



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ECONOMIC
AND COMMUNITY DEVELOPMENT



HEATHER JOHNSON
COMMISSIONER

February 1, 2023

Honorable Senator Chip Curry
Honorable Representative Tiffany Roberts
Committee On Innovation, Development, Economic Advancement and Business
100 State House Station
Augusta, ME 04333

Dear Sen. Curry, Rep. Terry, and members of the IDEAB Committee,

In accordance with Title 5 MRSA, §13070-P, the Department of Economic and Community Development presents the attached interim comprehensive evaluation of state investments in economic development.

The Department is required to provide an evaluation performed by independent, objective reviewers. To that end, we hired EBP US, Inc. for a contract encompassing the attached report and the full comprehensive evaluation due February 1, 2025. Statute requires a full comprehensive evaluation to be submitted every four years, starting February 1, 2021, and an interim progress report every four years starting February 1, 2023. Due to the effects of the COVID-19 pandemic, we were unable to execute a contract for this evaluation until March 7, 2022. The attached report is the first output of this contract, and follows our last comprehensive evaluation published in January 2018 under a prior iteration of the evaluation statute.

The attached report focuses on the Pine Tree Development Zone and Employment Tax Increment Financing programs, as those programs have been of particular interest to this Department and the Legislature in recent years. It also touches on Maine's overall incentive landscape and other programs that will be covered in greater detail in the evaluation to come over the next two years.

We welcome any questions and would be glad to discuss the report further at the pleasure of the Committee.

Sincerely,

Heather Johnson
Commissioner

Attachment: *Interim Program Evaluation Report – February 2023*, EBP US, Inc.

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INTERIM PROGRAM EVALUATION REPORT

MAINE DEPARTMENT OF ECONOMIC AND
COMMUNITY DEVELOPMENT

FEBRUARY 2023



EBP 

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Executive Summary

EBP is pleased to present the Interim Program Evaluation Report for two Maine Department of Economic and Community Development (DECD) incentive programs: Pine Tree Development Zones (PTDZ) and Employment Tax Increment Financing (ETIF). The purpose of this Interim Report is to provide insight into PTDZ and ETIF performance from 2018 to 2021 as well as to provide proof-of-concept of a methodology for evaluating other programs. Additionally, results from this evaluation should inform DECD decisions to shift investment toward programs that best achieve the objectives of Maine's 10-Year Economic Development Plan. This Interim Report follows a similar evaluation that Investment Consulting Associates (ICA) conducted in 2018 of Maine Economic Development and Research and Development programs.

Methodology

EBP began the evaluation by conducting a comprehensive review of each program. DECD identified PTDZ and ETIF as the first programs for closer evaluation because (a) they are primary offerings in DECD's incentives portfolio, (b) there is continued interest in their performance and alignment with the state's economic plan, and (c) PTDZ is scheduled to sunset at the end of 2023.

EBP then conducted a survey of companies participating in the PTDZ and ETIF programs. The survey consisted of 53 questions gathering information on individual companies' operations and their interactions with and impressions of the Maine DECD incentive programs. Over a two-month period, the survey received 106 unique responses, of which 47% of responses indicated participation in the PTDZ program, 34% indicated participation in the ETIF program, and the remaining 19% did not explicitly identify programs in which the company participates. The survey represents less than 35% of the 142 companies enrolled in PTDZ, and 27% of the 136 enrolled in ETIF in any given year. The information gathered in this survey later supplemented the quantitative evaluation of the PTDZ and ETIF programs.

Following the survey, EBP then benchmarked Maine and its economic development programs against comparator locations and comparable programs they offer. EBP's methodology for the State Benchmark Assessment is composed of five analyses leveraging various data sources to assess the competitive position and performance of the State of Maine and its incentive programs. Results for Benchmarks 3 and 4 should be interpreted in the context of the limitations described below.

Current Benchmarking Limitations

In this Interim Report, EBP replicated Benchmark 3 and Benchmark 4 in the 2018 evaluation. The results reported in the following sections are therefore meant for comparative purposes.

Although IncentivesFlow is one of the most comprehensive sources for incentive data, it does not provide complete information for Maine. According to Wavteq (the data provider), this is primarily due to limited transparency around incentives and incentive reporting in Maine (which is itself a finding of this evaluation). Still, IncentivesFlow provides enough information to position incentive performance in Maine relative to the United States. In this context, IncentivesFlow should be interpreted as a *benchmarking* tool rather than a *reporting* tool.

In the comprehensive evaluation, we intend to explore other incentive data sources and also collect data directly from comparative states, including information on the effectiveness of similar programs.

Benchmarking Results

A description of the benchmarks and primary findings from the State Benchmark Assessment are as follows:

Benchmark 1: State Investments	
Description	EBP used data from the FDI (Foreign Direct Investments) Markets Database to explore Maine's competitive position in attracting FDI projects from different markets, industries, and activities.
Main Findings	<ul style="list-style-type: none"> On average, Maine ranks 43rd nationally in terms of investment attraction, which represents an improvement from 44th in 2018 and 46th in 2016, as noted in the 2018 Comprehensive Report. The largest source of international investment into Maine over the past five years is Canada, with six projects, followed by the Netherlands and Switzerland, with two projects each.

Benchmark 2: Business Environments	
Description	This assessment is based around a location analysis which uses a variety of economic and demographic data to compare the competitive position of Metropolitan Statistical Areas (MSAs) in Maine with MSAs in other locations across the U.S.
Main Findings	<ul style="list-style-type: none"> • The Maine MSAs of Bangor, Portland, and Lewiston ranked 18th, 20th, and 25th overall among 22 competitor MSAs. • The Maine MSAs generally rank highly among competitors in terms of occupational employment, educational attainment, and lower than average wages, which may be attractive for certain businesses. • Maine MSAs rank lower than competitors in terms of labor force availability, higher than average commercial property tax rates, and below average share of jobs in industries that tend to drive economic growth (e.g., management, professional services, and real estate) in some of the MSAs. Maine's shrinking and aging population and low housing growth drive up housing prices and stifle opportunities to attract workers and businesses.

Benchmark 3: Incentive Awards	
Description	This assessment uses data from Wavteq IncentivesFlow Database to evaluate trends in incentive use across the U.S.
Main Findings	<ul style="list-style-type: none"> • Maine has a relatively high incentive cost per job created (\$82,239) and a relatively low return on investment (\$2.71). • From 2017 to 2021, Maine spent \$74.9 million on 17 incentive awards (\$4.4 million per project), placing Maine slightly below par for the U.S. On average, any given state spent \$995.8 million on 380 incentive awards (\$2.6 million per project), suggesting that Maine spent disproportionately more on incentives when compared to the rest of the U.S. • From 2017 to 2021, an incentive granted to a project resulted in an average of 146 new jobs and capital investments of \$31.2 million, at the national level. For Maine individually, an incentive granted to a project resulted in an average of 54 new jobs and capital investments of \$11.9 million, with both metrics below the national averages.

Benchmark 4: Incentive Transparency	
Description	Using data from Wavteq IncentivesFlow Database, EBP developed an Incentive Productivity Index to assess and rank states according to their incentive deal figures. The primary indicators used include number of awarded incentives, value of capital investments, and number of newly created jobs.

Benchmark 4: Incentive Transparency

Main Findings	<ul style="list-style-type: none"> • Maine ranked 46th on average for incentive productivity. Despite this, the State has gained ground over the last five years, improving from its ranking of 48th in 2017. • In 2017, Maine ranked 48th with only one incentive deal recorded. In 2021, the State moved to 44th with six incentive deals recorded. Although these six deals did not bring capital investment into the state, they did bring 599 new jobs, placing Maine 43rd nationally for new jobs created.
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Benchmark 5: Competitive States

Description	<p>This assessment involves the examination of programs similar to ETIF and PTDZ from several competing states. The states – Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont, Florida, Idaho, Maryland, and New Jersey – were selected based on similarities in terms of location, share of gross domestic product, and incentive distributions, in addition to input from DECD. EBP found that each of these states offer at least one incentive program primarily focused around the goal of increasing employment, similar to the PTDZ and ETIF programs.</p>
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Current Modeling Limitations

In this Interim Report, EBP replicated the IRR cost model utilized in the 2018 evaluation of the PTDZ incentive program. The results reported in the following sections are for comparative purposes only. The unrealistic nature of the current figures highlights significant data limitations that stem primarily from the low response rate and completeness of the survey data. EBP recommends updating the cost model for the comprehensive report to better reflect available information, incorporate changes resulting from the Covid-19 pandemic, and rely less on survey data. The updated cost model should also focus more on the programs' impact on gross state product, wages, or other economic indicators.

Using the information and context gained from the program review, survey of participating companies, and state benchmark assessment, EBP conducted a more thorough evaluation of the PTDZ and ETIF programs. In this evaluation, EBP created a Return on Investment (ROI) model (cost-benefit model) to quantify net benefits and conducted interviews with program participants to better understand the extent to which each program meets its objectives. The ROI model is modeled after the cost-benefit model used during the 2018 evaluation. It should be noted that the

tool may not be capturing the true IRR of each incentive due to not accounting for new confounding variables, such as those resulting from the Covid-19 pandemic, as well as because of the limitations described above.

The findings of the ROI analysis and interviews for each evaluation are as follows:

PTDZ Evaluation Findings

Type of Assessment	Findings
ROI Model (Cost-Benefit Model)	<ul style="list-style-type: none"> • The cost-benefit model found that the PTDZ program has an internal rate of return (IRR) of 1923.08%, implying that for every dollar the state of Maine invests in the incentive, Maine has seen \$19.23 in additional tax revenue. • This IRR is much higher than that found in the 2018 evaluation. The 2018 evaluation found an IRR of 297.2%, or \$2.97 in additional tax revenue for every dollar invested in the program. This unexpected difference from 2018 strongly suggests a need for further investigation into the availability, completeness, and accuracy of data available to EBP from DECD sources.
Interviews with Program Participants	<ul style="list-style-type: none"> • Interviewees generally reported that PTDZ has helped them sustain business in difficult times and avoid closure. Likewise, PTDZ has helped companies invest in expansion efforts they may not have pursued otherwise. • Companies reported that PTDZ offsets some energy and materials costs of operating in Maine, helping them stay competitive in capital-intensive industries. However, many competitor states still have cost advantages. • Two companies reported that PTDZ was a primary factor in deciding to locate in Maine, while several other companies noted that PTDZ is not a significant consideration in their decision-making processes. • Several interviewees expressed concerns about cybersecurity risks and program uncertainty in relation to the PTDZ program.

ETIF Evaluation Findings

Type of Assessment	Findings
ROI Model (Cost-Benefit Model)	<ul style="list-style-type: none"> • The cost-benefit model found that the ETIF program has an internal rate of return (IRR) of 950.07%, implying that for every dollar the state of Maine invests in the incentive, Maine has seen \$9.50 in additional tax revenue. • The IRR is high, like the IRR associated with PTDZ. Considering that the model relies on survey data representing less than 27% of program participants, this result suggests a need for further investigation into the availability, completeness, and accuracy of data available to EBP from DECD sources. • This unexpected difference from 2018 strongly suggests a need for further investigation into the availability, completeness, and accuracy of data available to EBP from DECD sources. • The ETIF incentive seems to produce significant increases in sales tax, personal income tax, and employer payroll tax revenues. The sales tax increase is driven by increased sales in the State of Maine and therefore paid for by consumers.
Interviews with Program Participants	<ul style="list-style-type: none"> • Labor-intensive sectors such as software development benefit the most from ETIF; one such employer located in Maine specifically to receive this and the PTDZ benefit. • Companies stated that hiring in Maine can be difficult even with generous salary and benefits packages as ETIF does not solve labor and housing availability challenges. • Companies reported positive experiences in working with the State to access ETIF benefits.

Based on this evaluation of the PTDZ and ETIF programs, EBP preliminarily recommends the State pursue the following opportunities for program and process improvements:

- **Enforce company information requests**, and weigh this against confidentiality and data security concerns. We understand that this has been an ongoing concern and still requires an effective solution. The ability to provide full and transparent analysis to the state and taxpayers relies on the ability to get complete and thorough reporting from the companies benefitting from the programs.
- **Consider making programs perpetual.** Companies value certainty and predictability above almost all else. Uncertainty makes long-term business planning difficult, which can give other states an edge.
- **More closely align PTDZ and ETIF with the Maine Economic Development Strategy.** Continue to support economically distressed communities by supporting job creation and wage growth, as well as sectors involved in innovation, but also make programs permanent or at least more certain to support the Maintain Stable Business strategy.
- **Focus on addressing root causes of business challenges.** Partner with organizations to support business in ways that extend beyond direct financial support.

This Interim Report establishes a framework and methodology to evaluate the Pine Tree Development Zone (PTDZ) and the Employment Tax Increment Financing (ETIF) programs. In 2023, EBP will evaluate several more programs, including:

- Certified Media Production Tax Credit
- Maine Seed Capital Investment Tax Credit
- Capital Investment Credit
- Educational Opportunity Tax Credit

The comprehensive report will employ similar evaluation techniques as found in this report, but will also include enhancements to the ROI model to (a) make it more accurate and (b) expand the impacts we can evaluate, including impacts on gross state product. We will also explore new incentive data sources for the purpose of comparing incentive performance among Maine and competing states.

1. Introduction

This Interim Program Evaluation Report presents an assessment of the performance of two Maine DECD incentive programs: Pine Tree Development Zones (PTDZ) and Employment Tax Increment Financing (ETIF). PTDZ and ETIF are two of the most widely used incentive programs in Maine. This work is part of a comprehensive evaluation due to the Maine Legislature in 2025. The purpose of this report is to provide insight into PTDZ and ETIF performance from 2018 to 2021 as well as to provide proof-of-concept of a methodology for evaluating other programs. This report draws on a combination of business interviews, annual report reviews, a survey, and cost effectiveness analysis. It also offers suggestions for program improvements and provides a discussion of next steps.

1.1. Background

Maine's Legislature requires that the effectiveness of Economic Development and Research and Development (R&D) programs be examined every four years, with interim progress reports delivered halfway between each full evaluation (i.e., every two years).¹ The State performs these Biennial Progress Reviews to examine how effectively these programs have been achieving the state's economic development goals. The Legislature also required that, in addition to the regular Biennial Progress Report, a Comprehensive Evaluation of Investments in Research and Development (R&D) report covering the previous six years be prepared in 2018. At that time, the Maine Department of Economic and Community Development (DECD) retained Investment Consulting Associates (ICA) to conduct both a consolidated evaluation of the Economic Development and R&D programs and Biennial Progress Report. The goal of this consolidated study was to generate a series of action plan reports to examine the state's investments in both economic development and R&D.

ICA used the following methodology for the 2018 Evaluation:

- Reviewed previous program evaluations performed for the State
- Conducted interviews and roundtable discussions with relevant public sector entities
- Conducted roundtable discussions with private and non-profit entities who have received benefits or assistance from the state
- Benchmarked the state's natural competitiveness against several peer states
- Conducted surveys to gather data on program usage, hiring trends, salary rates, and capital investment
- Performed a cost-benefit analysis of survey data for select programs
- Examined annual reports for various programs

¹ Under Maine Title 5, Section 13070-P.

Appendix 1 provides an overview of findings from the 2018 evaluation conducted by ICA. In general, the evaluation found that companies have benefited from the state's economic development programs. However, the evaluation found opportunities to improve Maine's overall business environment.

ICA made numerous recommendations related to the structure and target of incentive programs, the eligibility and benefits of programs, and monitoring and evaluation; these recommendations are also located in the appendix. Based on their recommendations, ICA proposed the following implementation plan in the 2018 evaluation report:

- Confirm the State's economic development goals and overall strategy, which should include a plan for coordinating business establishment, growth, retention, and attraction
- Develop a coordinating team of individuals with representatives from the Executive branch, Legislature, and selected stakeholders to facilitate conversation and action on economic development and R&D activities
- Review the list of recommendations for consolidation, expansion, reconfiguration, and elimination and work with the State legislature to make appropriate program changes and to implement new mechanisms for information sharing and reporting
- Develop or change enabling legislation for the new or repurposed Centralized Coordinating Agency for economic development activities and investments

1.2. Purpose of 2022 Evaluation

Maine has developed a suite of policy and investment tools aimed at advancing economic development in the state. Because economic conditions and specific requirements of businesses are continually evolving, the toolset used to support business attraction and growth must be periodically evaluated and updated as well. 5 MRSA §13070-P, enacted by PL 2017, c. 264, §13 addresses this need by requiring the commissioner of DECD to submit a comprehensive, independent, objective review and assessment of the State's portfolio of economic development investments to the Governor and Legislature every four years. Under statute, the report must address, at a minimum, the following:

1. The extent to which the level and types of investments that comprise the State's portfolio of economic development investments aligns with and supports the state's economic development strategy
2. The extent to which individual activities and programs, or groups of activities and programs, within the State's portfolio are contributing to the achievement of the goals, measurable objectives and performance targets established in the economic development strategy
3. How the level and types of investments that comprise the State's portfolio of economic development investments compares to investments in other states

4. The effectiveness of the State's economic development investments in improving the competitiveness of the State's established and emerging technology and industry sectors
5. The extent to which the overall framework for the State's economic development investments provides for sufficient transparency and accountability, effective and efficient coordination, and easy access for interested businesses and other entities

This Interim Report and the Final Report will provide actionable information to DECD, the Governor, and the State Legislature that identifies opportunities to:

- Modify the current portfolio of state economic development investments to better align with the goals and objectives of the 10-year economic development plan
- Shift investments from economic development activities and programs to other state efforts to better achieve the goals and objectives of the 10-year economic development plan
- Improve transparency and accountability for these investments to the state government, to the public, and to the business community
- Identify further areas for improvement

In addition to providing an analysis of two of the state's major economic development incentive programs – the Employment Tax Increment Financing (ETIF) and Pine Tree Development Zones (PTDZ) – this Interim Report includes an updated analysis of the economic development investment portfolios offered by selected peer states.

1.3. Programs Evaluated in 2022

This Interim Report focuses on two of Maine's major economic development programs: ETIF and PTDZ. DECD identified these programs as priorities because (a) they are primary offerings in DECD's incentives portfolio, (b) there is continued interest in their performance and alignment with the state's economic plan, and (c) PTDZ is scheduled to sunset at the end of 2023.

The State established ETIF to incentivize businesses to create new employment opportunities and improve and broaden the state tax base. Under this program, Maine businesses that hire at least five net new employees within two years are eligible for a refund of between 30 and 80% of state income tax withholding for up to ten years. (Businesses must be for-profit and may not be retail or public utilities).

PTDZ, established in 2003, aims to improve and broaden employment opportunities and the associated tax base in economically distressed areas of the state. The program statute designates certain geographic areas of the state as eligible locations for businesses to participate. DECD then certifies businesses located in these zones to receive PTDZ benefits. Eligible businesses fall under two tiers based on their physical locations. DECD stopped certifying Tier 2 businesses in 2013 and will stop certifying Tier 1 businesses in 2023. All benefits are scheduled to sunset on December 31, 2033—10 years after the last round of Tier 1 certifications.

Businesses approved for PTDZ can automatically participate in ETIF if they also meet that program's requirements. DECD administers both programs with assistance from Maine Revenue Services.

By focusing our analysis on these two programs, we were able to test and refine our methodology before analyzing the broader set of incentives for the final, comprehensive report, which will be delivered in January 2025.

1.4. Methodology

1.4.1. Program Review

Before initiating a detailed evaluation process, EBP conducted an initial review of each program identified by DECD. DECD provided a list of the economic development programs and incentives in the State's portfolio, and in collaboration with EBP, each program was prioritized in terms of (a) time sensitivity, i.e., whether the programs ended or were about to end, and (b) the degree of legislative or public interest they had received. Based on this categorization scheme, EBP analyzed the highest priority programs in the greatest detail and mid-range priority programs at a moderate level of detail. EBP will not evaluate programs in the lowest priority group individually; rather, we will analyze these programs in terms of their contribution to the State's overall portfolio of economic development investments based on available information.

EBP reviewed the State's 10-year economic development strategic plan to enable us to conduct program-specific document review with an understanding of the State's economic development goals and objectives. We then reviewed individual program documentation including:

- DECD's previous evaluation reports
- Program evaluation reports produced by the Office of Program Evaluation & Government Accountability (OPEGA)
- Program annual reports from 2018-2021
- The Finance Authority of Maine's (FAME) recent annual reports and data publications
- Existing Industry Sector Reports and Industry Intelligence related to R&D investments

EBP also reviewed the enabling legislation for each program and identified the legislative purpose of programs (if included in the legislation). For those programs that do not include legislative purpose as part of their enabling statutes, we reviewed program websites and the published reports listed above to identify program purpose.

1.4.2. State Benchmark Assessment

This section provides the following five benchmark analyses based on various databases to which the EBP Team has access:

Benchmark 1: State Investments: The State Investments Benchmark uses proprietary data from the FDI (Foreign Direct Investment) Markets Database, which tracks greenfield investment projects from both national and international sources, including investment flows between U.S. states. The Benchmark explores the competitive position of Maine in attracting FDI projects from various markets, industries, and activities. However, it does not include equity-based investments such as mergers and acquisitions.

Benchmark 2: Business Environments: The Business Environments Benchmark highlights the competitive position of Metropolitan Statistical Areas (MSAs) in Maine compared to MSAs across the U.S. that a site selector may compare and contrast during an evaluation process.

EBP's location analysis – the Reverse Site Selection Model – provides a more distinctive approach to conventional location analysis. EBP collected indicators from various sources, mainly ESRI Business Analyst, which allow for comparisons across a range of competitive dimensions in the Reverse Site Selection Model. Our location analysis gathers and ranks such indicators, instead of simply analyzing them. Comparing and contrasting rankings then enables a more profound location analysis, since EBP's analysis is based on various rankings that complement one another.

Benchmark 3: Incentive Awards: The Incentive Awards Benchmark shows trends in incentive use across the U.S., such as highlighting particularly active incentive programs to particularly responsive companies. The analysis uses proprietary data from the Wavteq IncentivesFlow Database².

Benchmark 4: Incentive Productivity: In line with the Incentive Awards Benchmark, this section introduces the Incentive Productivity Index. This Index is a composite measure that ranks states according to their incentive deal figures. The analysis uses proprietary data from IncentivesFlow Database.

Benchmark 5: Competitive States: The Competitive States Benchmark focuses on incentive programs across competing states that align with ETIF and PTDZ in Maine. EBP examined programs from the following competing states: Connecticut, Florida, Idaho, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, and Vermont.

² Wavteq IncentivesFlow is a database tracking financial incentives awarded to companies for both foreign and domestic investment projects.

1.4.3. Participating Companies Survey

As part of the data collection process, EBP designed a survey of PTDZ and ETIF incentive program participants. The survey asked individual companies to share details about their operations such as industry, revenues, and employment, along with their interactions with and impressions of the Maine DECD incentive programs. Responses would supplement data collected by the DECD to quantitatively evaluate the programs and to obtain insights from participants themselves. EBP has used the data collected from this survey for the cost-benefit analysis to provide additional details on the direct impact of each program.

The survey had 53 total questions with a total of 245 input fields. The questions fall into nine categories: survey details, contact information, company structure, financials, market geography, awareness of programs, program participation, direct impact, and open response.

Between August 25 and October 20, 2022, the survey received 106 unique responses. Eight companies each submitted two responses; however, for all eight companies, one response was much more detailed than the other. With no contradictory responses found between the duplicates, only the more detailed response from each company was used to avoid double-counting.

Table 1 provides details, an example, and the survey response rates for each question category. Most notably, questions seeking “Awareness of Programs” and “Direct Impact” had the lowest response rates, with both receiving a response from only around 39% of respondents.

Table 1. Response Rates by Question Category

Question Category	Category Description	Example Question	Response Rate
Awareness of Programs	How many and which programs have respondents heard and/or interacted with	Which of the following Maine agencies or organizations are you aware of or have you interacted with?	39.81%
Company Infrastructure	Shareholder, tax, and employee structure of respondents	Provide a breakdown of the shareholder structure of your company	61.11%
Contact Information	Contact information for the individual completing the survey	Email Address	95.19%
Direct Impact	Direct impacts of incentive participation on jobs, taxes, investments, exports, certifications, and training	What were the direct results of these incentives on additional jobs?	39.63%
Financials	Annual and planned expenditures, sales, tax liabilities, and investment information	What is the total amount of income tax your company paid to the State of Maine?	65.12%
Geography (Markets)	Questions regarding the respondent company's industry sectors and markets	Which industry sector best matches your business?	92.90%
Open Response	Free responses providing respondent's feedback on the importance and effectiveness of the incentive programs	Rate the importance of the state of Maine's existing funding or incentive assistance programs to realize your company's growth plans	53.55%
Program Participation	Identification of participation and received benefits from Maine incentive programs	What is the total amount of money or financial benefits your company received from ALL State of Maine incentive programs?	60.34%
Survey Details	Automatically collected information about when, how, and where the response was completed	IP Address	100.0%
Average Response Rate			66.91%

The survey gained 106 total responses, with 102 identified companies. While the PTDZ and ETIF annual reports indicate that 99 of these companies participated in either one or both of the programs in the last five years, fewer than half explicitly indicated such participation in their survey response. Table 2 shows how many companies indicated participation in each program. “PTDZ Responses” refers to any response that specifies participation in PTDZ, while “PTDZ Only Responses” refers to responses in which only the PTDZ incentive program is mentioned. These “Only” responses serve to isolate the effects more directly to the program itself. The ETIF responses are defined similarly.

Table 2. Responses By Program

Response By Program	Number of Responses
PTDZ Responses	50
ETIF Responses	36
PTDZ Only Responses	19
ETIF Only Responses	13
PTDZ and ETIF Responses	106

About 30% of companies reported higher expenses than revenues for at least one year between 2017 and 2021, inclusive. Because this high expense to revenue ratio was unexpected, EBP contacted these individual respondents to confirm these expense numbers. Of the 37 contacted companies, only one expense number was corrected.

Given the limited number of responses overall, especially compared to previous iterations of this survey (311 responses in 2018), the results may not be representative of the entire participant population. Therefore, when possible and appropriate, EBP substituted more comprehensive supplemental data for survey data.

1.4.4. Return on Investment Model

To evaluate the impacts of the PTDZ and ETIF programs, it is beneficial to understand the net benefit (or cost) of these programs to the State of Maine. In this review, EBP evaluated both incentive programs on the extent of their utilization and the comparison of economic development benefits to financial costs from 2017 through 2021.

The direct and indirect costs and benefits can be measured through an Internal Rate of Return (IRR) simulation technique. The IRR is a measurement that estimates the profitability of potential or existing investments. As employed in this evaluation, IRR is intended to capture the economic and financial impacts on participating firms benefiting from the PTDZ and ETIF programs. A positive IRR suggests that the program is a financially viable investment for the State.

Current Modeling Limitations

In this Interim Report, EBP replicated the IRR cost model utilized in the 2018 evaluation of the PTDZ incentive program. The results reported in the following sections are for comparative purposes only. The unrealistic nature of the current figures highlights significant data limitations that stem primarily from the low response rate and completeness of the survey data. EBP recommends updating the cost model for the comprehensive report to better reflect available information, incorporate changes resulting from the Covid-19 pandemic, and rely less on survey data. The updated cost model should also focus more on the programs' impact on gross state product, wages, or other economic indicators.

The cost model used in this report calculates benefits to the State of Maine by assessing direct tax revenues and costs resulting from business participation. The assessed tax benefits include state-level corporate income tax, sales tax revenues, state-level personal income taxes, resident dividends tax, state-level employer payroll taxes, and the cost of program administration. The model also attempts to answer the “but-for” question: How would Maine’s tax revenues be affected if the incentive was not offered?³ The differences between the two scenarios provide the IRR of the investment.

The models for the PTDZ and ETIF programs employ various sources to account for the costs and benefits. Data for the models is derived from the survey described above; annual incentive program reports and administrative cost breakdowns compiled by Maine DECD; and publicly available tax and salary information.

More specifically, the survey solicited company-specific information such as total sales revenues, total expenses, cost of sales, headcounts, and ownership structure. The averages from the survey can be used to produce aggregate totals. The annual reports validate and supplement this data, providing more details on employment levels and level of program participation. The U.S. Bureau of Labor Statistics provides details on occupations of interest and their annual mean wages. State and federal corporate tax rate information was found at www.taxfoundation.org and the

³ “But for” analyses should be interpreted carefully, with the understanding that they rely on businesses’ self-assessment of a program’s influence or level of attribution. Also, many programs require that the company certify that they would not have made the investment in question but for the incentive award, making companies highly reluctant to report otherwise post-facto. Actual program attribution levels are difficult to ascertain because incentives are just one of many factors that impact business decisions.

Internal Revenue Service webpages, respectively. Bankrate.com and Pew research provided personal income tax rates. Finally, Maine DECD produced the figures for program administration. These data sources and the information derived from them are shown below in Table 3.

Table 3. Cost Model Data Sources and Derived Information

Data Source	Derived Information
Participating Companies Survey	Annual Sales Revenues, Annual Expenses, Payroll Taxes, Capital Expenditures, Additional Exports
PTDZ/ETIF Annual Reports	Number of Active Participants, Total Number of Retained Jobs, Additional Jobs, Number of Employees
Bureau of Labor Statistics	Workforce Percentage by Occupation, Annual Mean Wage
www.taxfoundation.org	State of Maine Corporate Income Tax Rates
Internal Revenue Service	Federal Corporate Income Tax Rates
www.bankrate.com	State of Maine Personal Income Tax Rates, Federal Personal Income Tax Rates
Pew Research	Adult Marriage Rate Estimate
Maine DECD	Cost of Administering PTDZ/ETIF Programs

When comparing the cost model results to those from 2018, it is clear the poor survey response rates among participating companies limits the model as-is. For example, average total sales revenues and sales figures differ by an order of magnitude. Even with the Covid-19 pandemic impacting businesses in 2020 and 2021, this difference is unexpected and points toward a lack of reliable data. These figures impact various components of the cost model, in particular company tax liabilities, and therefore skew the resulting IRR value. Further program-specific limitations are discussed in the following sections below.

1.4.5. Company Interviews

EBP supplemented the quantitative survey and IRR analysis with semi-structured business interviews. We conducted eight interviews in June 2022 with companies that benefited from either the PTDZ or ETIF programs. Companies were selected in collaboration with DECD to represent a range of industries.

Interviews focused specifically on company successes and challenges, benefits of program participation, experience working with DECD, the Maine business climate, and future plans. Findings from the interviews are included in the sections on PTDZ and ETIF.

2. State Benchmark Assessment

EBP compared Maine’s portfolio of economic development incentives with those in states across the country, including peer competitor states, states in the New England region, and states with programs that target sectors like those targeted by Maine. This assessment will help DECD understand at what rate companies take advantage of Maine incentives, Maine’s general business environment, incentive transparency, and investment performance against national and regional benchmarks. This section also reviews best practices for economic development programs based on data from competitive states.

2.1. Benchmark 1: State Investments

2.1.1. Absolute State Investment Performance

Figures from FDI Markets show that 8,083 investment projects were registered for the U.S. from 2017 through 2021. Of these, 482 projects were located in New England, with 17 in Maine.

Table 4. National Investment Performance

	United States	New England	Maine
Total Projects	8,083	482	17
Total Capital Investments (M \$)	\$368 B	\$12 B	\$556 M
Total Job Creation	710,477	32,671	1,007

Source: EBP Analysis of FDI Markets, 2017-2021.

As noted in Table 4, the investment projects in the U.S. represent about \$368 billion in capital investments and about 710,500 jobs. The subset of investment projects in New England represents about \$12 billion in capital investments and about 32,700 jobs, with about \$556 million in capital investments and 1,000 jobs in Maine.

On average, Maine ranks 43rd nationally in terms of investment attraction, which represents an improvement from 44th in 2018 and 46th in 2016, as noted in the 2018 Comprehensive Report. New England states, such as New Hampshire, Rhode Island, and Vermont, perform generally similarly to Maine. In fact, with over \$556 million in capital investments and 1,000 jobs, Maine outperforms Rhode Island and Vermont in both categories. When analyzed on a per capita basis, Maine ranks 35th nationally, surpassing Vermont.

2.1.2. Average Investment Performance

Comparing average investment performance values reveals that Maine outperforms New England states in terms of capital investments and slightly underperforms in terms of jobs per investment project. From 2017 to 2021, the average investment project in Maine generated capital investments of \$32.7 million and 59 new jobs.

The average investment project generated capital investments of \$45.5 million and 88 new jobs in the U.S., and capital investments of \$24.9 million and 68 new jobs in New England, specifically. Thus, Maine can be considered on par with the rest of New England in terms of performance.

Table 5. Average Investment Performance

	United States	New England	Maine
Average Capital Investments (M \$)	\$45.5 M	\$24.9 M	\$32.7 M
Average Job Creation	88	68	59

Source: EBP Analysis of FDI Markets, 2017-2021.

2.1.3. Maine Investment Performance

As shown in Table 5, although annual investment performance remains similar year over year in Maine, Maine received more capital investments and jobs in 2017 and 2018, peaking with \$90.8 million in capital expenditures and 90 jobs per project in 2018. Maine has experienced a downturn in investment performance since 2020, with only \$69 million in capital expenditures and 168 jobs generated by five projects. This downturn is likely associated with the COVID-19 Pandemic.

Table 6. Maine Investment Performance

Year	Total Projects	Capital Investments (M \$)	Jobs Created
2017	4	\$153.2	382
2018	3	\$272.3	269
2019	5	\$61.5	188
2020	3	\$13.3	1
2021	2	\$55.6	167
Grand Total	17	\$555.93	1,007

Source: EBP Analysis of FDI Markets, 2017-2021.

The renewable energy and food and beverage sectors have been the most frequently targeted for investment projects in Maine, with seven projects in the past five years.

Table 7. Maine Investment Sectors

Sector	Share
Renewable Energy	23.5%
Food and Beverage	17.6%
Information Technology	11.8%
Aerospace	5.9%
Financial Services	5.9%
Healthcare	5.9%
Hotels and Tourism	5.9%
Paper, Printing, and Packaging	5.9%
Plastics	5.9%
Real Estate	5.9%
Textiles	5.9%

Source: EBP Analysis of FDI Markets, 2017-2021.

Table 8. Maine Investment Sources

Sector	Share
Canada	35.3%
Netherlands	11.8%
Switzerland	11.8%
Australia	5.9%
Finland	5.9%
France	5.9%
Germany	5.9%
Israel	5.9%
Norway	5.9%
United Kingdom	5.9%

Source: EBP Analysis of FDI Markets, 2017-2021.

Note: 36% of investments were sourced from Finland, France, Germany, Israel, Norway, and the United Kingdom.

In terms of jobs created, the food and beverage sector leads with an average of 248 jobs created per project, followed by the aerospace and hotels and tourism sectors with 186 jobs and 159 jobs created per project, respectively. In terms of capital investments, the food and beverage sector generates \$130 million per project, followed by the hotels and tourism sector and paper, printing, and packaging sector, with \$126 million and \$111 million, respectively.

As shown in Table 8, over the past five years, the largest source of international investment into Maine has been from Canada, with six projects, followed by the Netherlands and Switzerland, with two projects each. In terms of new jobs created, Atol Avion (Finland) generated 186 new jobs and Huttoopia (France) generated 159 new jobs. In terms of capital investments, Huttoopia generated \$126 million and ND Paper (United Kingdom) generated \$111 million.⁴

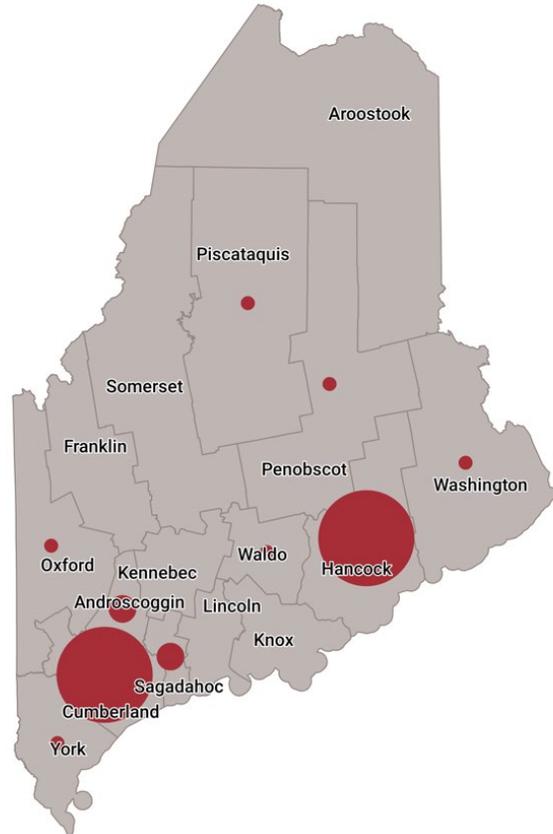
As shown in Figure 1, Cumberland County, specifically Portland, has attracted the largest share of state investment with seven investment projects. The remaining 10 projects are located in other counties across Maine, largely in Androscoggin and Penobscot counties.

⁴ According to FDI Markets, "ND Paper operates as a subsidiary of Hong Kong-based Nine Dragons Paper Holdings, itself a subsidiary of British Virgin Islands-based Best Result Holdings."

To reveal whether Maine has actually attracted investment in the fastest growing industries, we can compare Maine's investment in them with their national growth rates. For instance, Maine has attracted several investment projects in the software and information technology services and financial services sectors, both of which have experienced above-average national growth over the last five years. In addition, utilities and accommodation and food services are two growing industries in which Maine has attracted investment. Of particular note is the 31 percent growth in Maine's accommodation and food services since 2017.

Conversely, Maine's attraction of foreign investment in other nationally fast-growing industries, including transportation and warehousing, professional and business services, and scientific and technical services, has been limited, with few or no projects identified since 2017.

Figure 1. Maine Investment Distribution

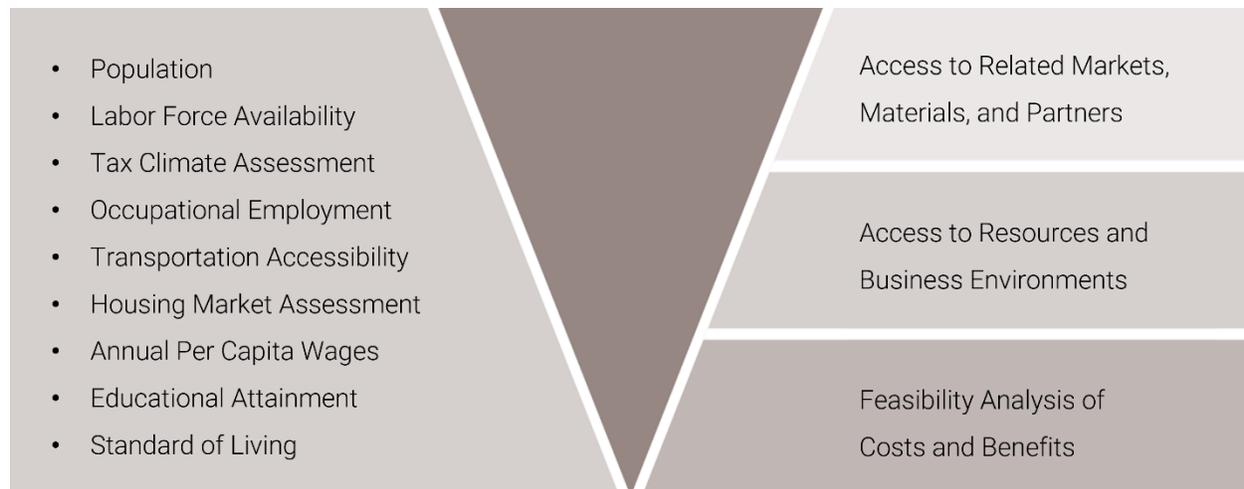


Source: EBP Analysis of FDI Markets, 2017-2021.

2.2. Benchmark 2: Business Environments

EBP conducted a “reverse site selection” analysis to understand how Maine compares with its peers in a competitive context. The Reverse Site Selection Model includes a weighting and ranking analysis using actual corporate location decision factors. Figure 2 shows the factors considered in the model.

Figure 2. Site Selection Factors



2.2.1. Methodology

Companies making expansion or relocation decisions typically undergo a multi-phase process of selecting the location that best fits their needs. These site selection analyses use a data-driven approach to weight and rank locations based on a variety of categories, such as labor markets, access to customer markets, infrastructure, tax environment, and incentives, to name a few. The process continues to narrow down the list of options until a short list is selected to begin field confirmation of the business environment and contextual themes that data alone cannot reveal.

By contrast, a **Reverse Site Selection (RSS) Analysis** assesses the community from a corporate project perspective. By reversing this analysis, a community can identify its own strengths and weaknesses as compared to its competitors, thereby helping it strategize how to capture opportunities by addressing threats and positioning for future growth.

As shown in Table 9, DECD selected three Maine Metropolitan Statistical Areas (MSA) and 22 other MSAs across the U.S. for the RSS analysis. These were also the same locations used in the prior evaluation.

Table 9. Reverse Site Selection Comparison Locations

Major City	State	Major City	State	Major City	State
Bangor	ME	Baton Rouge	LA	Columbus	OH
Lewiston	ME	Boston	MA	Portland	OR
Portland	ME	Ann Arbor	MI	Harrisburg	PA
Pine Bluff	AR	Kansas City	MO	Pittsburgh	PA
Tampa	FL	St. Louis	MO	Richmond	VA
Savannah	GA	Hattiesburg	MS	Madison	WI
Boise	ID	Raleigh	NC	Milwaukee	WI
Indianapolis	IN	Albany	NY		
Louisville	KY	Rochester	NY		

To run the model, EBP compiled business, demographic, tax, climate, and geographic data from a variety of sources to create a database. Table 10 outlines selected data sources in each category. More details about EBP's data sources, weighting, and calculations can be found in Appendix 2.

Table 10. Data Sources

Category	Data Source
Quality of Life	CDC National Center for Health Statistics, NOAA National Centers for Environmental Information
Tax Regime	Municipal Websites and Reports
Wages	ESRI Business Analyst Online
Household Statistics	ESRI Business Analyst Online
Occupation-Specific Employment	ESRI Business Analyst Online
Labor Force Availability	ESRI Business Analyst Online
Industry-Specific Employment	ESRI Business Analyst Online
Educational Attainment	ESRI Business Analyst Online
Population and Demographics	US Census Bureau American Community Survey, ESRI Business Analyst Online
Transportation and Market Access	ESRI ArcGIS, Google Maps

2.2.2. Reverse Site Selection Findings

EBP conducted the location ranking using a standard weighting system that generalizes the importance of the various assessment categories rather than approaching the benchmarking from a particular industry sector or activity. Using this weighting system, we ranked the communities on competitiveness, with 1st being highest and 25th being lowest. Table 11 displays the regional scoring of the measures.

Bangor, Portland, and Lewiston ranked 18, 20, and 25 in the analysis, respectively. These Maine cities rank well in competitive wages, educational attainment, owned housing, and per capita income growth. However, transportation access, population growth, property taxes, quality of life, and labor force availability lag the other MSAs in this analysis. EBP's model emphasizes population growth, median age, and employment as key drivers of labor force availability for businesses looking to locate in the state.

Table 11. Reverse Site Selection Rankings

Category	Hattiesburg, MS	Boise, ID	Raleigh, NC	Tampa, FL	Kansas City, MO	Portland, OR	St. Louis, MO	Louisville, KY	Boston, MA	Columbus, OH	Indianapolis, IN	Milwaukee, WI	Savannah, GA	Pittsburgh, PA	Rochester, NY	Madison, WI	Pine Bluff, AR	Bangor, ME	Ann Arbor, MI	Portland, ME	Baton Rouge, LA	Richmond, VA	Harrisburg, PA	Albany, NY	Lewiston, ME
Quality of Life	22	4	10	18	12	3	2	10	4	4	1	14	21	8	13	18	18	24	16	16	22	8	4	14	24
Tax Regime	1	1	8	8	8	8	1	1	19	1	8	17	19	15	19	8	8	19	1	19	1	17	15	19	19
Wages	1	3	16	9	9	22	16	3	22	9	9	9	3	16	9	22	1	3	22	16	3	16	9	16	3
Household Statistics	8	15	19	8	19	8	5	12	4	24	15	21	8	5	3	22	15	1	22	2	24	12	15	5	12
Occupation-Specific Employment	1	25	8	17	17	22	17	20	8	13	13	23	13	13	5	4	8	2	3	7	11	20	23	12	6
Labor Force Availability	21	11	1	4	2	7	7	9	4	11	11	2	18	4	16	11	23	21	18	18	23	10	16	11	23
Industry-Specific Employment	11	8	19	13	8	3	2	15	10	17	16	6	24	1	3	11	21	25	22	6	3	13	18	23	19
Educational Attainment	16	6	7	18	9	3	17	18	14	21	18	12	14	9	5	1	24	9	7	3	23	25	22	2	12
Population and Demographics	6	2	1	13	9	3	13	15	11	3	3	17	6	20	20	8	23	23	11	23	9	16	18	20	18
Transportation and Market Access	2	6	22	1	20	13	13	11	3	7	13	16	7	18	4	23	5	12	21	10	24	9	17	19	25
Overall Ranking	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Source: EBP Analysis of Data Sources.

2.2.3. Business Environment Analysis

The following table conveys the advantages and disadvantages associated with the three MSAs in Maine against the 22 competitor MSAs in the reverse site selection (RSS) model. Table 12 reports the average ranking of Portland, Bangor, and Lewiston in the Reverse Site Selection model. EBP uses these three Maine MSAs as proxies to discuss the advantages and disadvantages to locating a business in the state of Maine.

Despite Maine's well-educated population and moderate wages for skilled labor, its shrinking population and low housing growth stifle opportunities to attract both workers and businesses. Maine has the highest percentage of its population aged 65 years and older in the U.S.⁵ While this dynamic boosts the state's median household income, education level, and rate of home ownership, an older population also drives up housing prices, as older people offer more accumulated wealth to the housing market than younger workers. Limited housing supply and seasonal tourism exacerbate this trend, making the state less attractive to workers seeking to stay or relocate in Maine, buy homes, raise families, and otherwise contribute to economic growth.

The analysis also revealed key differences between the three Maine locations. Bangor and Portland, for example, rank well among the 25 MSAs in per capita income and rates of home ownership, making both cities more attractive for workers. Lewiston, by comparison, is average among competitor MSAs by these measures.

While Portland and Bangor rank significantly better than Lewiston in transportation and market access, in part because of Lewiston's distance from an airport or train station, wages in Portland are relatively high, making it a less attractive location for potential employers. Moderate wages in Lewiston and Bangor make them cheaper options for locating a business. Portland may still have a better business outlook, however, given a high share of jobs tied to industries that drive economic growth as well as a highly educated population.

⁵ [Population Research Board](#).

Table 12. Maine Business Environment Analysis

Advantages	Disadvantages
Industry Employment Ranking: 17	
	<ul style="list-style-type: none"> Below average share of jobs tied to industries that drive economic growth in Bangor and Lewiston, such as management, professional services, real estate, and retail.
Occupation Employment Ranking: 5	
<ul style="list-style-type: none"> Above average share of occupations in business, finance, and administration; occupations in health. 	
Educational Attainment Ranking: 8	
<ul style="list-style-type: none"> Above average share of population with education beyond high school. 	
Household Statistics Ranking: 5	
<ul style="list-style-type: none"> Higher share of owned rather than rented housing in Portland and Bangor. Higher than average per capita income growth in Bangor and Lewiston, making them a more attractive option for workers. 	<ul style="list-style-type: none"> Lower than average housing growth associated with low supply and expensive rents for potential workers moving to Maine.
Labor Force Availability Ranking: 21	
	<ul style="list-style-type: none"> Small employed labor force. High unemployment in Lewiston and Bangor.

Transportation and Market Access Ranking: 16	
<ul style="list-style-type: none"> • Access to major airports from Portland and Bangor. • Access to large consumer market within 1 hour drive of Portland and Lewiston. 	<ul style="list-style-type: none"> • Moderate growth in access to large consumer and labor markets within an hour drive, suggesting slower expansion of regional market. • Low access to airports and train stations from Lewiston, making it difficult for employees and executives to travel.
Quality of Life Ranking: 19	
	<ul style="list-style-type: none"> • Low average temperatures and high precipitation makes Maine less desirable for workers.
Population Ranking: 21	
	<ul style="list-style-type: none"> • Small relative population. • Low population growth in Bangor, moderate growth in Portland and Lewiston. • High median population age.
Tax Regime Ranking: 19	
	<ul style="list-style-type: none"> • Higher than average commercial property tax rate.
Wages Ranking: 7	
<ul style="list-style-type: none"> • Competitive wages in Lewiston and Bangor, moderate wages in Portland. 	

Source: EBP Analysis of Data Sources.

2.3. Benchmark 3: Incentive Awards

EBP developed an Incentive Award Productivity Benchmark using data from the Wavteq IncentivesFlow Database. This database registers incentives extended to corporations to establish or expand operations in the U.S.

Current Benchmarking Limitations

In this Interim Report, EBP replicated Benchmark 3 and Benchmark 4 in the 2018 evaluation. The results reported in the following sections are therefore meant for comparative purposes.

Although IncentivesFlow is one of the most comprehensive sources for incentive data, it does not provide complete information for Maine. According to Wavteq, this is primarily due to limited transparency around incentives in Maine, which is itself a finding of this evaluation. Still, IncentivesFlow provides enough information to position incentive performance in Maine relative to the United States. In this context, IncentivesFlow should be interpreted as a benchmarking tool rather than a reporting tool.

In the comprehensive evaluation, we intend to explore other incentive data sources and also collect data directly from comparative states, including – where available through GASB 77 filings - information on the effectiveness of similar programs.

2.3.1. Absolute State Incentive Productivity

As noted in Table 13, the six New England states awarded 1,425 (7.35%) of the 19,400 incentives on record for the U.S. from 2017 through 2021. These 1,425 awards had a total budget of \$1.45 billion. Incentives awarded in Maine, however, represent just a small fraction of the incentives awarded in New England, since only 17 (1.19%) of the 1,425 incentives were awarded to corporations in Maine. The state's incentives totaled \$74.92 million.

Table 13. National Incentives Distribution

State	Share	State	Share	State	Share
New York	10.3%	Utah	1.8%	Montana	0.5%
Ohio	8.1%	Arizona	1.8%	Vermont	0.5%
Michigan	7.7%	Colorado	1.5%	Nebraska	0.3%
Indiana	7.5%	Wisconsin	1.4%	Delaware	0.3%
Pennsylvania	5.2%	Illinois	1.4%	Rhode Island	0.3%
Kentucky	5.1%	New Mexico	1.4%	Idaho	0.3%
California	5.0%	Louisiana	1.3%	Washington	0.2%
Massachusetts	4.6%	Minnesota	1.2%	Oklahoma	0.2%
North Carolina	3.9%	Kansas	1.1%	Arkansas	0.2%
Virginia	3.4%	South Carolina	1.0%	West Virginia	0.2%
Tennessee	2.9%	Nevada	0.9%	Oregon	0.1%
Missouri	2.8%	New Jersey	0.9%	Maine	0.1%
Florida	2.8%	South Dakota	0.8%	Wyoming	0.1%
Iowa	2.5%	Mississippi	0.8%	Alaska	0.1%
Maryland	2.1%	Alabama	0.7%	North Dakota	0.1%
Texas	2.1%	Georgia	0.7%	New Hampshire	0.1%
Connecticut	1.9%			Hawaii	0.0%

Source: EBP Analysis of Wavteq IncentivesFlow, 2017-2021.

In terms of economic benefits, the 1,425 incentivized investment projects in New England have created about 64,960 new jobs, with about 910 new jobs in Maine. This job creation has been accompanied by capital investment worth \$11.46 billion in New England, with about \$203 million in Maine. The lowest number and value of incentives in New England were awarded by Maine, New Hampshire, and Rhode Island. These three states share similar economic performance, with their incentive budgets ranging from 0.07% to 0.44% of the collective budget for incentives nationally.

2.3.2. Relative State Investment Performance

Comparing the number of awarded incentives against their value reveals the states that spent disproportionately more or less on their incentive budgets. From 2017 to 2021, Maine spent \$74.92 million on 17 incentive awards (\$4.41 million per project), which would place Maine slightly below par for the U.S. On average, any given state spent \$995.78 million on 380 incentive awards (\$2.62 million per project), suggesting that Maine spent disproportionately more on incentives when compared to the rest of the U.S.

Table 14. Awarded Incentives Distribution in New England

State	Share
Massachusetts	61.9%
Connecticut	26.2%
Vermont	6.5%
Rhode Island	3.6%
Maine	1.2%
New Hampshire	0.8%

Source: EBP Analysis of Wavteq IncentivesFlow, 2017-2021.

In terms of economic benefits, the job creation and capital investment associated with awarded incentives can reveal the best and worst performing states. Maine ranks with Montana, New Hampshire, North Dakota, Washington, and Wyoming for both attracting job creation and capital investment. However, because the incentive budgets of these states are relatively small compared to larger states, it is important to assess their incentive-related economic performance in a manner that “normalizes” for these smaller budgets. The following indicators achieve this by allowing one to compare incentive impacts across states in a more normalized and objective manner:

- **Incentive Per Job Created:** The result of dividing the total value of awarded incentives by the total number of jobs created per state. This indicator provides a value of what states “paid” for each job created by incentive.
- **Return on Investment:** The result of dividing the total volume of capital investment by the total value of awarded incentives. This indicator provides a value for the return on one dollar of incentive. For instance, a return on investment of three dollars means that for every dollar spent on an incentive, a capital investment worth three times the incentive investment was generated.

Applying these indicators shows that Maine has a relatively high incentive cost per job created (\$82,239) and a relatively low return on investment (\$2.71). According to these indicators, Maine performs similarly to New Jersey, although incentivized investment projects have brought greater job creation and capital investment to that state, in terms of absolute dollars.

Figure 3. Average Incentive Productivity in New England



Source: EBP Analysis of Wavteq IncentivesFlow, 2017-2021.

2.3.2. Average State Incentive Productivity

From 2017 to 2021, an incentive granted to a project resulted in an average of 146 new jobs and capital investments of \$31.17 million, at the national level. For Maine individually, an incentive granted to a project resulted in an average of 54 new jobs and capital investments of \$11.94 million, with both metrics below the national averages.

In terms of incentive productivity in New England, Maine generally outperforms its peers in job creation and capital investment per incentivized investment project. However, per incentivized project, Rhode Island gained more capital investment than Maine and New Hampshire experienced more job creation per incentivized project.

Within New England, Maine's incentive productivity is similar to that in New Hampshire and Vermont. Maine outperformed New Hampshire and Vermont in terms of capital investment but underperformed in terms of job creation. It should also be noted that Maine also spent more on its incentive budget than New Hampshire and Vermont, combined.

2.3.3. Maine State Incentive Trends

Six of the 17 incentive deals in Maine occurred in 2021, with the number of incentive deals steadily increasing since 2017. The total value of the 17 incentive deals peaked in 2018 with an investment in the aerospace, defense, and marine sector of \$60 million, and averaged around \$2.06 million in the remaining years. The total value of the 14 incentive deals since 2018 has also steadily increased, doubling from \$1.32 million in 2019 to \$3.99 million in 2021.

Maine specifically targeted the service industry, with four incentive deals totaling \$1.63 million. Maine also provided three incentive deals in the consumer goods industry, also with a total value of \$1.63 million three incentive deals in the leisure and tourism industry, with a total value of \$4.04 million.

It should be noted that three incentives awarded to investment projects in the aerospace, defense, and marine industries, mainly comprised of a significant investment in 2018, totaled \$61.87 million (82.58%). These three incentives have translated into disproportionately large economic benefits more broadly, representing over \$200 million in capital investment in Maine.

Table 15. Maine Incentive Sectors

Sector	Share
Services	23.5%
Defense	17.6%
Consumer Goods	17.6%
Leisure and Tourism	17.6%
Basic Materials	5.9%
Electronics	5.9%
Food and Drink	5.9%
Life Sciences	5.9%

Source: EBP Analysis of Wavteq IncentivesFlow, 2017-2021.

Comparing the strongest growing industries in the country with the allocation of incentives in Maine also indicates potential opportunities for awarding and targeting incentives. Maine has awarded most of its incentives to the service industry, which has experienced an annual revenue growth rate of 3.6% in Maine, above the national growth rate of 2.9%.

Maine awarded 15 incentives to local corporations, with only two incentives awarded to corporations based outside of the state (one each from Massachusetts and Virginia). The largest incentive package, at \$60 million, was awarded to a General Dynamics in Virginia, generating \$200 million of capital investment in Maine. This can be attributed to the capital-intensive nature of the incentivized investment project, which was one of the aforementioned projects in the aerospace, defense, and marine industry.

2.4. Benchmark 4: Incentive Productivity

States vary considerably regarding the public disclosure of information on the number, value, and economic performance of their incentive programs. To address this obstacle to evaluating incentive performance, we developed the Incentive Productivity Index.

The objective of the Incentive Productivity Index is multi-fold. The Index largely contributes to greater transparency on incentive programs, as it provides an assessment of incentive productivity. Full disclosure of incentive information among states can also mitigate the “race to the bottom,” in which states fiercely compete against each other on the number of incentives rather than the value of incentives and ultimately, multiplier effects for their respective communities.

The Index also functions as an instrument for legislatures and authorities that wish to evaluate the performance of their incentive programs against those of other states. It thus enables one to make more informed decisions regarding the design and evaluation of their incentive programs.

2.4.1. Methodology

To produce the Incentive Productivity Index, EBP analyzed IncentivesFlow data at the state level. Constructing the Index consists of four steps.

Step 1: Calculate values for each indicator.

For each state, EBP collected and calculated the values for three indicators:

- **Indicator 1:** Number of Awarded Incentives
- **Indicator 2:** Value of Capital Investments
- **Indicator 3:** Number of Newly Created Jobs

It should be noted that this evaluation method handicaps smaller states that cannot award as many incentives as larger states. Nonetheless, these indicators provide insights into the returns that incentive deals can provide to states.

Step 2: Convert each indicator value into state rankings.

We now convert each indicator into a national ranking, where the state with the highest value ranks first (1) and the state with the lowest value ranks last (50). The ranking of Indicator 1 (Number of Awarded Incentives) forms the baseline of the Index, which is then measured and verified against the rankings of the two other indicators.

Step 3: Calculate total scores.

We then calculate the three rankings associated with the three indicators to determine final state-by-state scores.

Step 4: Produce the Incentive Productivity Index.

The final step includes ranking the final scores, which results in the Incentive Productivity Index. As shown in Table 16, states are ranked by averaging the ranks of the three indicators.

Table 16. Incentive Productivity Index

Ranking	State	Ranking	State	Ranking	State
1	New York	18	Wisconsin	34	Arkansas
2	Indiana	19	Colorado	35	Idaho
3	Ohio	20	Georgia	36	Rhode Island
4	California	21	South Carolina	37	Nebraska
5	North Carolina	22	Maryland	38	Delaware
6	Texas	23	Iowa	39	Oklahoma
7	Kentucky	24	Illinois	40	Vermont
8	Michigan	25	New Mexico	41	Montana
9	Tennessee	26	Alabama	42	Oregon
10	Virginia	27	Minnesota	43	Washington
11	Florida	28	Nevada	44	North Dakota
12	Pennsylvania	29	Connecticut	45	West Virginia
13	Arizona	30	Mississippi	46	Maine
14	Missouri	31	Kansas	47	Wyoming
15	Massachusetts	32	New Jersey	48	Alaska
16	Utah	33	South Dakota	49	New Hampshire
17	Louisiana			50	Hawaii

Source: EBP Analysis of Wavteq IncentivesFlow, 2017-2021.

2.4.2. High Performers

On average, New York, Indiana, and Ohio scored the highest on the Index as they have generally awarded the largest number of incentives, created the largest number of new jobs, and generated the largest amount of capital investments.

The second tier of states rank just below Ohio. These are states that either have made progress on evaluating their incentive programs but already have relatively high levels of transparency (e.g., North Carolina, Kentucky, Tennessee, Virginia) or states that are leading in incentives evaluation but are in the process of improving the transparency of their incentive programs and evaluations (e.g., Florida, Pennsylvania, Arizona, Massachusetts, Louisiana). These states represent likely future competitors for New York, Indiana, and Ohio.

2.4.3. Low Performers

Eight states were found to be low-performing on one or both indices and moderately on the other index or poorly on both indices. The latter includes Washington, North Dakota, West Virginia, Maine, Wyoming, Alaska, New Hampshire, and Hawaii. These are states with relatively small economies that often do not heavily rely on incentives as instruments to encourage economic development, and also do not have a system in place for evaluating the already limited use of these programs.

2.4.4. Improving States

States that particularly improved their rating over the last five years include New Mexico (+18), Arizona (+15), Kansas (+12), Oklahoma (+12), Georgia (+10), and Minnesota (+10). New Mexico's strong improvement can be partly attributed to the number of incentives administered as reported by IncentivesFlow, as the state rose in the ranks from 37 in 2017 to 19 in 2021. The same is true for Arizona, for which IncentivesFlow registered 74 incentives (9th) in 2021 vis-à-vis 55 (24th) in 2017. These changes illustrate how publicly disclosing more information on incentives results in higher ranking on the Incentive Productivity Index.

At the other end of the spectrum, New Jersey (-15), Connecticut (-14), Louisiana (-11), Colorado (-11), and West Virginia (-9) lost ground. New Jersey's steady decline can be partly attributed to a decrease in the number of incentives administered, declining in rankings from 18 in 2017 to 33 in 2021. The same is true for Connecticut, for which IncentivesFlow registered only 20 incentives (20th) in 2021 vis-à-vis 155 (34th) in 2017.

2.4.5. Maine Ranking

Although Maine ranked 46th on average, the state has gained ground over the last five years. In 2017, Maine ranked 48th with only one incentive deal recorded. By contrast, it moved to 44th in 2021 with six incentive deals. Although these six deals did not bring capital investment into the state, they did bring 599 new jobs, placing Maine 43rd nationally for new jobs created. Maine is consistently trailed by or grouped with New Hampshire, Alaska, Nebraska, and Wyoming – which often have no incentives recorded in IncentivesFlow. Overall, the evaluation shows Maine performs similarly to New Hampshire and Vermont. Outside of New England, Maine also ranks similarly to Oregon, despite Oregon's larger geographic size and contribution to the national gross domestic product.

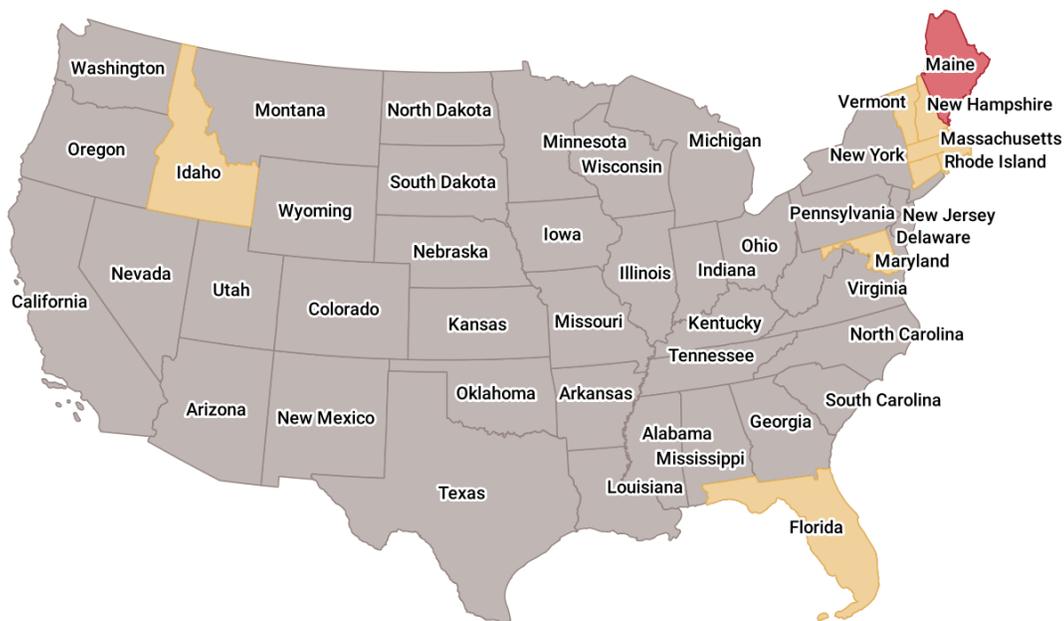
2.5. Benchmark 5: Competitor States

The Pine Tree Development Zone (PTDZ) Program and Employment Tax Increment Financing (ETIF) Program are both focused on supporting job creation in Maine through financial incentives such as tax credits and income reimbursements.

EBP benchmarked Maine's incentive programs against nine states: the five other New England states (Connecticut, Massachusetts, New Hampshire, Rhode Island, and Vermont), as well as Florida, Idaho, Maryland, and New Jersey. EBP selected these states for benchmarking based on their similarities in terms of location, share of gross domestic product, and incentive distributions, as well as with input from DECD.

Regarding incentive distributions, most of these nine states have at least one incentive program similar to the PTDZ and ETIF programs. EBP considered programs similar if their economic development goals focus on increasing employment, and if they provide businesses with an incentive or reward. In the forthcoming comprehensive evaluation, EBP will also assess the effectiveness of similar programs in competitor states.

Figure 4. Selected Comparator States



Connecticut:

Jobs Grant Program: Businesses may be able to earn a tax rebate equal to 25-50% of the withholding taxes from net new employees depending on their location. Eligible firms must create at least 25 new full-time jobs with a minimum wage of \$37,500. The tax rebate is earned in years 3 through 7.

Accumulated R&D Tax Credit Expansion Program: Businesses that create at least 50 new jobs in state or spend \$5 million on capital can be eligible to offset taxes. Eligible entities must have over \$500,000 of Connecticut R&D tax credits without the ability to use them in the next two years.

Massachusetts:

Economic Development Incentive Program: Companies committed to significant investment and/or creating and retaining jobs are potentially eligible for state and/or local property tax incentives. The incentive award depends on the details of the project and are approved by the MA Economic Assistance Coordinating Council (EACC). The EACC has access to refundable tax credits, local tax incentives, tax increment financing, and other special tax assessments.

New Hampshire:

Economic Revitalization Tax Credit: Taxpayers with certified projects that are located in a designated economic revitalization zone and created new jobs in the state may access a tax credit up to \$40,000 in a calendar year. The credit amount is determined by a weighted sum of the salaries of each created full-time job and potentially the cost incurred for facility-related construction and equipment purchases.

Coos County Job Tax Credit: This tax credit is available to businesses in Coos County that have hired new, full-time, year-round employees with actual wages equal or exceeding 150% of the current state minimum wage. The Department of Resources and Economic Development will award credit equal to \$750 or \$1,000 for each qualified employee hired.

Rhode Island:

Jobs Growth Act: Eligible businesses can offer employees tax exemptions on half of their performance-based income and instead pay 5% tax on the income. To qualify, a business must hire at least 100 new employees in the state and add at least \$10 million to its state payroll.

Qualified Jobs Incentive Tax Credit: Businesses that expand their workforce or relocate jobs from out of state can qualify for annual redeemable tax credits for up to 10 years. Depending on wage level and other factors, credits can be up to \$7,500 per job per year. The minimum number of jobs created to qualify varies by industry and company size.

New Employment Tax Incentive: Businesses that hire Rhode Island residents who have been unemployed can be eligible for a deduction or modification of 40% of the employee's first year wages up to \$2,400 per employee.

Vermont:

Employment Growth Incentive: Cash payments are provided over time to induce job and payroll growth beyond what may otherwise occur. Businesses must create qualifying full-time jobs either alone or as part of a larger project. Enrolled businesses must meet annual performance requirements to continue receiving incentive installments.

Florida:

Qualified Target Industry Tax Refund: This incentive seeks to support job creation in target industries by supporting tax refunds of \$3,000-6,000 per net new full-time job. Businesses must create at least 10 new full-time jobs or increase employment by at least 10%, depending on project specifics. Additional tax refunds can be awarded per job based on wage level, industry, location, and external financial support.

Idaho:

Tax Reimbursement Incentive: This incentive offers businesses up to a 30% tax credit on income, payroll, and sales taxes for up to 15 years. Eligible entities must create 20-50 new jobs based on location with meaningful community and economic contribution.

Idaho Business Advantage: Businesses that invest a minimum of \$500,000 in new facilities and create at least 10 new jobs can receive multiple tax incentives including a 3.75% credit on income tax, a 2.5% credit on real property, a new jobs tax credit of \$1,500-3,000 per new job, and a sales and use tax rebate of 25%.

Maryland:

Job Creation Tax Credit: Qualified businesses who create 10-60 new full-time jobs (minimum number of created jobs depends on location), can receive an income tax credit equal to \$3,000-6,000 per new job. The credit increases if positions are filled by qualified veteran employees.

More Jobs for Marylanders Tax Credit: Qualified manufacturers that create 10-20 new positions in an Opportunity Zone may receive a refundable tax credit against State income tax equal to 4.75% of wages for each qualified position. The credit may be available over a 5- or 10-year benefit period depending on project location.

One Maryland Tax Credit: Businesses making capital investments and creating 10+ jobs are eligible for income tax credits. The amount of credit is based on eligible project costs and operates on a sliding scale based on the number of jobs created.

New Jersey:

Emerge Program: Businesses that create at least 35 full-time jobs in an eligible incentive location can receive a tax credit for \$500-8,000 per job dependent on project and company specifics. The credits can be used to offset corporate business or insurance premium tax or transferred or surrendered for 85+% of their value.

3. Pine Tree Development Zones (PTDZ)

3.1. Intent and Objectives

The Maine State Legislature created the Pine Tree Development Zone Program (PTDZ) in 2003, as codified in Maine Revised Statute [Title 30-A §5250-J](#). PTDZ aims to encourage development in economically distressed areas of the state to (1) provide new employment opportunities; (2) improve existing employment opportunities; (3) improve and broaden the tax base; and (4) improve the general economy of the state (PL 2003, c. 688, Pt. D, §2). DECD administers the overall program, while Maine Revenue Services, Public Utilities Commission, and Efficiency Maine Trust administer individual PTDZ benefits.

PTDZ allows DECD to designate certain areas of the state as Development Zones. DECD then certifies businesses located in these zones to receive PTDZ benefits. Eligible businesses fall under two tiers based on their physical locations.

The requirements for designation as a "Tier 1 Location" are defined by Title 30-A, section 5250-J, subsection 3-A. Locations with Tier 1 designation include: 1) Municipalities located in Maine counties other than Cumberland or York County; 2) Municipalities in Cumberland or York County with an unemployment rate at least 15% higher than its labor market unemployment rate; 3) Municipalities granted PTDZ designation prior to January 1, 2009; 4) property within a military redevelopment zone (prior to January 1, 2019); and 5) the Towns of Sanford and Berwick. Municipalities in Cumberland or York Counties not classified as a Tier 1 location were classified as Tier 2 Locations. Certification of businesses in Tier 2 locations was discontinued as of December 31, 2013.

Tier 1 businesses can receive PTDZ benefits for 10 years, while those in Tier 2 can receive benefits for five years. DECD stopped certifying Tier 2 businesses in 2013 and will stop certifying Tier 1 businesses at the end of 2023. All benefits are scheduled to sunset on December 31, 2033—10 years after the last round of Tier 1 certifications (PL 2021, c. 398, Pt. III, §1).

Table 17 outlines PTDZ benefits for certified businesses aimed at promoting employment and investment in property.

Table 17. Benefits Available to PTDZ-Certified Businesses

PTDZ Benefit	Description
Expanded ETIF Reimbursement	PTDZ-certified businesses automatically qualify for 80% reimbursement of qualified employee income tax under the ETIF program.
Sales Tax Exemption and Reimbursement	Businesses can apply for 100% personal property exemption and 100% real property reimbursement.
PTDZ-Specific Tax Credits	A tax credit against income, franchise, and insurance premiums taxes equal to 100% of the tax liability attributable to new qualified business activity in the first five years and 50% for the next five years.
Discounted Utility Rates	Companies receive a per-kilowatt-hour credit against their electricity costs that phases out over a four-year period.

To qualify, a business must create at least one new, quality job in certain business sectors listed in the box to the right, or move existing jobs in those sectors to Maine within two years of application. Currently, businesses in all of Maine’s counties except for Cumberland and York are eligible for PTDZ benefits. Only businesses in select municipalities of Cumberland and York counties are eligible.⁶

To qualify under PTDZ, jobs must pay above the average income in the county where they are located and provide access to a group health care plan and retirement benefits. To count as “new,” jobs must raise a business’ employment above its “base level,” or the total employment during the calendar year before the PTDZ application (PL 2009, c. 461, §26).

PTDZ-Eligible Sectors

- Biotechnology
- Aquaculture and Marine Technology
- Composite Materials Technology
- Environmental Technology
- Advanced Technologies for Forestry and Agriculture
- Manufacturing and Precision Manufacturing
- Information Technology
- Financial Services

3.2. Alignment with Economic Development Strategy

PTDZ aligns with “Strategy C: Promote Innovation” of the Maine Economic Development Strategy. Tax, energy, and employment incentives encourage private businesses to invest in the resources and workforce they need to develop new technologies, generate well-paying jobs, and expand the

⁶ [Maine Office of Business Development.](#)

state's tax base. Furthermore, Strategy C's four thematic areas of Food/Marine, Forest Products, Making/Manufacturing, and Technical Services align with PTDZ eligible sectors.

3.3. Return on Investment

Reproducing the 2018 study's cost-benefit model highlights serious data limitations; the replicated cost-model found that the PTDZ program to have an internal rate of return (IRR) of 1923.08%, implying that for every dollar the state of Maine invests in the incentive, it will see \$19.23 in additional tax revenue. This imputed IRR is extremely high and may be confounded by artifacts of incomplete data used in the model (ie. The participating companies survey and annual report data). This rate was calculated using a sensitivity rate of 20%, implying that 20% of all recipients would have invested or expanded regardless of the PTDZ incentives. The results of this cost-benefit analysis for the PTDZ incentive program are shown in Table 18.

An IRR rate of 1923.08% is unrealistically high: in 2018, the IRR of the PTDZ incentive was found to be 297.2% with a sensitivity rate of 0%. As discussed previously, the cost-model likely does not capture the true IRR of the program due to the poor data availability. The model relies on data from the company survey, but with only 50 companies mentioning PTDZ, and only 19 in the "only" PTDZ subset, the sample is small, and likely unrepresentative of the average incentive participant. The survey represents <35% of the 142 companies enrolled in the program in any given year, on average, as shown by the annual reports. This small sample can allow outliers to skew the averages to an unrepresentative extent. As a result, for expense and revenue information, data points that are more than two standard deviations above or below the average were omitted from average calculations.

The model also relies on PTDZ annual report data for employment data, including numbers on total, retained, qualified, and additional employees for each enrolled company. This approach may attribute jobs that resulted from various causes—including other incentives—solely to PTDZ. This double-counting may cause the current cost model to overestimate the IRR value for the PTDZ program, and should be considered when redesigning the model for the comprehensive report.

The current cost model is adapted from the 2018 iteration. In addition to the low survey response rates, the model may also be failing to capture the true IRR of the incentive by not accounting for new confounding variables or extenuating circumstances resulting from the Covid-19 pandemic. As discussed in the methodology section, we recommend updating the cost model and focusing more on the program's broad economic impact rather than pure return-on-investment. The model can also be updated with alternative parameters for sensitivity, discount, and wage inflation rates.

Table 18. Cost-Benefit Overview for PTDZ Program

Benefits for State of Maine	With Incentive	Without Incentive
Corporate Income Taxes for the State of Maine	\$ 368,102	\$ 492,276
Sales Tax Revenues	\$ 36,330,600	\$ 560,923
Personal Income Taxes for the State of Maine	\$ 681,964,354	\$ 27,806,058
Resident Dividends Tax Revenues	\$ 2,844,781	\$ 210,444
Payroll Taxes for the State of Maine	\$ 45,289,811	\$ 8,814,989
Direct Tax Revenues	\$ 766,797,648	\$ 37,884,690
Program Administration Costs	\$ 358,257	\$ -
Direct Revenues after Incentive Costs	\$ 766,439,391	\$ 37,884,690
IRR Incentive Program: Direct Benefits	1923.08%	

Source: EBP Analysis.

3.4. Interview Summary

EBP conducted business interviews in June 2022 with companies that benefited from PTDZ. Interviewed companies came from a range of industries. The semi-structured conversations focused specifically on company successes and challenges, benefits of program participation, experience working with DECD, the Maine business climate, and future plans.

Interviews with PTDZ recipients yielded the following findings:

- Two companies reported PTDZ was a primary factor in deciding to locate in Maine.
- Interviewees generally expressed that PTDZ has helped them sustain business in difficult times and avoid closure. Likewise, PTDZ has helped companies invest in expansion efforts they may not have pursued otherwise.
- Companies reported that PTDZ offsets some energy and materials costs of operating in Maine, helping them stay competitive in capital-intensive industries. However, many competitor states still have cost advantages.
- Several interviewees noted they do not consider PTDZ in their companies' decision-making processes. The value of tax incentives becomes part of their respective bottom lines.
- One company expressed concern over cybersecurity risks and sharing confidential R&D information that DECD required on the program application.
- An interviewee noted the structure of the program i.e., uncertainty about what incentives will be available in the future and in which counties, makes it difficult to incorporate into long-term planning.

4. Employment Tax Increment Financing (ETIF)

4.1. Intent and Objectives

The Maine State Legislature established the Employment Tax Increment Financing (ETIF) benefit in 2003, as codified in the Maine Revised Statute [Title 36 §6751- §6761](#). ETIF's legislative intent is to incentivize businesses to create new employment opportunities and improve and broaden the state tax base (PL 1995, c. 669, §5). As mentioned previously, businesses can automatically participate in ETIF if they all meet PTDZ's requirements. DECD administers both programs with assistance from Maine Revenue Services.

ETIF aims to incentivize businesses in Maine to hire net new employees by refunding 30-80% of state income tax withholding the business pays for up to ten years. Eligible recipients of ETIF must (1) hire at least five new full-time employees over a two-year period; and (2) must be non-retail, non-public utility, for-profit businesses (PL 1995, c. 669, §5).

Qualifying jobs include those that pay above the average income in the county where they are located and provide access to both a group health care plan and retirement benefits (PL 2015, c. 368, §5). The statute includes special "qualified employee" provisions for call center jobs in Aroostook County and Washington County. DECD also requires that businesses submit a ["but for" letter](#) affirming they would not have created the qualified jobs without the ETIF benefit.

ETIF reimbursement payments equal 30-80% of qualifying employees' "benefit base" during years 1-5 that a business participates in the program. The statute defines "benefit base" as total gross wages paid to qualified employees during a calendar year, multiplied by 4.5% (PL 2021, c. 602, §1). This is a recent change that was not in effect during the time period covered for this evaluation.

Businesses are eligible for varying levels of reimbursement depending on the unemployment rate at the time of the ETIF application in the [labor market area](#) to which qualifying jobs belong (PL 2021, c. 602, §5). DECD reevaluates the reimbursement rate in years 6-10 based on unemployment rates at the beginning of the 6th year. Businesses that receive ETIF through PTDZ are eligible for even higher income tax reimbursement for ten years.

Table 19 details the qualifying criteria for various levels of ETIF benefits. The intent of this reimbursement structure is to incentivize job creation in labor market areas with high unemployment.

Table 19. Qualifying Criteria for ETIF Benefits

Criteria	Income Tax Reimbursement Rate
Labor Market Unemployment \leq State Unemployment	30%
Labor Market Unemployment \geq State Unemployment	50%
Labor Market Unemployment $>$ 150% of State Unemployment	75%
Qualified Pine Tree Development Zone Employees (Title 30-A, Section 5250-I, Sub-Section 18)	80%

4.2. Alignment with Economic Development Strategy

ETIF aligns with Maine’s goal to add 75,000 people to the state workforce by 2030, aiming to attract new talent by adding quality jobs. The requirement that companies pay new employees above the county average income aligns with Maine’s goal to grow the average annual wage by more than 10%. While ETIF supports the State’s overall workforce and wage growth goals, the program does not align with a specific strategy under Maine’s 10-year plan.

4.3. Return on Investment

The results of using the 2018 study cost-benefit model to assess the IRR of ETIF are unrealistic, and reveal serious limitations in both the current methods for data collection and compliance with those methods. The model found that the ETIF program has an internal rate of return (IRR) of 950.07%, implying that for every dollar the state of Maine invests in the incentive, it will see \$9.50 in additional tax revenue. This rate is improbably high and should be considered a signal of the quality and completeness of the input data. The IRR was calculated using a sensitivity rate of 20%, implying that 20% of all recipients would have invested or expanded regardless of the ETIF incentives. The results of the cost-benefit analysis for the ETIF incentive program are shown in Table 20.

The ETIF incentive seems to produce significant increases in sales tax, personal income tax, and employer payroll tax revenues. The sales tax increase is driven by increased sales in the State of Maine and therefore paid for by consumers.

An IRR rate of 950.07% is unrealistically high, and therefore, the cost-model may not capture the true IRR of the program. The model relies on data from the company survey, but with only 36 companies mentioning ETIF, and only 13 in the “only” ETIF subset, the sample is small, and likely unrepresentative of the average incentive participant. The survey represents <27% of the 136 companies enrolled in the program in any given year on average as shown by the annual reports. This small sample also resulted in no data for key inputs such as additional exports, payroll taxes, and capital expenditures.

The model also relies on ETIF annual report data for figures on total, retained, qualified, and additional employees for each enrolled company. Using these figures may attribute jobs solely to the ETIF program, where they may have resulted from various causes including other incentives such as PTDZ. This double-counting may cause the current cost model to overestimate the ETIF IRR value, and should be considered when redesigning the model for the final report.

The current cost-benefit model is also modeled after the 2018 iteration. However, the tool may not currently be capturing the true IRR of the incentive by not accounting for new confounding variables or extenuating circumstances resulting from the Covid-19 pandemic, for example.

The model can also be updated with alternative parameters for sensitivity, discount, and wage inflation rates.

Table 20. Cost-Benefit Overview for ETIF Program

Benefits for State of Maine	With Incentive	Without Incentive
Corporate Income Taxes for the State of Maine	\$ 471,575	\$ 966,724
Sales Tax Revenues	\$ 62,120,893	\$ 1,424,178
Personal Income Taxes for the State of Maine	\$ 804,128,880	\$ 65,009,080
Resident Dividends Tax Revenues	\$ 4,290,174	\$ 253,778
Payroll Taxes for the State of Maine	\$ 52,634,125	\$ 20,271,877
Direct Tax Revenues	\$ 923,645,646	\$ 87,925,636
Program Administration Costs	\$ 369,002	\$ -
Direct Revenues after Incentive Costs	\$ 923,276,645	\$ 87,925,636
IRR Incentive Program: Direct Benefits	950.07%	

Source: EBP Analysis.

4.4. Interview Summary

EBP also conducted business interviews with companies that benefited from ETIF. Interviewed companies came from a range of industries, and the conversations focused on the following topics: company successes and challenges, benefits of program participation, experience working with DECD, the Maine business climate, and future plans.

Interviews with ETIF recipients yielded the following findings:

- Labor-intensive sectors such as software development benefit the most from ETIF, one such employer located in Maine specifically to receive this and PTDZ benefit.

- Companies stated that hiring in Maine can be difficult even with generous salary and benefits packages, ETIF does not solve labor and housing availability challenges.
- Most businesses find ETIF application and reporting manageable and had positive experiences working with state employees to comply with requirements in recent years.
- Several companies noted DECD stepped in to help them navigate bureaucratic barriers to accessing ETIF benefits.

5. Preliminary Recommendations

Our evaluation of PTDZ and ETIF revealed several opportunities for program and process improvements. PTDZ is set to expire in 2033; recommendations related to it are therefore meant to inform the design of future incentive programs or improve PTDZ if the program is extended. We also offer general recommendations related to incentive programs and DECD's process for working with companies in Maine. These recommendations are preliminary, since the next phase of this evaluation will likely offer new insights that are important to consider.

Preliminary recommendations include the following:

- **Enforce company information requests.** Low survey response rates and incomplete responses negatively impacted our evaluation of program performance. As sections 3 and 4 of this report discuss, low response rates meant that the survey results are likely skewed toward companies that may want additional support from DECD, and therefore not fully representative of the entire population of companies that have benefited from PTDZ and ETIF. Difficulties gathering complete information from participating companies has been and continues to be a critical weakness in the evaluation process, mentioned in every report since at least 2014. We recommend that DECD require companies to fulfill information requests as part of the initial application process and as a condition of receiving support. This could include more detailed annual reporting that requests the exact information necessary for regular evaluations. It could also include mandatory surveys that occur annually or bi-annually. This must be weighed against risks to financial confidentiality and data security that some companies expressed in interviews and open-ended survey responses.
- **Consider making programs perpetual.** In the context of PTDZ and its scheduled sunset date, at least one interviewee noted that it is difficult to do long-term business planning when there is uncertainty around which programs will exist in the future and for how long. This has a broader impact on competitiveness: Because programs like PTDZ influence investment decisions, companies must factor in the risk that a program will not be available to them. This could be a risk they can avoid in other states. We recommend that DECD work with the Legislature to keep programs in operating in perpetuity or at least for longer periods so that companies have more certainty about resources available to them.
- **More closely align PTDZ & ETIF with the Maine Economic Development Strategy.** PTDZ and ETIF generally support the objectives of the Economic Development Strategy by (a) promoting job creation and wage growth in economically distressed communities, and (b) in the case of PTDZ, focusing on specific industry sectors involved in innovation. Related to the previous recommendation, the programs could support Strategy F, Maintain Stable Business Environment, by becoming permanent offerings for businesses. This would help ensure that businesses considering relocating to or expanding in Maine are not deterred by uncertainty around the support they will receive from the State.

- **Focus efforts on addressing root causes of business challenges.** While most interviewees appreciated the financial benefits of incentive programs, they also face other challenges that these programs may be unable to address. These include workforce and housing availability as well as costs of transportation, energy, and other inputs to production. Because these factors seem more fundamental to company location and expansion decisions, we recommend that DECD continue to focus its efforts on Maine's economic development strategy and ways it can partner with organizations throughout the state to support businesses in ways that extend beyond direct financial support.
- **Increase incentive program transparency.** In replicating the incentive productivity benchmarks from the 2018 evaluation, we discovered that one of the leading databases of incentive information—IncentivesFlow—has incomplete data for Maine. This is reportedly because it has been difficult to obtain necessary information from the state through web-scraping and public records review, especially in comparison with some other New England states. This points to a need for improved transparency around incentives, not specifically to fulfill information requests from third parties, but to enable easier access to data for outside evaluators and the public. One way to improve transparency is to make more data and reports available on the web, possibly through an online data hub or portal that is updated regularly and easily searchable.

6. Conclusion and Next Steps

6.1. Conclusion

This Interim Report establishes a framework and methodology to evaluate the Pine Tree Development Zone (PTDZ) and the Employment Tax Increment Financing (ETIF) programs. Serving as a proof-of-concept, these same techniques will be used to evaluate a broader selection of programs for the comprehensive 2025 report.

EBP benchmarked the state of Maine in five categories: investment attraction, business environment, incentive awards and transparency, and competitiveness of programs.

Maine has slightly improved in terms of investment attraction in the past few years: it currently ranks 43rd nationally, up from 44th in 2018 and 46th in 2016. While Maine outperforms New England states in capital investment, it sees a higher incentive cost per job created. There was a downturn in Maine in investment performance in recent years, likely resulting from reduced economic activity associated with the Covid-19 pandemic.

Performing a reverse site-selection assessment to benchmark Bangor, Portland, and Lewiston MSAs against 22 other MSAs revealed gaps in Maine's business environment. The three Maine MSAs ranked 18th, 20th, and 25th respectively, comparing unfavorably to the majority of the other 22 MSAs in terms of access, population growth, property taxes, quality of life, and labor force availability.

EBP also assessed the 10-year policy fit and the return on investment for the PTDZ and ETIF programs specifically. In addition to using quantitative data from public and proprietary sources, EBP conducted a participating companies survey to gain insight into firms interacting with two programs. The survey had a low response rate, particularly when compared to previous iterations: it received only 106 responses, an average response rate of 66%. EBP's cost-benefit analysis models used data from annual reports and surveys to understand the impact of each program on tax revenues and derive an internal rate of return (IRR) value.

Both programs were found to have very high return (an IRR of 1923.08% for PTDZ and 950.07% for ETIF). These unexpected results suggest a need for further investigation into the availability, completeness, and accuracy of data available to EBP from DECD sources. EBP will therefore revise the methodology to ensure the models capture the true rate of return of the programs in the next phase of this evaluation project.

6.2. Programs to be Evaluated in 2023

Several programs in Maine’s economic development portfolio are scheduled to sunset prior to 2025, have recently been revised by the Legislature, or are likely to receive revision in the Legislature between 2023 and 2025. With these considerations in mind, this section describes the programs we intend to evaluate in 2023.

6.2.1. Certified Media Production Tax Credit

The Maine State Legislature enacted the Certified Media Production Tax Credit, also referred to as the “film tax credit,” in 2005, as codified in Maine Revised Statute [Title 5 §13030-L](#). This program allows a visual media production company to have a production or portion of a production certified as eligible for reimbursement of production costs and visual media tax credit.

“Visual media production” is defined as a recorded feature film, television show or series, video, digital media project or photographic project created for public exhibition to a local, regional, national, or international audience. The statute excludes news, current events, weather or market reports; talk shows; sporting events; awards shows; solicitation of funds; or explicit content subject to Federal reporting requirements.⁷ This definition focuses the incentive on productions that are not inherently local to Maine and therefore may be attracted to or retained as a result of the incentive.

The visual media production reimbursement (Maine Revised Statute [Title 36, chapter 919-A](#)), as amended in 2011, allows reimbursement of 12% of certified production wages paid to Maine residents and 10% of wages paid to non-residents (PL 2011, c. 240, §37).

Certified production companies are also eligible for a tax credit (Maine Revised Statute [Title 36, section 5219-Y](#)). The current law, as amended in PL 2011, allows a tax credit of up to 5% of nonwage visual media production expenses incurred in Maine for preproduction, production, and postproduction. Such expenses include, but are not limited to, construction; operations; editing; music, photography, and film processing; sound recording, mixing, and synchronization; lighting, makeup, and wardrobe; transportation; food and lodging for cast and crew; insurance and bonding; facilities and equipment rental; and location fees. The tax credit may not reduce tax liability below zero, it must be used for the taxable year in which the production is completed, and companies may not claim the film tax credit or any other state tax credit on expenses for which reimbursement was claimed.

Under this program, a media production company applies to the Maine Film Office (MFO) within the Maine Office of Tourism at DECD to have a production or portion of a production certified. For the wage reimbursement program, the company submits Form 841ME along with their annual tax form (e.g., Form 1040ME). The company must also document eligible wages by collecting

⁷ Under 18 United States Code, Section 2257.

[Maine Revenue Services Certified Media Production Residency Affidavits](#) from employees and keeping the forms on file for at least three years for MRS for review upon request. For the tax credit, the production company submits a [Visual Media Production Credit Worksheet](#) to Maine Revenue Service along with its annual tax form.

6.2.2. Maine Seed Capital Investment Tax Credit

The Maine State Legislature enacted the Maine Seed Capital Investment Tax Credit (“MSCTC” or “Seed Credit”) in 1987 to promote equity investments in Maine businesses from private investors and venture capital funds (PL 1987 c. 854, §§4,5 codified in the Maine Revised Statutes as [Title 36 §5216-B](#)). Under this program, administered by FAME, investors receive state income tax credits for 40% of the cash equity provided to eligible Maine businesses for fixed assets, research, or working capital.

To be eligible, businesses must be located in Maine and have annual gross sales of less than \$5 million, be operated full-time by at least one of its principal owners, and investors may not own 50% or more of the business or otherwise have a controlling interest. In addition, the business must meet at least one of the following criteria: (1) be a manufacturer; (2) provide goods or services with 60% of sales derived from outside the state or to out-of-state residents, but with a majority of company employees in Maine; (3) develop or apply advanced technologies; (4) be a value-added natural resource enterprise; or (5) be certified as a visual media production company.

The Legislature has modified the program numerous times since its inception. PL 2019, c. 616 tripled the annual program cap from \$5 million to \$15 million as recommended by the state’s economic development strategy. Subsequently, however, PL 2021, Ch. 412 reduced the total program limits for calendar years 2021 and 2022 from \$15 million to \$13.5 million, which still more than doubled the original cap amount of \$5 million.

Effective in 2020, new legislation reduced the amount of credits from 50% to 40% of eligible investment, reduced the maximum cumulative qualified investment in each company from \$5 million to \$3.5 million, and limited qualified investment in any one company to \$2 million per calendar year.

1. In 2019, the Legislature added a program evaluation requirement ([PL 2019 c. 616 Pt. LL, §12](#)). The governing statute requires the Office of Program Evaluation and Government Accountability (OPEGA) to evaluate the program relative to the following public policy objectives of the tax credit:
2. To increase job opportunities for residents of the State in businesses that export products or services from the State
3. To increase private investment in small new and existing businesses, especially those that experience significant difficulty in the absence of investment incentives in obtaining equity financing to carry the businesses from start-up through initial development
4. To increase municipal tax bases

The statute directs OPEGA to evaluate the program annually as measured by the number and geographic distribution of full-time employees added or retained because of the credit; the amount of in-state businesses; the number of businesses created or retained in the State as a result of the credit; fiscal impact and overall economic impact to the State; and the amount of foregone tax revenue per job created or retained.

OPEGA completed the most recent evaluation in 2021 ([Report No. TE-SEED-19](#)) and reported that between 2010 and 2020, FAME issued \$42.5 million in tax credit certificates to investors on \$95.6 million of private equity investments in 134 businesses. OPEGA's quantitative evaluation found that "the MSCTC is associated with substantial private equity investments in Maine businesses." OPEGA also reported that it was unable to "fully or reliably assess the effectiveness of the MSCTC in achieving the goals of increasing investment, increasing jobs, and increasing municipal tax bases," and cited the following reasons:

- **Annual Report Data Collection:** "Inconsistent and incomplete" annual report data collected by FAME
- **Job Growth and Retention:** A lack of program elements that directly promote job creation and retention, despite this being a principal goal of the program
- **Increasing Investment in Maine Businesses:** Program design allows investors to receive credits for investments in businesses they are connected to and therefore may have invested in anyway
- **Business Growth:** The program may benefit some businesses that do not have the potential for rapid growth, particularly tourism, hospitality, and film industry firms
- **Increasing Municipal Tax Bases:** Program design does not directly promote an increase in the municipal tax base, and no data related to municipal tax contributions is collected as part of the program
- **Contribution to 10-Year Economic Development Strategy:** Program design allows a broad range of businesses to use the program, including businesses not typically associated with advances in innovation, such as tourism, hospitality, and the film industry

6.2.3. Capital Investment Credit

The purpose of the Maine Capital Investment Credit (MCIC) is to stimulate the economy by encouraging qualifying purchases of land, buildings, and equipment in Maine. This program, administered by Maine Revenue Services (MRS), allows taxpayers that claim a federal depreciation deduction for property "placed in service" (the point in time when a property or long-term asset is first placed in use according to accounting standards) in Maine to receive a tax credit relative to the net increase in the depreciation deduction reported as additional income for that taxable year. The credit, which Maine established in 2011, has undergone several changes since then, all tied to changes in federal bonus depreciation laws and regulations. Between 2015 and 2020, the MCIC credit for corporations was 9%. For individuals, the 2015 rate was 8% and the rate in 2016 and after was 7%. After January 1, 2020, individuals and corporations were eligible to

receive a 1.2% MCIC credit. The tax credit may not reduce total tax liability below zero and may be carried forward for up to 20 years.

OPEGA's 2020 program evaluation reports that the MCIC's legislative history shows that each of these changes occurred in response to federal changes and observed that this suggests that the program may be oriented toward conformity with the federal Internal Revenue Code. However, OPEGA also reported that when the Government Oversight Committee established the evaluation criteria for MCIC, they determined "that the goals should be centered on encouraging businesses to expedite capital investments in Maine." As a result, OPEGA evaluated the program from both perspectives.

OPEGA concluded that although the MCIC allows businesses to benefit from some of the financial value of conformity to bonus depreciation established by the U.S. Internal Revenue Service, it is cumbersome for companies to track in order to claim it, requiring two sets of tax records for the life of an asset on which bonus depreciation was claimed. Furthermore, OPEGA determined that the value of the credit to companies was minimal, equivalent to a discount of approximately 1% of the cost of the asset. OPEGA noted that research on the value of federal bonus depreciation, which has a greater tax value than the MCIC, found it provides only a modest impact, if any, on business investment decisions that are more strongly influenced by economic conditions and sales and earnings outlooks. OPEGA concluded that the program does not appear to improve Maine's attractiveness for investment.

6.2.4. Educational Opportunity Tax Credit

The Educational Opportunity Tax Credit (EOTC) was offered between 2008 and 2021, enacted by PL 2007, c. 469, Pt. B, §1 and codified in the Maine Revised Statute as Title 36 §5217-D. In 2021, the legislature replaced the EOTC with the Student Loan Repayment Tax Credit ("SLRTC"), beginning in the 2022 tax year (PL 2021, c. 635 Pt. H, §14).

The EOTC provided a tax credit in the amount of eligible student loan payments made by the taxpayer. Payments on loans taken out by Maine residents who (1) obtained an associate or bachelor's degree from a Maine college, community college or university after 2007; (2) an associate or bachelor's degree after 2015 from an accredited Maine or non-Maine college, community college or university; or (3) graduate degree after 2015 from an accredited Maine college, community college or university, and who, after graduation, live, work and pay taxes in Maine, were eligible for the EOTC. Eligible taxpayers include student borrowers as well as the employers who have made loan payments directly to the lender on behalf of the qualified graduate (not including payments or reimbursements made directly to the employee). Prior to 2013, the credit was non-refundable and unused portions of the could be carried forward for up to 10 years. In 2013, the credit became refundable for student borrowers (not employers) who obtained an associate or a bachelor's degree that qualifies as a degree in science, technology, engineering, or mathematics (STEM) under MRS Rule 812. In 2016, refundability was extended to include all associate degrees.

With the transition from EOTC to SLRTC, eligibility was expanded to include all associate's, bachelor's, or graduate degrees obtained from any accredited community college, college, or university (including those outside Maine). SLRTC also introduced an annual limit of \$2,500 per year with a lifetime cap of \$25,000.

Appendix A: Outcomes of Prior Evaluation

The 2018 Evaluation findings included:

- Companies reported that the programs were generally effective in helping them to either grow more than they otherwise would have or sustain them during challenging times.
- Though programs are generally effective, companies would like the programs to be better advertised, more straightforward, and simplified. Companies and individuals expressed that a lack of clarity around incentives contributes to a negative perception about doing business in Maine.
- Companies and individuals said that the general operating and regulatory environment in Maine raises concerns about the stability of incentive programs, further contributing to a negative perception about the state's business environment. Some companies and institutions expressed concern as to whether or not the report findings would lead to positive policy changes.
- Interviewees suggested the state should have a unifying vision for economic development and innovation shared by all state governing bodies.
- Available support programs do not directly address critical needs of companies in the 20-100 employee range; there is a need for more support for start-up companies looking to become more established.
- Companies and institutions said it was difficult to find qualified workers and suggested that the state focus on workforce development. In addition, Maine DECD should consider broadening business retention and growth efforts to all incentive program participants as well as to companies that are not participants.
- Some institutions and enterprises recommended that Maine be more aggressive in supporting innovation by promoting relationships between research, business, and finance. Furthermore, Maine should better define the role of pure scientific research in the state's economic success.
- The Economic Development Survey, which ICA used to gather information from participating companies on doing business within the State of Maine and to collect input values for the Cost Benefit Models (CBM), had a completion rate of over 90 percent. The CBM has been repurposed as the Return on Investment Model for the current evaluation.
- ICA constructed CBMs for four programs. The methodology and results for each are as follows:
 - Business Equipment Tax Reimbursement (BETR)
 - Methodology: Evaluated using the unmodified internal rate of return (IRR) model.
 - Results: Provides a positive IRR of 86.7 percent, implying a return of nearly \$1.867 on each dollar invested into the BETR program.

Finance Authority of Maine (FAME)

- Methodology: Evaluated using the unmodified IRR model.
- Results: Shows a positive IRR of 66.5 percent for CLI/ERLP, implying a return of \$1.665 for each dollar invested.
- Maine Technology Institute (MTI)
 - Methodology: Evaluated using the unmodified IRR model.
 - Results: Shows a positive IRR of 4.2 percent for the development loan (DL) program, implying a return of \$1.042 for each dollar invested.
- The PTDZ program
 - Methodology: Evaluated using the IRR model but included a sensitivity factor based on the assumption that companies would not have proceeded to locate in Maine without the incentive.
 - Results: Shows a positive IRR of 297.2 percent, implying a return of \$2.972 for each dollar invested.
- Maine's incentive productivity is similar to that of New Hampshire, Rhode Island, and Vermont. Connecticut and Massachusetts gave a greater number of incentive awards with higher value of those awards, resulting in greater capital investment and job creation. Maine continues to trail other states in measures of incentives data availability.

The 2018 Evaluation findings informed the resulting recommendations (organized by category):

- Structure and Targets of Incentive Programs
 - Organize a clear Economic Development and Research & Development strategy
 - The program design process should be led by simplicity, clarity, certainty, and objectivity
 - The State should be explicit in matching performance measures to the type of assistance provided. Furthermore, establish a clear, transparent mechanism communicating how the measurement and evaluation of programs results in updates to strategy and public policy
 - The State should examine programs that could be augmented to meet the needs of post start-up companies (20-100 employees)
 - Within each program, establish a clear and transparent framework for both investors and recipients
 - Loosen requirements for personal equipment tax exemptions in the PTDZ program
 - The State should focus on growing and supporting all business sectors in Maine, rather than focusing on seven specific sectors
- Eligibility and Benefits of Programs
 - Ensure that investment incentive programs are clear and simple with pre-determined criteria
 - Keep administrative processes as simple and clear as possible

- Descriptions and details on incentive program websites should also be clear and transparent
- Monitoring and Evaluation of Incentive Programs
 - The State should create a searchable repository of information on all programs, including clear statements of goals, outcomes, and evaluation and monitoring procedures
 - Program administrators should follow up with program applicants who are deemed ineligible for or are not chosen to receive funding
 - Again, the State should establish a clear and standardized reporting tool for all program recipients which provides a means for recipients to give feedback to the State on their experiences on the utility and efficacy of the programs
 - Once a company receives an incentive award, the State must continue to honor the award until either it expires, or the company falls out of compliance
 - The State should consider revising the metrics it uses to evaluate the effectiveness of its research programs
 - Similarly, the State should fully recognize the distinction between pure research performed by educational and non-profit institutions, and commercial research and development performed by industry
 - An Incentive Working Group comprised of representatives from government institutions and corporations should be established to facilitate collaboration
 - The Maine Revenue Service and DECD should coordinate to hold investment incentives holders responsible to report within the standard fiscal reporting system
 - There should be an annual review of incentives and purge of non-compliant companies in addition to a full fiscal review on a biannual basis
 - There should be clear guidelines for the types of matches allowed under programs that require fund matching
 - To allow for regular independent evaluation, the State should establish fixed program durations
 - The State should work to resolve redundancy of incentive program evaluations
- General Observations and Recommendations
 - Continually examine and refine economic development and R&D strategy
 - Continue to support large non-profit laboratories
 - Better refine the role of pure research in the State's development strategy
 - Improve the searchability of programs
 - Improve the accuracy of program data online
 - Develop a central storage system for reporting documentation
 - Adjust program confidentiality to allow for evaluation of program data as required
 - Work collaboratively across various public and private entities

- Understand workforce recruitment and retention as an economic development issue
- Expand the current Opportunity Maine program
- Work with businesses to determine areas with educational needs
- Consider establishing a business retention program
- Consolidate tax credit programs that are very similar or nearly identical

Appendix B: Reverse Site Selection Model Methodology

Category	Statistic	Ranking Methodology	Weight
Population and Demographics	2017-2022 Population: Annual Growth Rate	Higher is better.	3%
	2022 Total Population	Higher is better.	3%
	2022 Median Age	Lower is better.	6%
	2022-2027 Population: Annual Growth Rate	Higher is better.	3%
Household Statistics	2022 Owned Dwellings	Higher is better.	2%
	2022 Per Capita Income	Higher is better.	2%
	2022-2027 Average Household Income Annual Growth Rate	Higher is better.	2%
	2022-2027 Per Capita Income Annual Growth Rate	Higher is better.	2%
	2022-2027 Annual Housing Growth Rate	Higher is better.	2%
Labor Force Availability	2022 Employed Population	Higher is better.	8%
	2022 Unemployment Rate	Lower is better.	4%
Industry-Specific Employment	2022 Industry 11: Agriculture, Forestry, Fishing, and Hunting	Higher is better.	.5%
	2022 Industry 21: Mining, Quarrying, and Oil and Gas Extraction	Higher is better.	.5%
	2022 Industry 22: Utilities	Higher is better.	.5%
	2022 Industry 23: Construction	Higher is better.	.5%
	2022 Industry 31-33: Manufacturing	Higher is better.	.5%
	2022 Industry 41: Wholesale Trade	Lower is better.	.5%
	2022 Industry 44-45: Retail Trade	Lower is better.	.5%
	2022 Industry 48-49: Transportation and Warehousing	Higher is better.	.5%
	2022 Industry 51: Information and Cultural Industries	Higher is better.	.5%
	2022 Industry 52: Finance and Insurance	Higher is better.	.5%

Category	Statistic	Ranking Methodology	Weight
	2022 Industry 53: Real Estate and Rental and Leasing	Higher is better.	.5%
	2022 Industry 54: Professional, Scientific, and Technical Services	Higher is better.	.5%
	2022 Industry 55: Management of Companies and Enterprises	Higher is better.	.5%
	2022 Industry 56: Administration and Support, Waste Management and Remediation	Higher is better.	.5%
	2022 Industry 61: Educational Services	Higher is better.	.5%
	2022 Industry 62: Health Care and Social Assistance	Higher is better.	.5%
	2022 Industry 71: Arts, Entertainment, and Recreation	Lower is better.	.5%
	2022 Industry 72: Accommodation and Food Services	Lower is better.	.5%
	2022 Industry 81: Other Services (Except Public Administration)	Higher is better.	.5%
	2022 Industry 91: Public Administration	Lower is better.	.5%
Occupation-Specific Employment	2022 Occupations in Management	Higher is better.	1%
	2022 Occupations in Business, Finance, Administration	Higher is better.	1%
	2022 Occupations in Sciences	Higher is better.	1%
	2022 Occupations in Health	Higher is better.	1%
	2022 Occupations in Social Sciences, Education, Government, Religion	Higher is better.	1%
	2022 Occupations in Art, Culture, Recreation, Sport	Lower is better.	1%
	2022 Occupations in Sales and Service	Lower is better.	1%
	2022 Occupations in Trades, Transport, Operators	Higher is better.	1%

Category	Statistic	Ranking Methodology	Weight
	2022 Occupations Unique to Primary Industries	Higher is better.	1%
	2022 Occupations Unique to Manufacture and Utilities	Higher is better.	1%
Transportation and Market Access	2022 Population within 1 Hour Drive	Higher is better.	1.07%
	2022 Households within 1 Hour Drive	Higher is better.	1.07%
	2022 Average Household Income within 1 Hour Drive	Higher is better.	1.07%
	2022-2027 Households Annual Growth Rate	Higher is better.	1.07%
	Distance to Major Airport (Miles)	Lower is better.	2.14%
	Time to Major Airport (Minutes)	Lower is better.	2.14%
	Distance to Train Station (Miles)	Lower is better.	2.14%
	Time to Train Station (Minutes)	Lower is better.	2.14%
	Distance to Regional Airport (Miles)	Lower is better.	1.07%
		Time to Regional Airport (Minutes)	Lower is better.
Tax Regime	Property Tax Rate (Mills)	Lower is better.	5%
Quality of Life	Average Annual Temperature (Fahrenheit)	Middle is better.	1%
	Annual Precipitation (Inches)	Middle is better.	.5%
	Life Expectancy	Higher is better.	.5%
Wages	Average Hourly Wage	Lower is better.	10%