

## Response to Request #5

# **Losing a technology company employing 1,100 people:**

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**ECONOMIC AND TAX REVENUE IMPACTS FOR RHODE ISLAND**

As requested, Appleseed has analyzed the adverse impacts on Rhode Island's economy that would result from the loss of a technology firm currently employing 1,100 people in the state. For purposes of this analysis, we assumed that company operations in Rhode Island currently include a mix of headquarters, systems development, custom software development and computer facilities management and maintenance. We further assume that with the firm's departure, only 50 of these jobs would remain in the state.

We estimate that when its operations in Rhode Island are fully phased out (except for the 50 remaining jobs cited above), the company's departure would directly and indirectly cost the state:

- 1,534 jobs in Rhode Island;
- \$139.0 million in lost annual earnings (in 2020 dollars);
- A reduction of \$266.7 million in statewide economic output<sup>1</sup>; and
- A reduction of \$170.5 million in Rhode Island's annual GDP.

These impacts are summarized below in Table 1. The *direct impact* of the loss of the company's operations reflects the loss of the company's direct employment, its direct spending on wages and salaries, the value its operations add to Rhode Island's GDP, and the total value of the goods and services it produces. Its *indirect impact* is the effect of the loss of the company's spending on purchases of goods and services from other in-state businesses, and the effect of that loss on employment, earnings, value-added and output in Rhode Island.

**Table 1: Direct, indirect and total loss in jobs, annual earnings, value-added and output in millions of 2020 dollars)**

|                     | Employment   | Earnings       | Value added <sup>2</sup> | Output         |
|---------------------|--------------|----------------|--------------------------|----------------|
| Direct Effect       | 1,050        | \$111.2        | \$127.5                  | \$198.5        |
| Indirect Effect     | 484          | 27.8           | 143.0                    | 68.2           |
| <b>Total Effect</b> | <b>1,534</b> | <b>\$139.0</b> | <b>\$170.5</b>           | <b>\$266.7</b> |

After the company's phase-out from RI is completed (except for 50 jobs), Appleseed estimates that the state would lose approximately \$8.145 million in annual personal income, sales and business taxes, including:

- \$5.212 million annually (in 2020 dollars) in personal income taxes paid by workers whose jobs are directly or indirectly dependent on the company's RI operations

<sup>1</sup> Output is a measure of the total sales by Rhode Island companies (including the "sale" of labor by Rhode Island households) generated by the company's operations

<sup>2</sup> Value added represents the value sales from the company's Rhode Island operations, minus the cost of purchased inputs of goods and services; it is in effect the company's contribution to the state's gross domestic product

- \$2.274 million annually in sales taxes paid by these workers on household purchases within the state
- \$0.658 million in business taxes paid by the company and its RI suppliers

While the timing of the company's phase-out from Rhode Island is uncertain, Table 2 illustrates how the impact would be felt if occurred steadily over a five-year period.

**Table 2: Decline in direct and indirect jobs, annual earnings, value-added and output (in millions of 2020 dollars) over five years**

|         | <b>Employment</b> | <b>Earnings</b> | <b>Value added</b> | <b>Output</b> |
|---------|-------------------|-----------------|--------------------|---------------|
| Current | 1,534             | \$139.0         | \$170.5            | \$266.7       |
| Year 1  | 1,227             | 111.2           | 136.4              | 213.3         |
| 2       | 920               | 83.4            | 102.3              | 160.0         |
| 3       | 613               | 55.6            | 68.2               | 106.7         |
| 4       | 306               | 27.8            | 34.1               | 53.3          |
| 5       | 0                 | 0               | 0                  | 0             |

If the company were to remain in Rhode Island, it would be expected to invest \$150 million in capital in its facilities in the state. For purposes of this analysis we assume that one-third of this total would be spent on property acquisition, one-third on construction and one-third on equipment, with the mid-point of this investment coming in 2022. We further assume that expenditures on property acquisition would have no impact on the state's economy.

As shown in Table 3, investment of \$100 million for construction and equipment would directly and indirectly result in:

- 385 person-year of work in Rhode Island;
- \$25.8 million in earnings (in 2022 dollars);
- A one-time increase of \$74.6 million in statewide economic output; and
- A one-time increase of \$40 million in Rhode Island's annual GDP.

**Table 3: Direct, indirect and total impact in person-years of employment, earnings, value-added and output in millions of 2022 dollars**

|                     | <b>Employment</b> | <b>Earnings</b> | <b>Value added</b> | <b>Output</b> |
|---------------------|-------------------|-----------------|--------------------|---------------|
| Direct Effect       | 289               | \$19.8          | \$30.3             | \$58.6        |
| Indirect Effect     | 96                | 6.0             | 9.7                | 16.0          |
| <b>Total Effect</b> | <b>385</b>        | <b>\$25.8</b>   | <b>\$40.0</b>      | <b>\$74.6</b> |



If we assume that the projected \$150 million investment consists solely of construction and equipment (with no property acquisition), the impacts shown in Table 3 would increase by 50 percent.

Appleseed estimates that state tax revenues generated by an investment of \$100 million would total \$5.097 million, including:

- \$968,000 in personal income taxes paid by workers whose work directly or indirectly dependent on the company's investment in RI
- \$422,000 in sales taxes paid by these workers
- \$122,000 in business taxes paid by the company's contractors and suppliers
- \$785,000 in sales taxes on materials used in construction
- \$2,800,000 in sales taxes on furnishings and equipment

Should the company leave Rhode Island (as previously described) the economic and tax revenue impacts associated with this investment would also be lost.

Were it to remain in Rhode Island, the company might also experience some incremental growth. Table 4 illustrates the projected impact of an increase of 100 jobs, and Table 5 an increase of 30 jobs; both assumes a mix of jobs similar to the company's current employment in RI.

**Table 4: Direct, indirect and total impact of 100 additional jobs (annual earnings, value-added and output in millions of 2020 dollars)**

|                     | <b>Employment</b> | <b>Earnings</b> | <b>Value added</b> | <b>Output</b> |
|---------------------|-------------------|-----------------|--------------------|---------------|
| Direct Effect       | 100               | \$10.6          | \$12.1             | \$18.9        |
| Indirect Effect     | 46                | 2.6             | 5.1                | 6.5           |
| <b>Total Effect</b> | <b>146</b>        | <b>\$13.2</b>   | <b>\$16.2</b>      | <b>25.4</b>   |

Appleseed estimates that annual state tax revenues associated with an increase of 100 jobs would total \$776,000, including:

- \$496,000 in personal income taxes paid by the additional employees, and workers at other firms whose work directly or indirectly depends on expansion of the company's operations in RI
- \$217,000 in sales taxes paid by these workers
- \$63,000 in additional business taxes paid by the company and its RI suppliers

**Table 5: Direct, indirect and total impact of 30 additional jobs (annual earnings, value-added and output in millions of 2020 dollars)**

|                     | <b>Employment</b> | <b>Earnings</b> | <b>Value added</b> | <b>Output</b> |
|---------------------|-------------------|-----------------|--------------------|---------------|
| Direct Effect       | 30                | \$3.2           | \$3.7              | \$5.7         |
| Indirect Effect     | 14                | 0.8             | 1.2                | 1.9           |
| <b>Total Effect</b> | <b>44</b>         | <b>\$4.0</b>    | <b>\$4.9</b>       | <b>\$7.6</b>  |

Appleseed estimates that state tax revenues associated with an increase of 30 jobs would total \$233,000, including:

- \$149,000 in personal income taxes paid by the additional employees, and workers at other firms whose work directly or indirectly depends on expansion of the company's operations in RI
- \$65,000 in sales taxes paid by these workers
- \$19,000 in additional business taxes paid by the company and its RI suppliers

As with the investment described above, the economic and tax revenue impacts of any future increases in employment will also be lost if the company leaves Rhode Island.