

**The Economic Effects on Michigan of
the ZF Lemforder Facility Expansion Decision**

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Abstract

ZF Lemforder, a company that manufactures and assembles chassis components for the OEMs, is considering a 150,000-sq.-ft. expansion of its facility in Lapeer, Michigan. The facility would employ an additional 90 people by 2007. We estimate that by 2014, this expansion will have generated a total of 219 jobs in the state. Total state government revenues through 2014, net of MEGA costs and adjusted for inflation, would increase by \$8,337,000 (2003 dollars).

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan if ZF Lemforder, a company that manufactures and assembles chassis components for the OEMs, constructs a 150,000-sq.-ft. addition to its facility in Lapeer, Michigan (SIC 3714). Investment activity would take place between 2004 and 2006, with an investment of \$34.7 million. The facility would employ an additional 90 people by 2007.

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 2004 to 2014, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2005 to 2012 equal to 100 percent, and 50 percent in 2013 and 2014, 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 investment activity is expected to generate a total of 175 jobs in 2004; almost all of these jobs are temporary. In 2007, the first year of full operations, an additional 236 jobs are generated in the state. We estimate that by 2014, this expansion will have generated a total of 219 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 expansion averages 2.5 over the period 2007 to 2014. 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 ZF Lemforder were to expand its operations in Michigan under the incentive

program, state personal income in 2007 would be higher by \$15.5 million (in current dollars) than it would be without the expansion, and in 2014 it would be \$19.2 million higher. Adjusted for inflation, these numbers in 2003 dollars would be \$11.4 million in 2007 and \$13 million in 2014.

The gain in economic activity results in higher state government revenues. We estimate that in 2007, the first year of full operations, the expanded facility would generate \$1,192,000 in additional gross state government revenue, and that the MEGA package would provide a \$165,000 incentive to ZF Lemforder. Thus, the ZF Lemforder expansion would increase state government revenues in 2007 by \$1,027,000, net of MEGA incentive costs.

Over the period 2004 to 2014, gross state government revenue is projected to increase by \$13,257,000 (in current dollars) due to the expansion of ZF Lemforder. The MEGA incentive package for ZF Lemforder is forecast to cost \$1,568,000 over the period, resulting in a net increase in state government revenue of \$11,689,000. Adjusted for inflation, the total net increase in state government revenue from 2004 to 2014 would be \$8,337,000 in 2003 dollars.

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 ZF Lemforder Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2004	2005	2006	2007	2010	2014	Total 2004-2014
Total Employment	175	228	214	236	217	219	—
Manufacturing	14	94	89	103	98	97	—
Nonmanufacturing	161	134	125	133	119	122	—
Retail Trade	19	30	27	29	25	25	—
Services	42	49	42	44	36	37	—
Other	100	55	56	60	58	60	—
In current dollars (thousands):							
Personal income	8,400	12,800	13,400	15,500	16,800	19,200	172,400
Gross state revenue	646	984	1,030	1,192	1,292	1,476	13,257
MEGA cost	0	124	133	165	184	112	1,568
State revenue net of MEGA cost*	646	860	897	1,027	1,108	1,364	11,689
Adjusted for inflation (thousands of 2003 dollars):							
Personal income	6,713	9,728	9,988	11,360	11,972	12,979	122,926
Gross state revenue	516	748	768	874	921	998	9,453
MEGA cost	0	95	99	121	131	76	1,116
State revenue net of MEGA cost*	516	653	669	753	790	922	8,337

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

**Fiscal Effects on Michigan of the ZF Lemforder Facility Expansion
Net Benefits with the Incentive Package**

Year	Gross State Revenue (In thousands of current dollars)	MEGA Cost	State Revenue Net of MEGA Cost
2004	646	0	646
2005	984	124	860
2006	1,030	133	897
2007	1,192	165	1,027
2008	1,238	170	1,068
2009	1,269	176	1,093
2010	1,292	184	1,108
2011	1,330	193	1,137
2012	1,369	203	1,166
2013	1,430	107	1,323
2014	1,476	112	1,364