

Jobs Development Act (JDA): An Evaluation Using a “Breakeven” Cost-Benefit Analysis

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Introduction



About Us

- Rhode Island Department of Revenue, Office of Revenue Analysis (ORA).
- Executive branch office with economic development incentive evaluation mandate.
- Situation within Department of Revenue allows access to certain confidential data.

About the Evaluation

- The JDA evaluation is part of Economic Development Tax Incentives Evaluation Act defined by the R.I. Gen Laws § 44-48.2-4.
- This evaluation includes a net benefit measured in terms of jobs, GDP, and state revenues generated under this tax incentive.

Introduction



- Rhode Island General Laws § 44-48.2-4, titled “*Rhode Island Economic Development Tax Incentives Evaluation Act of 2013*” requires the Office of Revenue Analysis to produce a report that contains analyses of various tax incentives once every three years.
- Each tax incentive evaluation contains three major parts:
 - **Part I:** Provides comprehensive information regarding the tax incentive and their recipients.
 - **Part II:** Provides a Breakeven Cost-Benefit analysis for the tax incentive measured in jobs, GDP, and general revenues.
 - **Part III:** Provides recommendations as to whether the tax incentive should be continued, modified, or terminated.

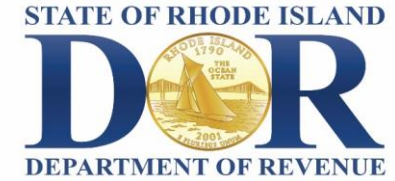
About the JDA Program



Program Benefits:

- JDA provides a tax rate reduction for each new unit of employment that is added to a company's previously established base employment.
- A unit of employment consists of:
 - 10 new FTEs for companies with base employment levels ≤ 100 employees **or**
 - 50 new FTEs for companies with base employment levels > 100 employees.
- For each unit of employment added, a qualifying company receives
 - 0.25% reduction in their business corporation tax rate up to a maximum reduction of 6%, prior to January 2015.
 - 0.20% reduction in their business corporation tax rate up to a maximum reduction of 4%, after January 2015.

About the JDA Program



Program Requirements:

Hours Worked

Wages

**Health &
Retirement**

Prior to 2009

≥ 30 h/week

$\geq 150\%$ min
wage

Not Required

After 2009

≥ 30 h/week

$\geq 250\%$ min
wage

Required

Data Description



JDA Recipients and Credit Amounts:

| Tax Year | Number of Recipients | Amount Received (million of \$) |
|-----------------|-----------------------------|--|
| 2013 | 6 | \$7.5 |
| 2014 | 5 | \$23.3 |
| 2015 | 4 | \$23.5 |
| Total* | 6 | \$54.4 |
| Average | 5 | \$18.1 |

*The total number of recipients represents the sum of distinct companies receiving the credit in tax years 2013 through 2015 as the same companies appear to take the JDA credit every year.

Data Description

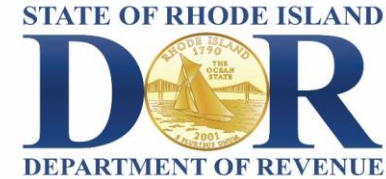


JDA Recipients Employee Count:

- “*Required jobs*” represent the number of FTEs as defined in the JDA program requirements.
- “*Reported jobs*” represent the number of FTEs as submitted by the program recipients.

| Tax Year | Required Jobs | Reported Jobs |
|----------------|---------------|---------------|
| 2013 | 8,297 | 11,873 |
| 2014 | 7,572 | 11,411 |
| 2015 | 7,468 | 11,229 |
| Average | 7,779 | 11,504 |
| Total | 23,337 | 34,513 |

Cost-Benefit Analysis



Methodology

- The CBA is conducted using a “counterfactual” approach that analyzes the impact on the state’s economy if the tax incentive in question had not been in effect.
- The analysis uses the REMI PI+ model.
- Each tax credit recipient firm is matched to its corresponding industry code according to the North American Industry Classification System (NAICS).

Cost-Benefit Analysis

Assumptions

**REMI
Policy
Variable**

Modeling Cost

Tax incentive is funded by an equivalent reduction in state government spending

Exogenous final demand distributed across industries based on ORA profile of state general fund spending

Modeling Benefits

The economic activity would NOT have occurred in the absence of the incentive.

Industry employment and compensation distributed across the industries reflecting JDA recipients activity

Cost-Benefit Analysis



Modeling Costs

- Breakdown of general fund expenditures by category for FY 2015:

| FY 2015 Rhode Island General Fund Expenditures | | |
|---|----------------------|---------------|
| Industry (NAICS) | Amount | % of Total |
| Ambulatory Healthcare Services (621) | \$1.12 billion | 31.8% |
| Educational Services (61) | \$1.04 billion | 29.7% |
| State Wages, Salary, and Other Compensation (entered as "State/Local Gov't Compensation") | \$937.0 million | 26.6% |
| Social Assistance (624) | \$95.9 million | 2.7% |
| Local Government Spending (entered as "Local Gov't Spending") | \$78.5 million | 2.2% |
| Professional, Scientific, and Technical Services (54) | \$50.3 million | 1.4% |
| Administrative and Support Services (561) | \$33.1 million | 0.9% |
| Wholesale Trade (42) | \$30.6 million | 0.9% |
| Remaining/Other | \$128.5 million | 3.7% |
| Total | \$3.5 billion | 100.0% |

Cost-Benefit Analysis

Modeling Benefits



- Using REMI PI+, benefits were modeled as following:

| Category | Detail | Amount |
|---|--|----------|
| Industry Employment (Exogenous Production) | Management of Companies and Enterprises | -3,630 |
| | Miscellaneous Manufacturing | -1,501 |
| | Monetary Authorities | -1,558 |
| | Professional Scientific and Technical Services | -69 |
| | Securities, Commodity Contracts, Investments | -779 |
| Compensation | Management of Companies and Enterprises | -\$636 M |
| | Miscellaneous Manufacturing | -\$154 M |
| | Monetary Authorities | -\$165 M |
| | Professional Scientific and Technical Services | -\$6 M |
| | Securities, Commodity Contracts, Investments | -\$93 M |

Cost-Benefit Analysis



Challenge:

- Is it appropriate to attribute all of the firm's economic activity to the tax incentive?
 - The availability of a tax incentive might have a decisive influence on a firm's production decision.
 - The incentive program may simply reward or subsidize behavior that likely would have occurred anyway.

The Breakeven Approach



Solution:

- Evaluate an incentive program's performance under a wide range of assumptions regarding the level of economic activity that would have taken place if the program had not been available.
- Specify the proportion of economic activity associated with the incentive program recipient in order for the total benefits to equal its total costs.
- Benefits and costs are measured as the impact on state general revenues (i.e., the condition that must be satisfied for the incentive program to “pay for itself”)

The Breakeven Approach



- Holding other factors equal, a lower breakeven percentage is more desirable than a higher breakeven percentage if the goal of an incentive program is to cost the state as little revenue as possible.
- A tax incentive program fails to breakeven, under any counterfactual assumption, when the breakeven percentage is greater than 100%.
 - Even if 100% of the economic activity associated with the incentive recipient was assumed to have taken place strictly because of the incentive's availability, a net negative impact on state general revenues would have resulted.

Revenue Impact Results



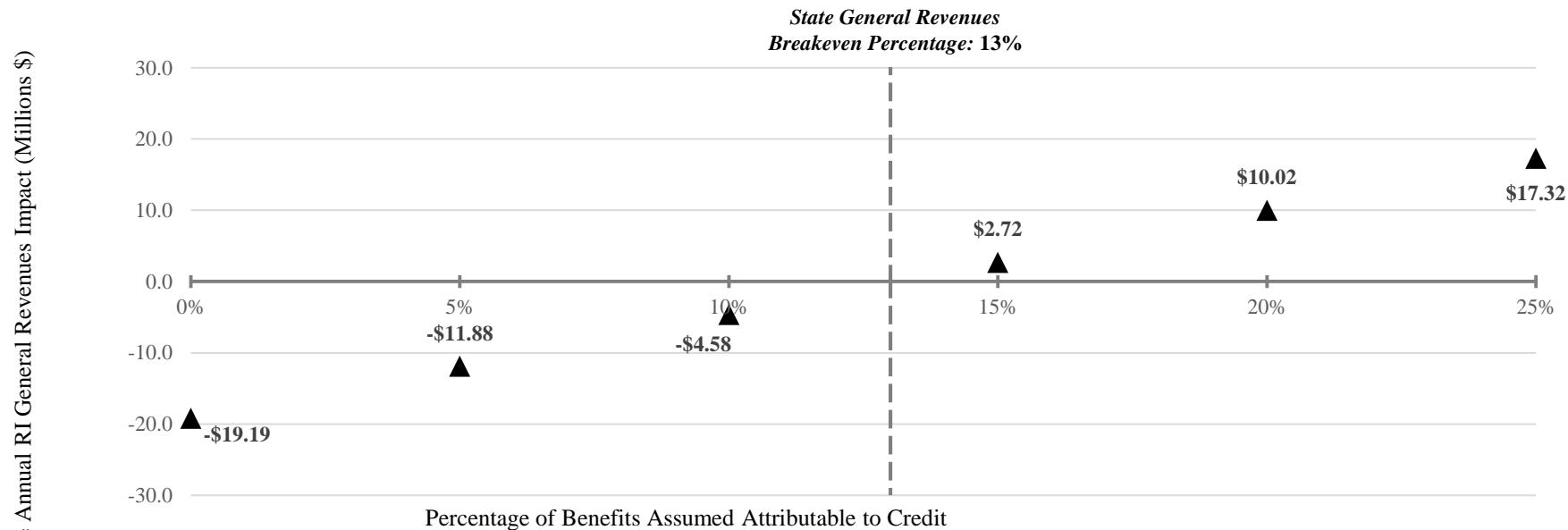
- 25% of the required jobs associated with the JDA program is assumed to be “*caused*” by the tax incentive:

| Average Annual Revenue Impact (Calendar Years 2013-2015) | |
|---|-------------------|
| Item Description | Amount |
| <i>General Revenue Generated by Incentive by Component</i> | |
| Personal Income Tax | \$11.7 M |
| Sales and Use Taxes | \$11.5 M |
| Other Taxes | \$0.5 M |
| Total Departmental Receipts | \$3.6 M |
| Other Sources | \$4.0 M |
| <i>Total General Revenue Generated by the Incentive</i> | <i>\$35.4 M</i> |
| <i>Forgone Revenue Due to Incentive</i> | <i>\$(18.1) M</i> |
| <i>Net Change in General Revenue After Paying for Incentive</i> | <i>\$17.3 M</i> |
| <i>New Revenues Generated for Every Dollar of Incentive</i> | <i>\$1.96</i> |

Gen. Revenue Breakeven Results



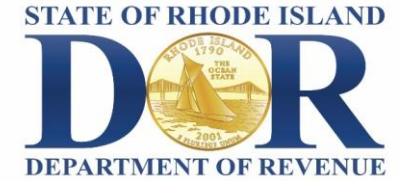
Jobs Development Act:
Rhode Island General Revenue Breakeven Analysis
 (Average Annual RI General Revenue Impact, Calendar Years 2013-2015)



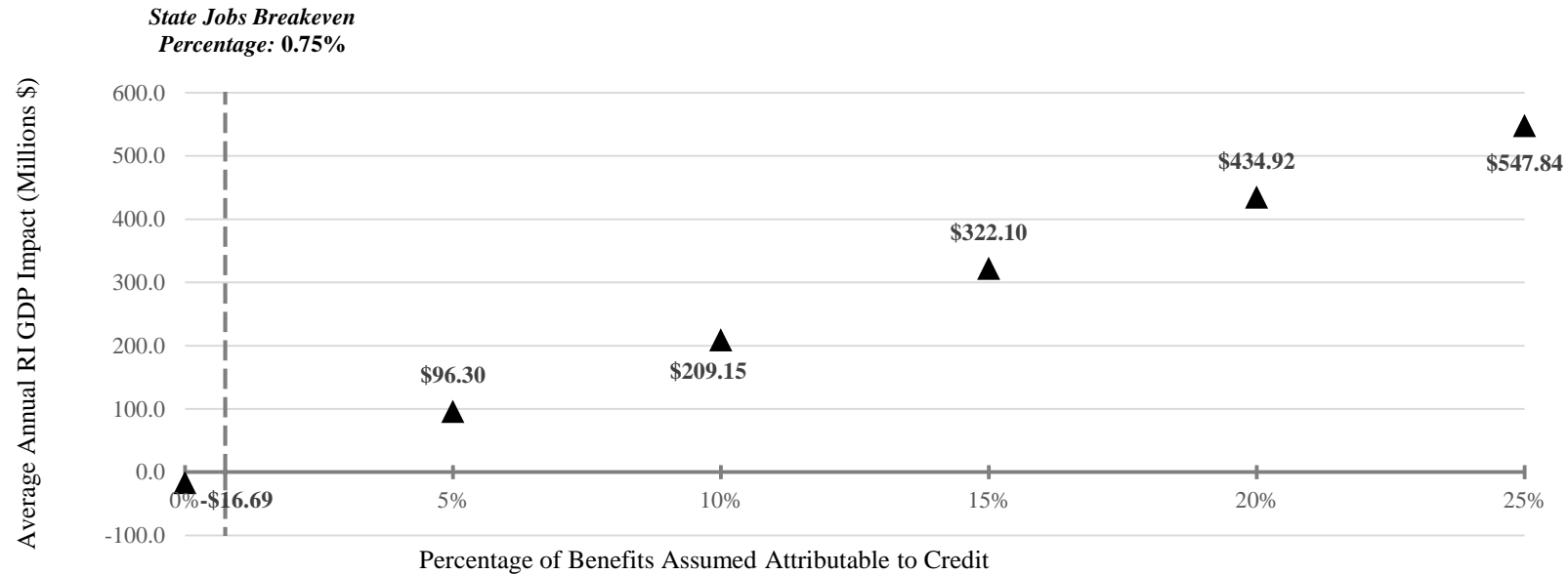
Notes: Label accompanying each marker refers to net RI general revenue impact resulting from a cost-benefit analysis assuming the labeled percentage of JDA benefits. General revenue impact is equal to the net revenue impact resulting from the direct, indirect, and induced effects in addition to the cost of paying back the cost of the tax credit. Note that the breakeven percentage is defined as the percent of benefits included in a cost-benefit analysis resulting in a net zero state RI general revenues impact.

Source: ORA calculations utilizing REMI PI+

GDP Breakeven Results



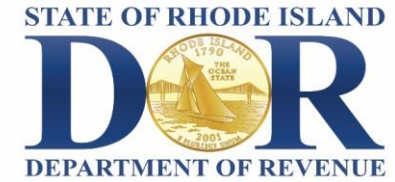
Jobs Development Act:
Rhode Island GDP Breakeven Analysis
 (Average Annual RI GDP Impact, Calendar Years 2013-2015)



Notes: Label accompanying each ▲ marker refers to RI GDP impact resulting from a cost-benefit analysis assuming the labeled percentage of JDA benefits. Note that the breakeven percentage is defined as the percent of benefits included in a cost-benefit analysis resulting in a zero state RI GDP impact.

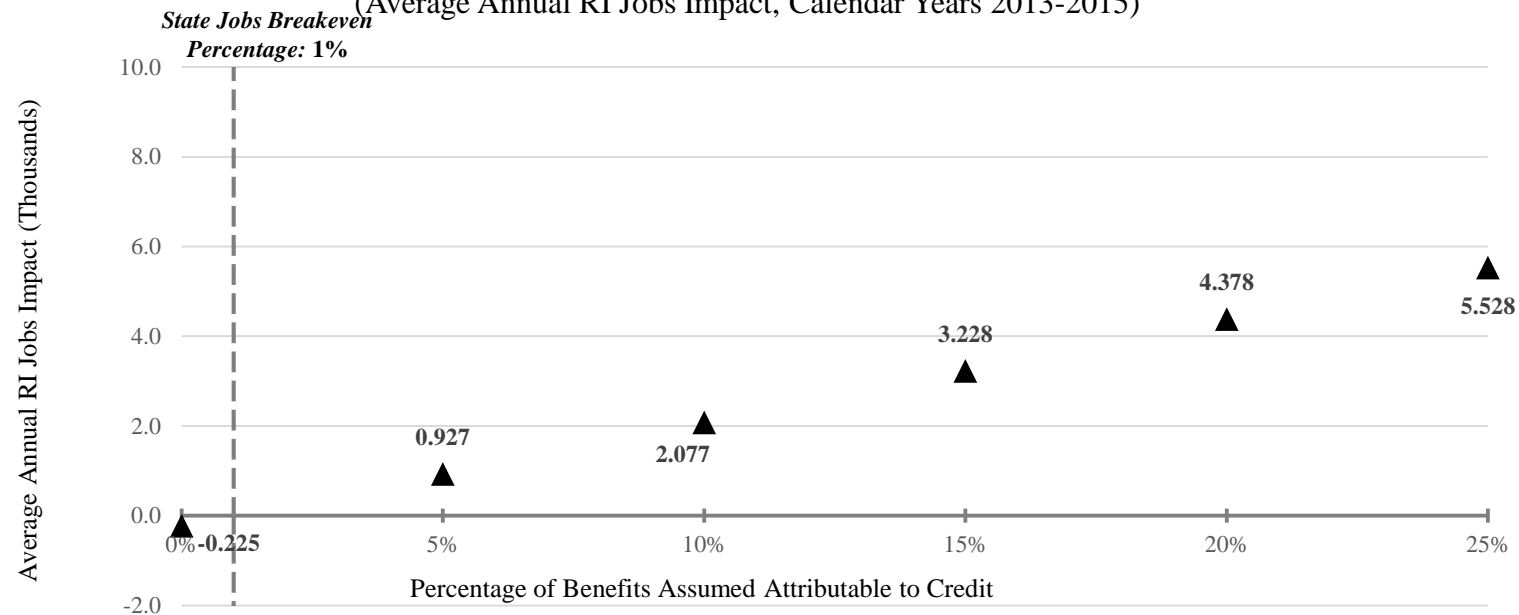
Source: ORA calculations utilizing REMI PI+

Employment Breakeven Results



Jobs Development Act: Rhode Island Jobs Breakeven Analysis

(Average Annual RI Jobs Impact, Calendar Years 2013-2015)



Notes: Label accompanying each marker refers to RI jobs impact resulting from a cost-benefit analysis assuming the labeled percentage of JDA benefits. Note that the breakeven percentage is defined as the percent of benefits included in a cost-benefit analysis resulting in a zero state RI jobs impact.

Source: ORA calculations utilizing REMI PI+



Thank you.

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- Full Report can be accessed through

<http://www.dor.ri.gov/documents/Reports/2018JobsDevelopmentAct.pdf>