

**The Economic Effects on Michigan of the
Johnson Control Technology Company, Inc. Facility Expansion Decision**

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Abstract

Johnson Control Technology Company, Inc. is considering developing a 370-acre greenfield site in Salem Township, Washtenaw County. The site would include a technical center campus, including employees for the design, engineering and development of automotive seating and interior systems and modules. The new facility would employ an additional 1,189 people by 2007. We estimate that by 2014, this expansion will have generated a total of 1,938 jobs in the state. Total state government revenues through 2014, net of MEGA costs and adjusted for inflation, would increase by \$88,924,000 (2001 dollars) due to the expansion of Johnson Control Technology Company, Inc.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Johnson Control Technology Company, Inc. developing a 370-acre greenfield site in Salem Township, Washtenaw County (SIC 2531). The site would include a technical center campus, including employees for the design, engineering and development of automotive seating and interior systems and modules. Investment activity would take place between 2002 and 2004, with an investment of \$168.05 million. The facility would employ an additional 1,189 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 2004 to 2013 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 80 percent in the year 2014.

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. In 2007, the first year of full operations, an additional 2,476 jobs are generated in the state. We estimate that by 2014, this expansion will have generated a total of 1,938 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 1.8 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 Johnson Control Technology Company, Inc. were to expand in Michigan under the incentive program, state personal income in 2007 would be higher by \$215.8 million (in current dollars) than it would be without the facility, and in 2014 it would be \$267.1 million higher. Adjusted for inflation, these numbers in 2001 dollars would be \$154.7 million in 2007 and \$164.2 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 facility would generate \$17,264,000 in additional gross state government revenue, and that the MEGA package would provide a \$4,059,000 incentive to Johnson Control Technology Company, Inc. Thus, the Johnson Control Technology Company, Inc. facility expansion would increase state government revenues in 2007 by \$13,205,000, net of MEGA incentive costs.

Over the period 2004 to 2014, gross state government revenue is projected to increase by \$174,392,000 (in current dollars) due to the expansion of Johnson Control Technology Company, Inc. The MEGA incentive package for Johnson Control Technology Company, Inc. is forecast to cost \$40,075,000 over the period, resulting in a net increase in state government revenue of \$134,317,000. Adjusted for inflation, the total net increase in state government revenue from 2004 to 2014 would be \$88,924,000 in 2001 dollars. These calculations do not include any revenue losses due to the property tax abatement. If the costs of 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.

newly created jobs would total \$1,467 and a benefit package equal to approximately 20% of wages.

Construction of the new technical campus would commence in April of 2002 and be complete by the end of 2003. Operations would begin in the facility immediately.

BENEFIT TO STATE:

According to the economic analysis done by the University of Michigan, we estimate this facility will generate a total of 1,938 jobs in the state by the year 2013. Total state government revenues through the year 2013, net of MEGA costs and adjustment for inflation, would be increased by \$88.9 million (2001 dollars) due to the presence of this facility.

BUSINESS CASE:

As part of the company's decision-making process, it conducted a comprehensive analysis between Salem Township, Michigan and another Midwest location where Johnson Controls has a technical center with available space. If the project goes to the other state, current Johnson Controls staff would not be relocated, but the project would create 1,189 jobs in the competing state. If located in Michigan, Johnson Controls would relocate existing personnel in Michigan to the project site, as well as locate the new employment at this facility.

The business decision that Johnson Controls faces with this project is one of which business model, distributive versus consolidative, it wants to undertake. There are advantages and disadvantages to both models. The consolidated model, the one that favors Michigan, allows the company to enjoy synergies associated with like personnel being co-located. It also allows a high profile facility that allows customers a single point of contact for technical and engineering functions of the company.

The distributive model on the other hand, which favors the other state, allows the expansion to occur with the minimal outlay of capital, since it requires a facility for only the new jobs and not one for the entire

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operation. It also allows the company to potentially locate engineering and technical services closer to the ultimate customer.

The cost differential between the two alternatives is somewhere in the range of \$180 million, primarily due to increased capital expenditures required in Michigan, utility extension costs and slightly lower wage rates in the alternative state. A MEGA tax credit is required to help this project come to Michigan.

OTHER STATE AND LOCAL ASSISTANCE:

The State of Michigan will provide the company with an Economic Development Job Training (EDJT) grant of \$500 for each of the 1,189 new employees, totaling \$594,500. In addition, the state will provide a 100% abatement of the 6-mill State Education Tax for a length of time to match the local property tax abatement. The estimated value of this state tax abatement is \$4,186,745.

The Washtenaw County Road Commission is working with Salem Township and Johnson Controls to identify road improvements that would be required for this project. Although a total cost for road improvements has not yet been identified, the Road Commission anticipates filing for a Category A grant from the Michigan Department of Transportation. The application for this grant will require the Road Commission to spend \$3,000 to \$5,000 in administrative fees for writing the application. An additional commitment of staff time in meetings to initiate and plan for the road projects and to identify sources of local match for the grant will be provided.

RECOMMENDATION:

The Michigan Economic Development Corporation recommends a MEGA employment credit of 100 percent for ten years and 80 percent for the eleventh year for up to 1,189 net new jobs.

It is anticipated that Salem Township will provide a 50 percent abatement of the company's real and personal property taxes for twelve years. The estimated value of this local abatement is \$10,764,157. If the township does not give the full abatement as indicated, the MEGA awarded this

**Economic and Fiscal Effects on Michigan of the Johnson Control Technology Company, Inc. Facility Expansion
Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2004	2005	2006	2007	2010	2014	Total 2004-2014
Total Employment	136	892	1,701	2,476	2,130	1,938	—
Manufacturing	76	447	818	1,189	1,189	1,189	—
Nonmanufacturing	60	445	883	1,287	941	749	—
Retail Trade	21	148	284	414	362	332	—
Services	14	180	356	515	359	271	—
Other	25	117	243	358	220	146	—
In current dollars (thousands):							
Personal income	21,300	74,600	141,700	215,800	240,600	267,100	2,179,900
Gross state revenue	1,704	5,968	11,336	17,264	19,248	21,368	174,392
MEGA cost	234	1,426	2,702	4,059	4,494	4,151	40,075
State revenue net of MEGA cost*	1,470	4,542	8,634	13,205	14,754	17,217	134,317
Adjusted for inflation (thousands of 2001 dollars):							
Personal income	11,543	54,649	103,790	154,689	158,695	164,216	1,444,101
Gross state revenue	924	4,372	8,303	12,375	12,696	13,137	115,528
MEGA cost	127	1,044	1,979	2,910	2,964	2,552	26,604
State revenue net of MEGA cost*	797	3,328	6,324	9,465	9,732	10,585	88,924

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