

**The Economic Effects on Michigan of
the American Axle & Manufacturing Facility Retention Decision**

**George A. Fulton
Peter Nicolas
Donald R. Grimes**

University of Michigan

May 17, 2005

Abstract

American Axle & Manufacturing, which manufactures driveline products for several General Motors vehicle programs, is considering replacing the GMT 800 series program with the GMT 900 series program at its facilities in Detroit and Three Rivers, Michigan. The two facilities together would retain 650 workers starting in 2006. We estimate that by 2013, this project will have retained a total of 1,568 jobs in the state. Total state government revenues through 2013, net of MEGA costs and adjusted for inflation, would increase by \$51,183,000 (2005 dollars) due to the retention of American Axle & Manufacturing.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan if American Axle & Manufacturing, which manufactures driveline products for several General Motors vehicle programs, replaces the GMT 800 series program with the GMT 900 series program at its facilities in Detroit and Three Rivers, Michigan (SIC 3714). Investment activity would take place in 2005, with an investment of \$80 million. The facilities would retain 650 workers starting in 2006.

The estimates of the benefits include the total number of jobs retained 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 2005 to 2013, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2006 to 2013 equal to 100 percent of the state income tax rate on the payroll (gross wages) of employees retained at the facilities as a result of the project..

The total employment effects, reported in the first line of the table, include the direct jobs retained at the facilities themselves 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 280 jobs in 2005; almost all of these jobs are temporary. In 2006, the first year of full operations, 1,874 jobs are retained in the state. We estimate that by 2013, this project will have retained a total of 1,568 jobs in the state. The total number of jobs retained (direct plus spin-off) for every direct job retained constitutes the "employment multiplier." The employment multiplier for the retention averages 2.6 over the period 2006 to 2013. Sectoral detail on the employment retention 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 American Axle & Manufacturing were to retain its operations in Michigan under the incentive program, state personal income in 2006 would be higher by \$103.2 million (in current dollars) than it would be without the retention, and in 2013 it would be \$135.2 million higher. Adjusted for inflation, these numbers in 2005 dollars would be \$87.1 million in 2006 and \$98.1 million in 2013.

The gain in economic activity results in higher state government revenues. We estimate that in 2006, the first year of full operations, the facility retention would generate \$7,936,000 in gross state government revenue, and that the MEGA package would provide a \$1,225,000 incentive to American Axle & Manufacturing. Thus, the American Axle & Manufacturing retention would increase state government revenues in 2006 by \$6,711,000, net of MEGA incentive costs.

Over the period 2005 to 2013, gross state government revenue is projected to increase by \$76,568,000 (in current dollars) due to the retention of American Axle & Manufacturing. The MEGA incentive package for American Axle & Manufacturing is forecast to cost \$10,055,000 over the period, resulting in a net increase in state government revenue of \$66,513,000. Adjusted for inflation, the total net increase in state government revenue from 2005 to 2013 would be \$51,183,000 in 2005 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 American Axle & Manufacturing Facility Retention
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total 2005-2013
Total employment	280	1,874	1,833	1,757	1,685	1,636	1,595	1,577	1,568	—
Manufacturing	43	797	773	751	731	718	708	703	701	—
Nonmanufacturing	237	1,077	1,060	1,006	954	918	887	874	867	—
Retail trade	34	251	238	223	208	198	189	184	181	—
Services	97	400	368	334	305	284	270	264	262	—
Other	106	426	454	449	441	436	428	426	424	—
In current dollars (thousands):										
Personal income	14,500	103,200	114,700	119,600	122,800	125,800	128,400	131,500	135,200	995,700
Gross state revenue	1,115	7,936	8,820	9,197	9,443	9,674	9,874	10,112	10,397	76,568
MEGA cost	0	1,225	1,291	1,240	1,193	1,195	1,246	1,302	1,363	10,055
State revenue net of MEGA cost*	1,115	6,711	7,529	7,957	8,250	8,479	8,628	8,810	9,034	66,513
Adjusted for inflation (thousands of 2005 dollars):										
Personal income	14,500	87,094	92,420	93,463	93,816	94,673	95,341	96,644	98,091	766,042
Gross state revenue	1,115	6,698	7,107	7,188	7,214	7,280	7,332	7,432	7,543	58,909
MEGA cost	0	1,034	1,041	969	911	899	926	957	989	7,726
State revenue net of MEGA cost*	1,115	5,664	6,066	6,219	6,303	6,381	6,406	6,475	6,554	51,183

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