## The Economic Effects on Michigan of the Hyundai America Technical Center, Inc. Facility Location Decision

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## Abstract

Hyundai America Technical Center, Inc. is considering relocating and expanding its North American headquarters and research and development center — which conducts research, development, design engineering, and emissions testing for the Hyundai and Kia brands — to Michigan. The facility would employ an additional 400 people by 2009. We estimate that by 2024, this location will have generated a total of 751 jobs in the state. Total state government revenues through 2024, net of MEGA costs and adjusted for inflation, would increase by \$80,808,000 (2003 dollars) due to the location of Hyundai America Technical Center, Inc.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Hyundai America Technical Center, Inc. relocating and expanding its North American headquarters and research and development center – which conducts research, development, design engineering, and emissions testing for the Hyundai and Kia brands – to Michigan (SIC 8734). Investment activity would take place in two phases between 2003 and 2009, with a total investment of \$84.3 million. The facility would employ an additional 400 people by 2009, with 225 jobs attributable to Phase I and 175 jobs attributable to Phase II.

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 2024, are shown in the attached table. The MEGA incentive package for Phase I includes relief from 100 percent of the single business tax for the period 2005 to 2007, a tax credit to the company for the period 2005 to 2014 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 Phase I, and a tax credit to the company for the period 2015 to 2024 equal to 50 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility as a result of Phase I. The MEGA incentive package for Phase II includes a tax credit to the company for the period 2005 to 2024 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 Phase II.

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 65 jobs in 2003, 310 jobs in 2004, 284 jobs in 2005, 133 jobs in 2007 and 441 jobs in 2008; almost all of these jobs are temporary. In 2010, the first year of full operations without investment

activity, an additional 867 jobs are generated in the state. We estimate that by 2024, this location will have generated a total of 751 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 1.9 over the period 2010 to 2024. 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 Hyundai America Technical Center, Inc. were to locate its operations in Michigan under the incentive program, state personal income in 2010 would be higher by \$100.3 million (in current dollars) than it would be without the location, and in 2024 it would be \$157.5 million higher. Adjusted for inflation, these numbers in 2003 dollars would be \$71.1 million in 2010 and \$84.3 million in 2024.

The gain in economic activity results in higher state government revenues. We estimate that in 2010, the first year of full operations without investment activity, the new facility would generate \$7,713,000 in additional gross state government revenue, and that the MEGA package would provide a \$1,769,000 incentive to Hyundai America Technical Center, Inc. Thus, the Hyundai America Technical Center, Inc. location would increase state government revenues in 2010 by \$5,944,000, net of MEGA incentive costs.

Over the period 2003 to 2024, gross state government revenue is projected to increase by \$163,689,000 (in current dollars) due to the location of Hyundai America Technical Center, Inc. The MEGA incentive package for Hyundai America Technical Center, Inc. is forecast to cost \$35,433,000 over the period, resulting in a net increase in state government revenue of \$128,256,000. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2024 would be \$80,808,000 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 Hyundai America Technical Center, Inc. Facility Location Net Benefits with the Incentive Package

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Economic/Fiscal Indicator	2003	2004	2005	2006	2007	2008	0000	0010				Total
Total Employment	65	310	440	102	410	2001	4003	0102	2015	2020	2024	2003-2024
Manufacturing	,—I			70	01.	C/	930	867	736	732	751	
Nonmanufacturing	49	299	432	102	2 0	0 2	0	0	0	0	0	İ
Retail Trade	7	35	900	767	27+	C ;	930	867	736	732	751	<u></u>
Services	16	52	115	200	50	104	171	161	142	143	147	
Other	4	212	27.8	971	197	284	609	582	525	526	538	
In course dollars (thousand)		1	077	07	OCI	387	150	124	69	63	99	
th current contains (mousands);												
Personal income	2.900	14 700	28 100	00000	0							•
Gross state revenue	22.6	1,,00	20,100	20,800	33,000	28,900	97,300	100,300	114,400	135,500	157 500	2 120 600
WEGA cost	577	1,130	7,161	1,600	2,692	4,529	7,482	7.713	8 798	10.420	10,,00	2,120,000
	0	0	215	.552	762	503	707	- 1	2 1	074.01	12,112	163,689
State revenue net of MEGA cost*	223	1,130	1,946	1.048	1 930	3 036	1,080	1,769	1,635	2,197	2,897	35,433
Adjusted for inflation					) ) ) (	2,	0,70	7,744	7,163	8,223	9,215	128,256
(thousands of 2003 dollars):	-											
Personal income	2.900	11.889	21 871	15 600	76 711							
Gross state revenue	223	017	1/0/1	13,009	20,411	42,462	70,966	71,079	73,672	79.201	84.297	1 330 807
MEGA cost		+ (	1,002	1,206	2,031	3,266	5,457	5,466	5,666	6,090	6.482	102,004
State revenue not of MECA*	> 0	> ;	108	416	575	428	1,230	1.253	1 053	1 204	797,	00,001
THE OF THE COST.	777	914	1,514	790	1,456	2,838	4,227	4.213	4 613	107,1	1,550	22,230
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\*These estimates do not include any state government revenue losses due to the Investment Tax Credit.