## The Economic Effects on Michigan of the Compuware Corporation Facility Expansion Decision

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## Abstract

Compuware Corporation is considering increasing its computer software product development staff in Farmington Hills to meet the expected needs of their existing customers and to attract new customers. By 1999, the facility would employ 331 people. We estimate that by 2011, this expansion will have generated a total of 680 jobs in the state. Total state government revenues through 2011, net of MEGA costs and adjusted for inflation, would be increased by \$28,383,000 (1996 dollars) due to the expansion of Compuware Corporation.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Compuware Corporation's increasing its computer software product development staff in Farmington Hills to meet the expected needs of their existing customers and to attract new customers (SIC 7371). Investment in machinery and equipment would take place between 1997 and 1999, amounting to \$6.6 million, and operations would begin in January, 1997. The facility would employ 331 workers by 1999.

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 1997 to 2011, are shown in the attached table. The MEGA incentive package includes a tax credit to the company for the same period equal to 4.4 percent of the payroll (gross wages) of employees hired at the facility as a result of the project between 1997 and 1999, and 1.76 percent of the payroll between 2000 and 2011. The payroll tax credit represents 100 percent of the maximum employment credit available to a company between 1997 and 1999, and 40 percent between 2000 and 2011.

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 initial investment in the facility is expected to generate a total of 13 jobs in 1997, 12 jobs in 1998, and 13 jobs in 1999; almost all of these jobs are temporary. In 1999, the year that full operations begin, an additional 714 jobs are generated in the state. We estimate that by 2011 this facility will have generated a total of 680 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 2.0 over the period 1999-2011. 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 Compuware Corporation were to locate in Michigan under the incentive program, state personal income in the year 1999 would be higher by \$36.4 million (in current dollars) than it would be without the facility, and in 2011 it would be \$61.3 million higher. Adjusted for inflation, these numbers in 1996 dollars would be \$27.9 million in 1999 and \$35.3 million in 2011.

The gain in economic activity results in higher state government revenues. We estimate that in 1999, the year that full operations begin, the facility would generate \$2,912,000 in additional gross state government revenue, and that the MEGA package would provide a \$942,000 incentive to Compuware Corporation. Thus, the Compuware Corporation facility would generate an additional \$1,970,000 in revenue to state government in 1999, net of MEGA incentive costs.

Over the period 1997-2011, gross state government revenue is projected to increase by \$53,256,000 (in current dollars) due to the expansion of Compuware Corporation. The MEGA incentive package for Compuware Corporation is forecast to cost \$7,459,000 over the period, resulting in a net increase in state government revenue of \$45,797,000. Adjusted for inflation, the total net increase in state government revenue from 1997 to 2011 would be \$28,383,000 in 1996 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 Compuware Corporation Facility Expansion Net Benefits with the Incentive Package

|                                 |       |        |         |        |        |        | Total     |
|---------------------------------|-------|--------|---------|--------|--------|--------|-----------|
| Economic/Fiscal Indicator       | 1997  | 1998   | 1999    | 2000   | 2005   | 2011   | 1997-2011 |
| Total Employment                | 191   | 379    | 714     | 703    | 645    | 089    |           |
| Nonmanufacturing                | 185   | 372    | 708     | 703    | 645    | 089    | I         |
| Retail Trade                    | 29    | 58     | 108     | 105    | 92     | 96     | İ         |
| Services                        | 132   | 267    | 511     | 505    | 477    | 493    |           |
| Other                           | 24    | 47     | 68      | 96     | 9/     | 91     |           |
| In current dollars (thousands): |       | -      |         |        |        |        |           |
| Personal income                 | 8,400 | 18,200 | 36,400  | 39,900 | 48,900 | 61,300 | 665,700   |
| Gross state revenue             | 672   | 1,456  | 2,912   | 3,192  | 3,912  | 4,904  | 53,256    |
| MEGA cost                       | 223   | 468    | 942     | 391    | 473    | 591    | 7,459     |
| State revenue net of MEGA cost  | 449   | 886    | 1,970   | 2,801  | 3,439  | 4,313  | 45,797    |
| Adjusted for inflation          |       |        | , agent | ***    |        |        |           |
| (thousands of 1996 dollars):    |       |        |         |        |        |        |           |
| Personal income                 | 7,301 | 14,480 | 27,946  | 28,622 | 31,047 | 35.271 | 429,509   |
| Gross state revenue             | 584   | 1,158  | 2,236   | 2,290  | 2,484  | 2.822  | 34,361    |
| MEGA cost                       | 217   | 442    | 998     | 350    | 369    | 391    | 5.978     |
| State revenue net of MEGA cost  | 367   | 716    | 1,370   | 1,940  | 2,115  | 2,431  | 28,383    |