

**The Economic Effects on Michigan of  
Emerald Graphics Corporation New Manufacturing Facility**

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

March 15, 2005

### Abstract

*Emerald Graphics Corporation is considering locating new manufacturing facilities in Cascade Township and the City of Kentwood, Michigan. These facilities would provide additional paint capacity to handle large plastic parts in the appliance market. The new facilities would employ up to 347 people by the end of 2009. We estimate that by 2015, these locations will have generated a total of 719 jobs in the state. Total state government revenues through 2015, net of MEGA costs and adjusted for inflation, would increase by \$23.2 million (2005 dollars) due to the location of Emerald Graphics Corporation's new facilities.*

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Emerald Graphics locating new manufacturing facilities in Michigan. Investment activity would take place between 2005 and 2009 with an investment of \$9.9 million. The facility would employ an additional 347 people and would be at full production by 2009.

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 2005 to 2015, are shown in the attached table. The MEGA incentive package includes 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 2006 to 2015.

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 2009, the first year of full operations, an additional 347 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 1.9 over the period 2005 to 2015. 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 Emerald Graphics were to locate in Michigan under the incentive program, state personal income in 2009 would be higher by \$35.1 million (in current dollars) than it would be without the facility, and in 2015, it would be \$51.8 million higher. Adjusted for inflation, these numbers in 2005 dollars would be \$32.2 million in 2009 and \$42.1 million in 2015.

The gain in economic activity results in higher government revenues. We estimate that in 2010, the first year of full operations without investment activity, the facility would

generate \$2.9 in additional gross state revenue, and that the MEGA package would provide a \$389,000 incentive to Emerald Graphics. Thus, the new Emerald Graphics facility would increase state revenues in 2010 by \$2.5 million, net of MEGA costs.

Over the period 2005 to 2015 state government revenue is projected to increase by \$29.9 million (in current dollars) due to the new Emerald Graphics facility. The MEGA incentive package for Emerald Graphics is forecast to cost \$3.6 million over the period, resulting in a net increase in state government revenue of \$26.3 million. Adjusted for inflation, the total net increase in state government revenue from 2005 to 2015 would be \$23.2 million in 2005 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.

**Emerald Graphics Corporation**  
**Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2005	2006	2007	2008	2009	2010	2015	Total
<b>Total Employment</b>								
Manufacturing	310	481	559	602	702	703	719	
Non-Manufacturing	151	262	301	325	378	376	370	
Retail Trade	159	219	258	277	324	327	349	
Services	29	35	41	44	51	51	54	
Other	85	115	131	139	163	163	174	
	45	69	86	94	110	113	121	
<b>In Current Dollars (Thousands):</b>								
Personal Income	\$14,040	\$18,980	\$24,290	\$28,380	\$35,100	\$37,630	\$51,760	\$388,890
Gross State Revenue	1,081	1,461	1,870	2,185	2,703	2,898	3,986	29,944
Mega Cost	0	245	63	328	388	389	489	3,641
State Revenue Net of MEGA Cost*	\$1,081	\$1,216	\$1,807	\$1,857	\$2,315	\$2,509	\$3,498	\$26,303
<b>Adjusted for Inflation (Thousands of 2005 Dollars):</b>								
Personal Income	\$14,040	\$18,535	\$23,227	\$26,584	\$32,209	\$33,837	\$42,131	\$343,240
Gross State Revenue	1,081	1,427	1,788	2,047	2,480	2,606	3,244	26,428
Mega Cost	0	240	60	308	356	350	398	3,198
State Revenue Net of MEGA Cost*	\$1,081	\$1,187	\$1,728	\$1,739	\$2,124	\$2,256	\$2,846	\$23,230

\* 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.