The Economic Effects on Michigan of the Picometrix Incorporated Expansion

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

Abstract

Picometrix Incorporated is considering an expansion of their manufacturing and research and development center in Ann Arbor, Michigan. This facility would expand their efforts to research, design, test, and manufacture high-speed optical sensing devices that convert optical pulses from fiber optic cable to the electronic pulses needed by computers and other equipment. The new facility would employ up to 243 people by the end of 2003. We estimate that by 2016, this location will have generated a total of 383 jobs in the state. Total state government revenues through 2016, net of MEGA costs and adjusted for inflation, would increase by \$30.4 million (2001 dollars) due to the expansion of Picometrix Incorporated.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Picometrix Incorporated expanding their manufacturing and research and development center in Ann Arbor. Investment activity would take place between 2001 and 2003, with an investment of \$29.6 million. The facility would employ an additional 243 people and would be at full production by 2003.

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 2016, are shown in the attached table. The MEGA incentive package includes relief from 100 percent of the single business tax for the period 2001 to 2016, 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 2002, and 50 percent for employees hired at the facility for the period 2006.

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 2003, the first year of full operations, an additional 608 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 1.68 over the period 2001 to 2016. 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 Picometrix Incorporated were to expand in Michigan under the incentive program, state personal income in 2003 would be higher by \$35.5 million (in current dollars) than it would be without the facility, and in 2016, it would be \$44.3 million higher. Adjusted for inflation, these numbers in 2001 dollars would be \$33.9 million in 2003 and \$31 million in 2016.

The gain in economic activity results in higher government revenues. We estimate that in 2004, the first year of full operations without investment activity, the facility would generate \$2.8 million in additional gross state revenue, and that the MEGA package would provide a \$886,000 incentive to Picometrix Incorporated. Thus, the new Picometrix Incorporated facility would increase state revenues in 2004 by \$1.9 million, net of MEGA costs.

Over the period 2001 to 2016, state government revenue is projected to increase by \$45.2 million (in current dollars) due to the new Picometrix Incorporated facility. The MEGA incentive package for Picometrix Incorporated is forecast to cost \$8 million over the period, resulting in a net increase in state government revenue of \$37.2 million. Adjusted for inflation, the total net increase in state government revenue from 2001 to 2016 would be \$30.4 million in 2001 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.

Picometrix, Incorporated Effects on Michigan - Net Benefits with the Incentive Package

Economic/Fiscal Indicator	2001	2002	2003	2004	2005	2006	2007	2010	2015	2016	Total
Total Employment	174	340	608	524	489	457	433	394	·		
Manufacturing	59	149	265	251	243	236	231	223			_
Non-Manufacturing	115	191	343	273	246	221	202	171	162	163	
Retail Trade	22	45	79	89	61	56	52	45			
Services	40	92	136	114	104	96	89	8		85	
Other	53	70	128	91	81	69	61	45	96	96	
In Current Dollars (Thousands):											
Personal Income	\$8,545	\$18,800	\$35,490	\$35,100	\$35,680	\$35,950	\$36,220	\$37,810	\$43,030	\$44,310	\$564,765
Gross State Revenue	684	1,504	2,839	2,808	2,854	2,876	2,898	3,025	3,442	3,545	45,181
Mega Cost	110	527	841	988	879	870	512	436	273	234	7,956
State Revenue Net of MEGA Cost*	\$574	226\$	\$1,998	\$1,922	\$1,975	\$2,006	\$2,386	\$2,589	\$3,169	\$3,311	\$37,225
Adjusted for Inflation											
(Thousands of 2001 Dollars):			•			-				-	
Personal Income	\$8,545	\$18,363	\$33,865	\$32,728	\$32,519	\$32,038	\$31,566	\$30,739	\$30,889	\$31,023	\$466,681
Gross State Revenue	684	1,469	2,709	2,618	2,601	2,563	2,526	2,459	2,471	2,482	37,334
Mega Cost	110	515	803	826	801	775	446	355	196	164	6,896
State Revenue Net of MEGA Cost*	\$574	\$954	\$1,906	\$1,792	\$1,800	\$1,788	\$2,080	\$2.104	\$2.275	\$2.318	\$30 438