment	142	196	210	212	227	249	253	—
Manufacturing	64	111	120	114	115	117	117	—
Nonmanufacturing	78	85	90	98	112	132	136	—
Retail trade	21	23	24	20	21	24	24	—
Services	30	33	35	30	37	49	52	—
Other	27	29	31	48	54	59	60	—
In current dollars (thousands):								
Personal income	5,200	7,700	9,000	12,100	15,400	19,800	20,900	258,100
Gross state revenue	416	616	720	968	1,232	1,584	1,672	20,648
MEGA cost	0	144	166	99	119	144	149	2,226
State revenue net of MEGA cost	416	472	554	869	1,113	1,440	1,523	18,422
Adjusted for inflation (thousands of 1997 dollars):								
Personal income	4,446	6,287	6,878	7,936	9,217	10,832	10,989	162,442
Gross state revenue	356	503	550	635	737	867	879	12,995
MEGA cost	0	137	154	79	82	86	86	1,672
State revenue net of MEGA cost	356	366	396	556	655	781	793	11,323

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