

Rhode Island Commerce Corporation
Rebuild Rhode Island Tax Credits – Economic Impact Analysis
Electric Boat Corporation Application

Introduction

The Rhode Island Commerce Corporation (the “Corporation”) may issue Rebuild Rhode Island tax credits to Electric Boat Corporation, a subsidiary of General Dynamics (the “Sponsor”). The credits would be issued in connection with the Sponsor’s proposed investment in the development of new manufacturing facilities at its existing site in the Quonset Business Park to support production of a new generation of ballistic missile submarines. By 2028, these new facilities would directly support more than 1,300 new jobs.

The Sponsor estimates the total cost of the project to be \$792.1 million. The Sponsor is requesting Rebuild Rhode Island tax credits for the project totaling \$2.0 million, and an exemption from state sales and use taxes on materials used in construction, valued at \$18.0 million.

This analysis was prepared by Appleseed, a consulting firm with more than twenty years of experience in economic impact analysis.

Jobs Analysis

Construction

As shown in Table 1, the Sponsor’s estimate of total project cost is approximately \$792.1 million.

Table 1: Estimated total project cost (\$ millions)

Component	Estimated cost
Buildings	\$432.9
Equipment	115.0
Fixtures	158.8
Overhead	85.4
Total	\$792.1

After excluding certain expenditures that do not have a direct, current impact on Rhode Island’s economy (such as spending on equipment and fixtures purchased from other states)¹, spending

¹ We assume, however, that on-site installation costs associated with major fixtures account for 20 percent of total spending on fixtures.

on development of the proposed new facilities is estimated to total approximately \$550.1 million. Appleaseed estimates that direct expenditures of \$550.1 million will directly and indirectly generate:

- 3,648 person-years² of work in Rhode Island, with \$242.2 million in earnings (in 2022 dollars);
- Approximately \$647.2 million in statewide economic output³; and
- A one-time increase of \$369.8 million in Rhode Island’s GDP.

These impacts are summarized below in Table 2. The project’s *direct impact* is the impact of the company’s direct spending on design and construction. Its *indirect impact* is the effect of spending by contractors for goods and services (insurance, construction materials, etc.) purchased from other Rhode Island businesses.

Table 2: Direct, indirect and induced impact of construction and related spending (employment in person-years; income, value-added and output in millions of 2022 dollars)

	Employment	Earnings	Value added	Output
Direct Effect	3,147	\$207.3	\$311.5	\$550.1
Indirect Effect	501	34.9	58.3	\$97.1
Total Effect	3,648	\$242.2	\$369.8	\$647.2

In addition to the impacts on employment, earnings, output and state GDP cited in Table 2, direct spending of \$550.1 million would generate a projected one-time increase of approximately \$14.194 million in taxes paid to the State during construction, including:

- \$9.083 million in state personal income taxes paid by Rhode Island workers employed on the project, or whose jobs are indirectly attributable to the project;
- \$3.963 million in state sales taxes paid on those workers’ taxable household spending; and
- \$1.148 million in state business taxes.

The activity reflected in Table 2 will occur from 2018 through the end of 2032. Most of this activity, however, is concentrated in the project’s first five years; more than half of all construction spending occurs between mid-2018 and the end of 2022.

The anticipated wage rates for construction jobs are shown below in Table 3. Anticipated wage rates are the median hourly wage for these occupations in Rhode Island.

² A person-year is equivalent to the time worked by one person who is employed full-time for a year. It could for example represent the work of two people who are each employed full-time for six months; or the work of one person who is employed half-time for two years.

³ Output is a measure of the total sales by Rhode Island companies (including the “sale” of labor by Rhode Island households) generated by the project.

Table 3: Anticipated wages during construction

Occupation	RI median hourly wage⁴
Architect	\$42.50
Construction manager	\$50.86
Carpenter	\$22.42
Electrician	\$25.26
Plumber	\$24.84
Painter	\$18.69
Laborer	\$18.68

Fringe benefits associated with these jobs are expected to be in accordance with industry norms, with the cost of such benefits generally ranging between 22 and 28 percent of wages. Workers who fill these jobs are expected to be drawn primarily from the Providence-Warwick RI-MA New England City and Town Area (NECTA).

Annual operations

The Sponsor will begin hiring new employees in 2018 to staff its expanded operations in the Quonset Business Park. The number of workers directly employed at the Sponsor's new facility is expected to peak in 2028 at 1,309, with the direct payroll for these jobs in 2028 estimated to total \$78.96 million. Using IMPLAN, Applesseed estimates (as shown in Table 2) that in 2028, ongoing operations would directly and indirectly support:

- 1,743 full-time-equivalent jobs in Rhode Island, with approximately \$114.1 million in annual earnings (in 2028 dollars);
- \$316.6 million in annual statewide economic output; and
- An increase of \$125.4 million in Rhode Island's annual GDP.

Table 4: Direct, indirect and total incremental impact of Electric Boat's expansion in Rhode Island, 2028 (employment in FTE; earnings, value-added and output in millions of 2028 dollars)

	Employment	Earnings	Value added	Output
Direct Effect	1,309	\$79.0	\$76.6	\$232.3
Indirect Effect	434	\$35.1	\$48.8	\$84.3
Total Effect	1,743	\$114.1	\$125.4	\$316.6

⁴ Rhode Island Department of Labor and Training, Occupational Employment Statistics, 2016

In addition to the impacts on employment, earnings, output and state GDP cited in Table 4, ongoing operations would generate a projected gross increase of approximately \$6.682 million in taxes paid to the state in 2028, including:

- \$4.276 million in state personal income taxes paid by Rhode Island workers employed in the Sponsor's expanded operations in Rhode Island, or whose jobs are indirectly attributable to those operations;
- \$1.866 million in state sales taxes paid on those workers' taxable household spending;
- \$540,000 in state business taxes.

Workers employed as a result of the Sponsor's expansion in Rhode Island could be drawn from communities throughout the Providence-Warwick RI-MA NECTA.

Impact

The state fiscal impact of the requested tax credits and sales tax exemption is approximately \$20 million in foregone state tax revenue. Direct and indirect economic and fiscal benefits of the proposed project include an estimated increase in annual state GDP (in 2028) of approximately \$125.4; the associated job creation; and a gross increase of nearly \$79.8 million in personal income, sales and business tax revenues directly and indirectly generated by the project during the construction phase, and by ongoing operations during the twelve years from 2023 through 2034.

In addition to the economic and tax revenue impacts cited above, the proposed project would benefit Rhode Island in several other ways:

- By providing an opportunity for Rhode Island to expand its industrial base – facilities, knowledge and skilled workers – in a segment of the defense industry that has significant potential for further growth
- By continuing to expand and diversify the state's ocean economy
- By increasing payments in lieu of taxes (PILOTs) paid to local government

Beyond the fiscal impact noted above, there is no anticipated financial exposure to the state. Various features of the Rebuild Rhode Island program mitigate other risks to the state. In particular, the completion risk (i.e., the risk that the project is not completed) is mitigated by the fact that the tax credits will be issued only upon completion of the development. The risk of project cost overruns is mitigated by the fact that the credits capped at the amount set forth above. In addition, if project costs come in lower than anticipated, the value of the credits will be reduced accordingly.