

**The Economic Effects on Michigan of the
Axle Alliance Company, LLC Facility Location Decision**

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Abstract

Axle Alliance Company, LLC is considering renovating and leasing a portion of the current Detroit Diesel facility in Redford, Michigan to use for the development, design, engineering and manufacturing of axles for commercial vehicles. The facility would employ an additional 215 people by 2008. We estimate that by 2018, this location will have generated a total of 552 jobs in the state. Total state government revenues through 2018, net of MEGA costs and adjusted for inflation, would increase by \$27,662,000 (2002 dollars) due to the location of Axle Alliance Company, LLC.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Axle Alliance Company, LLC renovating and leasing a portion of the current Detroit Diesel facility in Redford, Michigan to use for the development, design, engineering and manufacturing of axles for commercial vehicles (SIC 3714). Investment activity would take place between 2002 and 2007, with an investment of \$21.9 million. The facility would employ an additional 215 people by 2008.

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 2002 to 2018, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2004 to 2018 equal to 100 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility as a result of the project.

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 activity is expected to generate a total of 7 jobs in 2002, 23 jobs in 2003, 23 jobs in 2004, 12 jobs in 2005, 3 jobs in 2006, and 1 job in 2007; almost all of these jobs are temporary. In 2008, the first year of full operations without investment activity, an additional 583 jobs are generated in the state. We estimate that by 2018, this location will have generated a total of 552 additional 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 2.5 over the period 2008 to 2018. Sectoral detail on the employment gains is also shown in the table.

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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 Creative Solutions, Inc. were to expand in Michigan under the incentive program, state personal income in 2011 would be higher by \$37.6 million (in current dollars) than it would be without the facility, and in 2013 it would be \$40.2 million higher. Adjusted for inflation, these numbers in 2002 dollars would be \$24.7 million in 2011 and \$25.4 million in 2013.

The gain in economic activity results in higher state government revenues. We estimate that in 2011, the first year of full operations, the facility would generate \$3,008,000 in additional gross state government revenue, and that the MEGA package would provide a \$731,000 incentive to Creative Solutions, Inc. Thus, the Creative Solutions, Inc. facility expansion would increase state government revenues in 2011 by \$2,277,000, net of MEGA incentive costs.

Over the period 2002 to 2013, gross state government revenue is projected to increase by \$22,848,000 (in current dollars) due to the expansion of Creative Solutions, Inc. The MEGA incentive package for Creative Solutions, Inc. is forecast to cost \$5,721,000 over the period, resulting in a net increase in state government revenue of \$17,127,000. Adjusted for inflation, the total net increase in state government revenue from 2002 to 2013 would be \$11,839,000 in 2002 dollars. These calculations do not include any revenue losses due to the Investment Tax Credit or the property tax abatement. If the costs of the tax credit or the tax 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 Creative Solutions, Inc. Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2013	Total 2002-2013
Total Employment	80	198	270	258	292	332	374	413	455	496	482	—
Manufacturing	1	2	1	0	0	0	0	0	0	0	0	—
Nonmanufacturing	79	196	269	258	292	332	374	413	455	496	482	—
Retail Trade	12	29	38	36	40	45	51	56	61	67	64	—
Services	57	143	175	195	224	255	287	318	349	382	374	—
Other	10	24	56	27	28	32	36	39	45	47	44	—
In current dollars (thousands):												
Personal income	3,500	9,500	12,600	16,000	18,500	21,600	25,100	29,000	33,000	37,600	40,200	285,600
Gross state revenue	280	760	1,008	1,280	1,480	1,728	2,008	2,320	2,640	3,008	3,216	22,848
MEGA cost	79	215	274	329	378	440	505	575	649	731	788	5,721
State revenue net of MEGA cost**	201	545	734	951	1,102	1,288	1,503	1,745	1,991	2,277	2,428	17,127
Adjusted for inflation (thousands of 2002 dollars):												
Personal income	3,500	8,312	10,096	11,794	13,476	15,373	17,729	19,824	22,325	24,707	25,365	197,635
Gross state revenue	280	665	808	944	1,078	1,230	1,419	1,586	1,786	1,977	2,029	15,811
MEGA cost	79	188	219	243	276	313	357	393	439	480	497	3,972
State revenue net of MEGA cost**	201	477	588	701	802	917	1,062	1,193	1,347	1,497	1,532	11,839

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