

**The Economic Effects on Michigan of the
TRW Automotive, Inc. Headquarters Location Decision**

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

**University of Michigan
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Abstract

TRW Automotive, Inc. is considering relocating its headquarters operations to the company's Tech Center campus in Livonia, Michigan. The facility would employ an additional 165 people by 2005. We estimate that by 2013, this relocation will have generated a total of 272 jobs in the state. Total state government revenues through 2013, net of MEGA costs and adjusted for inflation, would increase by \$12,786,000 (2002 dollars) due to the relocation of TRW Automotive, Inc.'s headquarters operations.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of TRW Automotive, Inc. relocating its headquarters operations to the company's Tech Center campus in Livonia, Michigan (SIC 3714). Investment activity would take place in 2003, with an investment of \$15.5 million. The facility would employ an additional 165 people by 2005.

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 2003 to 2013, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the period 2003 to 2012 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, and equal to 50 percent for the year 2013.

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 230 jobs in 2003; almost all of these jobs are temporary. In 2007, the first year of full operations, an additional 305 jobs are generated in the state. We estimate that by 2013, this location will have generated a total of 272 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 1.7 over the period 2007 to 2013. 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 TRW Automotive, Inc. were to relocate its headquarters operations to Michigan

under the incentive program, state personal income in 2007 would be higher by \$28.4 million (in current dollars) than it would be without the headquarters operations, and in 2013 it would be \$33.6 million higher. Adjusted for inflation, these numbers in 2002 dollars would be \$20.3 million in 2007 and \$21.9 million in 2013.

The gain in economic activity results in higher state government revenues. We estimate that in 2007, the first year of full operations, the facility would generate \$2,272,000 in additional gross state government revenue, and that the MEGA package would provide a \$577,000 incentive to TRW Automotive, Inc. Thus, the TRW Automotive, Inc. headquarters relocation would increase state government revenues in 2007 by \$1,695,000, net of MEGA incentive costs.

Over the period 2003 to 2013, gross state government revenue is projected to increase by \$24,712,000 (in current dollars) due to the relocation of TRW Automotive, Inc.'s headquarters operations. The MEGA incentive package for TRW Automotive, Inc. is forecast to cost \$6,541,000 over the period, resulting in a net increase in state government revenue of \$18,171,000. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2013 would be \$12,786,000 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 and 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 TRW Automotive, Inc. Headquarters Location
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2003	2004	2005	2006	2007	2010	2013	Total 2003-2013
Total Employment	402	270	343	324	305	274	272	—
Manufacturing	88	126	165	165	165	165	165	—
Nonmanufacturing	314	144	178	159	140	109	107	—
Retail Trade	58	45	57	53	50	45	45	—
Services	73	60	74	65	58	44	41	—
Other	183	39	47	41	32	20	21	—
In current dollars (thousands):								
Personal income	20,700	19,900	26,600	27,600	28,400	30,300	33,600	308,900
Gross state revenue	1,656	1,592	2,128	2,208	2,272	2,424	2,688	24,712
MEGA cost	247	398	539	558	577	758	426	6,541
State revenue net of MEGA cost*	1,409	1,194	1,589	1,650	1,695	1,666	2,262	18,171
Adjusted for inflation (thousands of 2002 dollars):								
Personal income	16,548	15,317	19,899	19,965	20,332	20,651	21,922	216,948
Gross state revenue	1,324	1,225	1,592	1,597	1,626	1,652	1,754	17,356
MEGA cost	198	306	403	404	413	517	278	4,570
State revenue net of MEGA cost*	1,126	919	1,189	1,193	1,213	1,135	1,476	12,786

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