

**The Economic Effects on Michigan of the
Tower Automotive Research and Development Facility**

Prepared by the Michigan Economic Development Corporation utilizing Regional
Economic Models, Incorporated (REMI) software.

November 29, 2000

Abstract

Tower Automotive is considering building a research and development facility in Novi or Farmington Hills, Michigan. This facility would serve to expand Tower's technical service, prototype design and other advanced engineering functions. The new facility would employ up to 125 people by the end of 2001. We estimate that by 2010, this location will have generated a total of 236 jobs in the state. Total state government revenues through 2010, net of MEGA costs and adjusted for inflation, would increase by \$10.1 million (2000 dollars) due to the location of the Tower Automotive Research and Development Facility.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Tower Automotive locating a research and development facility in Novi or Farmington Hills. Investment activity would take place in 2001, with an investment of \$7.3 million. The facility would employ an additional 125 people and would be at full production by the end of 2001.

The estimates of the benefits attributable to the project 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 2001 to 2010, are shown in the attached table. The MEGA incentive package includes relief from 100 percent of the single business tax for the period 2001 through 2006, 75 percent for the period 2007 through 2010, and a tax credit to the company equal to 100 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2001 to 2006, and 75 percent for the period 2007 to 2010.

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 created from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. In 2001, the first year of full operations, an additional 429 jobs are generated in the state. The total number of jobs (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the expansion averages 2.34 over the period 2001 to 2010. Sectoral detail on the employment 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 Tower Automotive were to locate in Michigan under the incentive program, state personal income in 2001 would be higher by \$21 million (in current dollars) than it would be without the facility, and in 2010, it would be \$22 million higher. Adjusted for inflation, these numbers in 2000 dollars would be \$21 million in 2001 and \$18.2 million in 2010.

The gain in economic activity results in higher government revenues. We estimate that in 2002, the first year of full operations without investment activity, the facility would generate \$1.6 million in additional gross state revenue, and that the MEGA package would provide a \$621,000 incentive to Tower Automotive. Thus, the new Tower Automotive facility would increase state revenues in 2001 by \$1 million, net of MEGA costs.

Over the period 2001 to 2010, state government revenue is projected to increase by \$17.1 million (in current dollars) due to the new Tower Automotive facility. The MEGA incentive package for Tower Automotive is forecast to cost \$5.9 million over the period, resulting in a net increase in state government revenue of \$11.2 million. Adjusted for inflation, the total net increase in state government revenue from 2001 to 2010 would be \$10.1 million in 2000 dollars. These calculations do not include any revenue losses due to the property tax abatement or the investment tax credit. If the costs of the abatement and the tax credit were included, the net revenue gain to state government would be slightly less.

None of the 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.

**Tower Automotive Research & Development Facility
Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Total Employment	429	352	326	301	281	265	254	244	239	236	
Manufacturing	163	151	146	141	137	135	133	132	131	130	
Non-Manufacturing	266	201	180	160	144	130	121	112	108	106	
Retail Trade	55	45	41	37	34	31	28	27	26	26	
Services	97	78	70	63	58	53	50	47	46	46	
Other	114	78	69	60	52	46	43	38	36	34	
In Current Dollars (Thousands):											
Personal Income	\$20,970	\$20,540	\$21,030	\$21,180	\$21,240	\$21,270	\$21,390	\$21,550	\$21,910	\$22,400	\$213,480
Gross State Revenue	1,678	1,643	1,682	1,694	1,699	1,702	1,711	1,724	1,753	1,792	17,078
Mega Cost	613	621	658	654	660	655	495	498	501	504	5,860
State Revenue Net of MEGA Cost*	\$1,065	\$1,022	\$1,024	\$1,040	\$1,039	\$1,047	\$1,216	\$1,226	\$1,252	\$1,288	\$11,218
Adjusted for Inflation (Thousands of 2000 Dollars):											
Personal Income	\$20,970	\$20,063	\$20,067	\$19,749	\$19,359	\$18,956	\$18,642	\$18,370	\$18,248	\$18,211	\$192,635
Gross State Revenue	1,678	1,605	1,605	1,580	1,549	1,517	1,491	1,470	1,460	1,457	15,412
Mega Cost	613	607	628	610	602	584	431	424	417	410	5,326
State Revenue Net of MEGA Cost*	\$1,065	\$998	\$977	\$970	\$947	\$933	\$1,060	\$1,046	\$1,043	\$1,047	\$10,086

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