USING IMPLAN IN TAX INCENTIVE EVALUATION

2022 Roundtable on Evaluating Economic Development Tax Incentives, November 4, 2022

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Input-Output Modeling Approach

Determine Region and Economic Activity Type and Level

Enter the Parameters into the Software

Analyze the Model Results
EDGE Tax Credit

Established to encourage businesses to either create new jobs or retain existing in-state jobs

- The credit equals a portion of the withholding attributable to the new or retained jobs.
- A break-even analysis was used to measure how much new economic activity is necessary to cover the cost of an action.
- Scenarios were built using historical project data from the Indiana Economic Development Corporation (IEDC) and economic impacts computed through the IMPLAN input-output software.
EDGE Tax Credit

Developed scenarios to measure the potential break-even for projects in 10 industrial sectors

While the simulations do not provide insight on the effectiveness of EDGE, they do suggest the risk of Indiana not recovering the amount of foregone revenue as a result of EDGE credit certifications is low.

<table>
<thead>
<tr>
<th>Per 100 Jobs Created</th>
<th>Automotive Manufacturing</th>
<th>Professional and Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgone Tax Revenues</td>
<td>$90,500</td>
<td>$149,369</td>
</tr>
<tr>
<td>State Tax Revenue Impact</td>
<td>$2,223,093</td>
<td>$976,434</td>
</tr>
<tr>
<td>Forgone Tax Revenue as a Share of the State Tax Revenue</td>
<td>4.1%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>
Hoosier Business Investment Tax Credit

Established to encourage capital investments in Indiana

- The credit equals up to 10% of the qualified investment.
- Like EDGE, a break-even analysis was conducted using Hoosier Business Investment tax credit project data.
- Scenarios were built using historical project data from the Indiana Economic Development Corporation (IEDC) with economic impacts computed through the IMPLAN input-output software.
The break-even points for HBI projects were generally higher than EDGE.

- The model measured general spending.
- The results would be different if the investment related spending was targeted to specific commodities.
- The model does not assume an increase in sales or jobs.

<table>
<thead>
<tr>
<th>Per $1 million Investment</th>
<th>Automotive Manufacturing</th>
<th>Professional and Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgone Tax Revenues</td>
<td>$2,550</td>
<td>$26,056</td>
</tr>
<tr>
<td>State Tax Revenue Impact</td>
<td>$10,406</td>
<td>$29,477</td>
</tr>
<tr>
<td>Forgone Tax Revenue as a Share of the State Tax Revenue</td>
<td>24.5%</td>
<td>88.4%</td>
</tr>
</tbody>
</table>
Home Insulation Deduction

The deduction equals up to $1,000 of the material and professional installation costs.

• U.S. Census data was used to estimate the total spending associated with the deduction claims.

• The model assumes consumers will purchase insulation products from local retail or wholesale suppliers and use local labor for professional installations.

• An IMPLAN model was developed so the supply chain impact is limited to the necessary intermediate goods and services to support the home insulation products.
The estimated spending induced by the deduction is based on a study of a federal tax credit.

Activity Measured: $737,761

<table>
<thead>
<tr>
<th>Economic Impact from...</th>
<th>Employment</th>
<th>Labor Income</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>the activity directly</td>
<td>3.3</td>
<td>$172,950</td>
<td>$516,679</td>
</tr>
<tr>
<td>inter-industry spending through the supply chain</td>
<td>1.4</td>
<td>64,316</td>
<td>185,117</td>
</tr>
<tr>
<td>local spending of wages and salaries</td>
<td>1.5</td>
<td>56,962</td>
<td>172,861</td>
</tr>
<tr>
<td>Total Impact</td>
<td>6.2</td>
<td>$294,288</td>
<td>$874,657</td>
</tr>
</tbody>
</table>
References

• IMPLAN® model, 2022 Data, using inputs provided by the user and IMPLAN Group LLC, IMPLAN System (data and software), 16905 Northcross Dr., Suite 120, Huntersville, NC 28078 www.IMPLAN.com


Thank You

Heath Holloway, Deputy Director