

Economic Impact of Tax Incentive Programs

New York State Department of Taxation and Finance

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INTRODUCTION



Background

New York State enacted legislation (Article 8 of the NYS Tax Law § 180) requiring the Department of Taxation and Finance to contract with an economic impact firm for the purposes of conducting an independent, comprehensive analysis of each tax credit, tax deduction, and tax incentive under New York tax law that relates to increasing economic development. This report has been prepared by PFM Group Consulting¹ to meet that statutory requirement. Economic development encompasses efforts to increase employment, develop the state's workforce, and increase business activity.

It is notable that, unlike many studies conducted in other states that are noted throughout, this study was not focused on program evaluation, nor was it a financial audit. As a result, there are not explicit program recommendations (although on occasion, where warranted as part of the economic impact discussion, some recommendations are made), and the financial data provided by administering state departments is accepted as accurate.

Project Methodology

Because of the sheer number of tax incentives that were analyzed, the project team compartmentalized some aspects of the work. The project team's senior leadership, which included members of all five project firms, met in person on four occasions in Philadelphia on the project and also had regularly scheduled meetings via MS Teams. PFM also established a SharePoint site so that project data and information could be seamlessly shared among all team members.

The following detail the general and specific project activities:

1. A hybrid on-site and virtual project kick-off meeting was held in Albany in January, where the project team outlined its approach and timeline and answered questions from the tax incentive administering agencies.
2. A detailed information request was provided to each agency that administers the tax credits included in the study. As data and information was received, the project team analyzed it and used it as the primary basis for identifying financial and economic impacts as well as doing trends and other forms of analysis.
3. On-site (and in some cases virtual) interviews were conducted with administering agency leadership and subject matter experts to gain a greater understanding of the programs and how they are administered. These were primarily conducted in January through early March.
4. As data was analyzed, follow-on questions were provided, via email or phone conversations, and responses were noted for the analysis. On occasion, agencies did not respond to follow-on requests and were repeated. While most follow-on requests were ultimately answered, some were not.

¹ PFM Group Consulting (PFM) has conducted numerous similar tax incentive studies for other state and local governments. Most notably, PFM has, in each year from 2016 through 2023, conducted between 8-14 incentive evaluations for the State of Oklahoma Incentive Evaluation Commission. PFM has also studied and reported on tax incentives for the States of Hawaii, New Jersey, New Mexico, and Vermont. PFM was assisted on the project by four subcontractor firms. The Center for Regional Economic Competitiveness (CREC) was the lead on benchmarking similar tax incentives and some qualitative analysis. Fourth Economy was the lead on the economic impact analysis using the IMPLAN software. MFR Consulting provided substantial analytical assistance. Smart Incentives provided subject matter expertise on incentive best practices and design. PFM was solely responsible for Summary Findings and all report final content.



5. Similar programs in peer states were identified and analyzed for how NYS compares, in terms of financial and other aspects of incentive programs.
6. Best practices research was conducted related to tax incentives in general and those specific to the incentives under review.
7. Past studies and evaluations of programs, both in NYS and in other states, were researched and analyzed.
8. For some programs, virtual focus group interviews were arranged with external stakeholders.
9. Data limitations were identified that may reduce the confidence level in impact analysis.
10. Economic impact analysis was conducted using the IMPLAN input-output model. A discussion of the IMPLAN model is included as Appendix A.
11. A 'rough draft' of the credits components of the study was included as part of the quarterly report submitted to the Department of Taxation and Finance on September 29, 2023.
12. Draft reports for each incentive were primarily completed in November 2023.
13. The project team submitted the final report on December 29, 2023.

The project team wishes to thank the various agencies with whom it interacted during the project, in particular, the Department of Taxation and Finance and Empire State Development, whose assistance was invaluable in completing this study. Of course, should there be any errors within the final report, they are entirely the responsibility of PFM.

Commonly Used Acronyms

To save space, several acronyms will be used throughout the report. In cases where they are specific to a single chapter, acronyms will be defined on their first use. However, these will be defined only on their first use in the study as a whole:

- **BLS:** U.S. Department of Commerce, Bureau of Labor Statistics
- **CAGR:** Compound Annual Growth Rate
- **CREC:** Center for Regional Economic Competitiveness
- **ESD:** Empire State Development Corporation
- **FY:** Fiscal Year
- **IMPLAN:** Impact Analysis for Planning economic impact model.
- **NAICS:** North American Industrial Classification System
- **NYC:** New York City
- **NYS:** New York State
- **PFM:** PFM Group Consulting LLC
- **QCEW:** Quarterly Census of Employment and Wages
- **ROI:** Return on Investment



OVERARCHING ISSUES



Background

Tax incentives targeted at economic development are prevalent throughout the U.S., and every state provides them. Estimates on their use vary considerably, and it can be challenging to identify and estimate the dollar value associated with them.² While tax incentives are widely used, they are also controversial. There are a variety of concerns raised about tax incentives for economic development purposes. These include:

- **Interfering with market-based decisions.** Incentives generally reduce the cost of doing business for those receiving incentives. This may lead to inefficient allocation of resources by incentive recipients.
- **Picking ‘winners and losers.’** Even when investments in a particular industry or economic sector is justified, when a government entity chooses to make investments in some businesses but not others, there can be a concern that those choices may not be justified.
- **Providing incentives when business decisions do not require them.** It is generally understood that business location decisions rely on a combination of considerations, including available skilled workers, infrastructure, access to suppliers (and in some cases customers), and a reasonable cost structure, which can include taxes. Studies have raised the concern that many (or even most) businesses would have located in a particular city or state even absent incentives. This ‘but for’ test will be discussed further in this section.
- **Crowding out more effective uses of resources.** If incentives do not ‘pay for themselves’ (such as because the ‘but for test’ suggests businesses would have made investment decisions without the incentive, then the state government may have missed out on more effective uses of state tax dollars (opportunity cost).

Of course, there are equally strong arguments that are made in favor of the use of incentives. These include:

- **Necessity for ‘closing the deal.’** Particularly in cases of regional competition, incentives may be the deciding factor in ‘on the margins’ decisions.
- **Offsetting tax structure factors.** New York State (NYS) has a tax structure that, for many firms that pay corporate franchise or personal income tax, will be less competitive compared to other states. In these situations, incentives may be needed to level the playing field.
- **Catalyzing industry growth.** A logical economic development strategy is to incent early entrants so that they can help establish a mature business or sector. The expectation is that once the firm or sector is established, there will be a significant return on that original investment.
- **Creating positive externalities that the market may not value/create.** One of the common explanations for why government makes investments is that the private sector does not effectively value those investments, and the resulting positive externalities are worth the public investments. In the case of tax incentives, these can include a focus on training or employment of what are considered disadvantaged groups.

² A 2018 study by the Metropolitan Policy Program at the Brookings Institute estimated that state and local governments “expend tens of billions of dollars on economic development incentives” every year.



- **Signaling support for a business or industry.** States and local governments often declare themselves ‘open for business’ to signal their willingness to attract new business, industry, investment, and jobs. Incentives can be an embodiment of that effort.

While there is a reasonable case that can be made for the pro and con positions, the fact remains that tax incentives are and will continue to be part of competition among states. While the arguments against the use of incentives are reasonable and often well-founded, if this is taken to the logical extreme of eliminating all state tax incentives for economic development purposes, this becomes little more than a theoretical discussion. While the states it competes with continue to offer these types of incentives, NYS is not likely to exit this incentive competition.

In practice, it makes sense to accept that tax incentives will continue to exist. In that case, the most useful course of action, from a policymaking perspective, is to identify the instances where incentives are worthwhile and those where they may not be particularly effective or efficient. Making some determination of how these tax incentives fit into this taxonomy, of course, is the purpose of this study. There are a variety of issues that should be taken into consideration in this analysis, and the project team has worked to do so. The following describes and analyzes these issues.

Forms of Economic Development Assistance

Tax incentives are often referred to as a tax expenditure. This reflects the fact that foregone revenue from a tax incentive is little different from a budget expenditure for the same purpose. In fact, the purpose of most any tax incentive could also be accomplished through an expenditure program. This could be, for example, grants that seek to accomplish the same goals.

One advantage of expenditure programs is that they are more transparent, as expenditures are reported on a regular basis. In the case of tax law, foregone tax revenue is not always reported as frequently or is subject to the same amount of scrutiny in the budget process. In the case of NYS, the state’s tax expenditure report³ is a useful tool for determining the foregone revenue associated with tax incentives. Even so, this may not provide as much information as would be available for a grant program.

Key Tax Incentive Design Issues

There are multiple important considerations when constructing a tax incentive for economic development. The following are some of the key issues that need to be addressed.

Tax Liability

When comparing a grant program to a tax incentive, a key difference is that taxpayers generally only benefit from a tax incentive when they have tax liability. This, of course, is critical to the argument that tax incentives pay for themselves, as it requires the company receiving the benefit to actually pay corporate income taxes.

There are many instances in the realm of tax incentives where a potential beneficiary does not have any tax liability to apply a credit against. For many new firms, there is no profitability that would result in tax liability in the early years when it is receiving tax incentives. For other firms, their tax liability is exceeded by the tax incentive they would qualify to receive.

These are, of course, situations where the state may wish to make the incentive more useful for the recipient. There are three primary ways that this may be accomplished, and they may be combined, depending on the program and its requirements. The tax incentive might be:

- **Refundable.** In these instances, there is no requirement that there be tax liability to receive the credit. Where there is no liability or liability that lower than the amount of the credit, the state reimburses the recipient the full amount of the credit. This is effectively the same as a grant program

³ New York State Department of Taxation and Finance & Division of the Budget, New York State Tax Expenditure Report, 2024, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.



and is most susceptible to concerns about the 'but for test.'

- **Transferable.** In situations where a recipient does not have sufficient tax liability to use all or some of the tax credit, a transferable credit allows the recipient to sell the credit to another entity who can apply it against their own liability. This is often insurance companies or other entities that pay gross receipts taxes, like the insurance premium tax, as they will always have tax liability. The argument against allowing transferability is that some of the value of the tax credit will get lost, as the tax transfer will reduce the value of the incentive to the recipient (as they will have to forgo some percentage of the tax incentive to the purchaser, which is often 10 to 20 percent).
- **Carried Forward.** Many tax credits allow its value to be spread over multiple tax years. While this is most commonly the case in situations where a taxpayer has less tax liability than the value of the credit in a particular tax year, there may be situations where the taxpayer chooses to not apply the credit to that year's taxes. Generally, the incentive's ability to be carried forward is limited to a specific number of years, but in some cases, it may be carried forward indefinitely.

Eligibility

A key tax credit design issues relates to the criteria for determining those eligible to take the credit. These generally fall into two broad categories: 'as-of-right' and discretionary credits. As the name suggests, where all taxpayers who meet a set of eligibility criteria may take the credit, it is a 'as-of-right' credit. If, however, eligibility for the credit requires a state entity to decide on awarding or not awarding the credit, it is considered discretionary.

The primary advantage of an as-of-right credit is its relative certainty for the taxpayer receiving the credit. For business and tax planning purposes, there is a clear determination that may be made as to whether the tax credit will be available for use. On the other hand, a discretionary credit reduces that certainty, but the state gains greater flexibility in determining whether a particular recipient will advance the state's purposes in providing a tax credit. In general, there are specific criteria that will be weighed in determining whether to award the credit, and these often include agreement by the awardee to provide regular reporting on job creation, capital investment or other data and information. In other cases, the state may weigh issues such as community benefit when making an award.

One of the criticisms of as-of-right credits relates to the difficulty in getting information related to the outcomes related to the credit. In most instances, state tax forms do not require this type of reporting. It is understandable that state tax departments are primarily concerned with efficient collection of state taxes and are less focused on gathering data for determining the efficacy of the many tax credits found within the state tax code.

Targeting

Tax credits may also be targeted in various ways. Tax credit eligibility may limit benefits to certain types of business or industry, and it may require a specific minimum level of capital investment or jobs created or retained. There may also be requirements related to wage rates or provision of benefits, such as employer-provided health care coverage. And there may be requirements targeting benefits to a specific region or certain economic or demographic characteristics.

Duration

The duration of the tax credit can also be an important design feature. While many credits provide a one-time benefit, others provide for a credit to be taken for multiple years. There is substantial discussion around the value of providing multi-year versus one-time tax credits. From the state's perspective, spreading the credit over multiple years reduces the cost in the current fiscal cycle and may provide an opportunity to ensure that the recipient meets program requirements, such as job creation targets. On the other hand, businesses will discount the value of credits in future years, which means that the state may be forgoing revenue that the business isn't considering in its business planning (this is part of the 'but for test' discussion in the next section of this chapter).

One incentive strategy is to assist those early into a product, technology, industry, or region. To the extent the incentive helps establish a mature business and develop the necessary infrastructure, it will have value,



particularly if it is limited in duration. A three-year incentive that covers a share of a worker's payroll is more likely to have a positive ROI than the same incentive that lasts for 10 years.

Program Dollar Caps

Another important design element relates to whether there is a cap on the program benefits. In general, this relates to the amount of revenue the state will forego in a specific fiscal year (although it can also be a cap on the lifetime foregone revenue for the state or the lifetime amount of benefit available to an individual tax credit recipient). From the state's perspective, a program cap provides some level of certainty in its financial planning, as a tax credit without a cap may create an unexpected gap in tax revenue collections, particularly when a tax credit is fully refundable. States can also have the flexibility of adjusting dollar caps from year to year. Creating and maintaining program dollar caps is generally considered (again, from the state's perspective) a best practice.

Of course, from the recipient's perspective, a cap can also introduce uncertainty as to the award of the tax credit where there is strong demand for it. Generally, governments deal with the issue of how to administer caps by either pro-rating the award to all who are eligible to receive it or making the program 'first come, first served' where once the entirety of the program credits have been awarded in a fiscal cycle, others who are otherwise eligible cannot claim the credit. In some cases, states allow those who would otherwise qualify for the credit but do not receive it because of the cap to move to 'the front of the line' for award in the following fiscal cycle, if the program is still in place.

Program Sunsets

One concern that is often raised with tax credits is that they receive less scrutiny than other parts of the state budget and can carry on indefinitely. One way to counterbalance this concern is to set a statutory program expiration date. This 'sunset' requirement may allow the state to review the program costs and benefits on a regular basis. In many states, programs are reviewed and allowed to expire or, where the program is determined to be a net benefit to the state, the sunset date is extended. Of course, for sunsets to be effective, there has to be some process to regularly review programs, and in many states sunset dates are routinely extended without this sort of review.

Program Accountability

Many tax incentives are a form of 'quid pro quo' where the state provides a tax benefit in return for some desired actions by the recipient. Often, this is the promise of creating jobs or capital investment. If those promises are not kept, in most cases, the state has the right to expect to recoup some or all of its tax benefit. This is often accomplished with the use of a 'claw back' mechanism, where the state seeks to recoup the tax benefit. Of course, economic and other circumstances may make that difficult to accomplish – but still worth attempting. Another, more proactive, mechanism is to design the tax incentive so the benefit does not accrue to the recipient until the desired result (jobs created, capital investment made, etc.) is achieved. This can be done, for example, by structuring a payroll tax credit to be a rebate, paid once the jobs have been in place for some set period of time.

Program accountability can also take the form of regular business reporting on its promises.

Impact Analysis Key Topics

Issues Relating to Return on Investment

For many policymakers (and taxpayers), the key issue for a tax incentive is whether or not the state will obtain a positive return on the investment associated with the tax credit. Return on investment (ROI) relies on analyzing and calculating a variety of impacts and outcomes from providing tax incentives for economic development. In one basic calculation, unless the economic activity related to the tax incentive provides more state and local tax dollars in return, it can be considered to generate a negative return on investment. While



the project team has used IMPLAN, a well-known economic impact model⁴ to perform that calculation, it is not the only impact or outcome that should be considered in the ROI analysis. There may well be qualitative impacts or other quantitative impacts that should be considered.

Likewise, as will be noted later in this chapter, considering the ‘but for’ test is important. The ‘but for’ test seeks to determine whether some or all economic activity would have occurred even without the existence of the tax incentive. It is well settled in economic development circles that there are several issues that are as important as taxation (or tax incentives) for a business or industry. These include access to a workforce with the necessary skills, infrastructure (which may be roads and train spurs but also broadband and fiber), reasonable supply chains and, often, access to customers. It should be considered whether the incentive is truly spurring action or simply a sweetener for a business likely to locate in NYS in any event.

Balanced Budget Constraint Model

There are differing ways of thinking about the costs and benefits associated with tax incentives. Some evaluations that calculate return on investment for tax incentives include a ‘balanced budget constraint.’ This requires that the amount of the state tax credit be offset, for modeling purposes, by a decrease in state expenditures of the same amount. The theory is that because state budgets are required to be balanced on an annual basis, a tax credit reduces the amount of state resources that would otherwise be dedicated to some other spending purpose.

The project team has chosen to not build this into its return on investment calculations for several reasons. First, it is difficult to confidently predict how a government would spend the additional revenue if it existed. As a result, many of these modeling exercises use a calculation for general government spending, but that has little validity in the real-world of state budgeting – when states have additional unexpected revenue, there is no example of a state doing an ‘across the board’ increase in all categories of state spending. Deciding how policymakers would react to having this additional revenue is at least presumptuous.

Besides the concern about determining how policymakers might spend additional resources should these credits not exist, it is not a requirement that they be spent at all. It’s entirely possible that policymakers would make other choices: they could, for example, make other tax cuts, or they could add the revenue to budget, pension, or other reserves. It is notable that in recent years, as the federal government provided historic financial support to state governments, state reserve funds grew to record levels and many states enacted historic tax cuts – both of which support the theory that states, when provided unexpected resources, make choices that go beyond mere spending.

Qualitative Impacts

While they are more difficult to weigh, qualitative impacts must also be taken into consideration. Beyond the economic activity, incentives that are skills-based or result in positive community development are examples of situations where the qualitative aspect of the incentive’s impact may outweigh other considerations. Neighborhood, community, and regional qualitative impacts may also improve quality of life, which has value for the state as well.

Do Tax Incentives ‘pay for themselves?’

One of the more common claims about tax incentives is that they ‘pay for themselves’ because of all of the additional economic activity that is generated. This usually is arrived at by comparing additional personal income generated versus the foregone tax revenue. That will generally be positive (and also would be positive for most government expenditures) because of multiplier effects. However, because only a fraction of that personal income will be subject to additional state and local tax, in most instances, the foregone revenue – at least at the start – will be more than the additional tax revenue.

⁴ There is further discussion of IMPLAN in Appendix A.



That said, governments or governmental entities rarely exist for the sole purpose of turning a profit. In fact, they often exist because of limitations related to markets, public goods, and externalities, both positive and negative. It is the rare incentive that should only be deemed a success because it returns more in tax dollars than it cost. It is generally necessary to weigh other positive (or negative), and in many cases, those are not readily quantifiable and/or will require a longer timeframe for analysis.

Data Limitations

In nearly every tax incentive program evaluation in nearly every state, data limitations will be listed as an issue that limits the definitive evaluation of a program's benefits and return on investment. There are a number of reasons for this. First, as previously noted, program design may limit the data and information that is publicly available for use in determining a program's outcomes. In particular, as-of-right credits rarely have extensive program data and information, because it is rarely required as a part of claiming the credit.

Even in instances where data collection and reporting are built into program requirements, it may still not be sufficient to answer questions about program efficacy or impacts. First, the data itself may be questionable. While the data may be subject to some forms of financial audit, this is generally not a function of this type of program performance study. In other instances, there is confusion about the definition of terms. For example, jobs created might not differentiate between permanent and temporary positions or full versus part-time employees. Finally, the data is often a 'point in time' snapshot that may vary considerably depending on when it is captured. It is rare to have programs that require extensive data to be collected at a level of frequency and duration to develop a high degree of confidence in it.

These data limitations are understandable: rigorous data collection and reporting is a time consuming process, and there is a legitimate concern that requiring this from tax credit recipients will reduce their use of the credits – if the administrative burden is deemed to be more costly than the tax benefit ('the juice isn't worth the squeeze' in colloquial terms), then the tax credit loses its value. After all, while determining the impact of a tax credit is important, for many policymakers, the more important factor is to spur the economic activity for which the tax credit was created.

There is another type of data limitation that should be recognized for this particular study: the unusual economic impacts associated with the COVID-19 Pandemic. The Pandemic led to significant reductions in various types of public activities, which had profound impacts on certain types of commercial and consumer activity. For some of the tax credits discussed in this report, it is necessary to take these effects into consideration when weighing economic activity and tax credit outcomes. It should be recalled that the COVID-19 Pandemic was the catalyst for the deepest – and shortest – recession on record in the U.S.⁵ While some parts of the U.S. economy quickly recovered, others, particularly those that rely on social interaction and/or large public gatherings, were slower to recover. This impact is taken into consideration in the following discussions where relevant.

Finally, there are some data limitations that are specific to NYS tax law and this study. First, the tax data that was available on the Department of Taxation and Finance's Open Data portal during the analytical period of this project includes actual collections data through 2019.

The primary reason for the lag in actual collections data relates to filing deadlines and extensions related to the NYS corporate franchise tax. Article 9-A, Section 211, paragraph 1 of the Tax Law establishes the corporate tax return filing schedule. Calendar tax year filers, i.e., a tax year of January 1 through December 31, are required to file a return by April 15 of the following year. Section 211(1) also addresses fiscal year filers, i.e., those whose tax year begins on a date other than January 1, requiring a return within 3 ½ months after the close of the taxpayer's fiscal year. Finally, Section 211(1) provides for an automatic six-month filing

⁵ According to the National Bureau of Economic Research's Business Cycle Dating Committee, a peak in U.S. economic activity was reached in February 2020, and a trough in U.S. economic activity occurred in April 2020, meaning the recession lasted two months, the shortest U.S. recession on record. "Business Cycle Dating Committee Announcement July 19, 2021," National Bureau of Economic Research, accessed online at <https://www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021>



extension. Section 211 also permits the Tax Commissioner to grant extensions for reasonable cause. Subpart 6-4 of the New York's Codes, Rules, and Regulations (NYCRR) provides additional guidance pertaining to the time and place for filing reports. In particular, it authorizes two additional 3-month extension requests, bringing the total extension time period to one full year after the original due date.

This combination of fiscal year filing periods and one year filing extensions results in complete data being unavailable for several years after the close of a given tax year. To illustrate this, the Department of Taxation and Finance provided the following example: "consider a fiscal year filer with a period of December 1, 2023, through November 30, 2024, and its 2023 tax year. The return is first due on March 15, 2025. If the taxpayer extends for a full year, its 2023 tax year return is due on March 15, 2026."⁶

The 'but for test'

A critical question that arises in nearly every discussion of tax incentives meant to spur economic development is 'to what extent are the economic and fiscal benefits the result of the tax credit?' This is commonly referred to as the 'but for test' and is the subject of extensive discussion and debate in the tax incentives literature. It is important because it gets to the heart of the question as to whether an incentive is 'a good deal' for the state and its taxpayers. Clearly, if a business is going to undertake the activity that creates economic and fiscal benefits to the state regardless of the award of the tax credit, the state and its taxpayers are better off to not provide that tax benefit and dedicate its resources to more productive uses elsewhere.

There is extensive discussion of this concept, but the actual amount of conclusive study related to it is not as great as might be expected.⁷

This lack of certainty points toward the difficulty of proving the test. Some states have sought to build a but for requirement into programs, where they require recipients to attest to the fact that they were considering other locations or would not have undertaken the specific activity without the tax credit. While this might have some value, it is also difficult to conclusively prove the business was likely to locate elsewhere 'but for' the tax credit. As was noted earlier, while incentives can influence business behavior, incentives are only one factor among many that drive hiring, investment, spending, and location decisions.

It is not possible to assert with complete certainty the relative importance of a given incentive on individual business decisions. Firm characteristics, the type of business activity being incentivized, the availability of comparable alternatives, the incentive amount, incurred costs associated with compliance with incentive program rules and requirements, and other intangible factors all play a role in determining the influence of an incentive on a business decision.

Since the "true" level of the tax credits' influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume

⁶ Email to PFM project team from Director of Operations, Office of Tax Policy Analysis, Department of Taxation and Finance, April 19, 2023.

⁷ Based on a review of 30 different studies, Timothy J. Bartik of the W.E. Upjohn Institute estimates incentives probably affect between 2 percent and 25 percent of incented firms making business location, expansion, or job retention decisions. He also notes that, "Overall the research literature on incentives' "but for" effects are not as rigorous as one might hope." (*"But For" Percentages for Economic Development Incentives: What percentage estimates are plausible based on the research literature?* Upjohn Institute Working Paper 18-289. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. 2018.) While "but for" is often incorporated into assessments of incentive effectiveness, the term is not well-defined nor is it used consistently in evaluations. (*Estimating the Influence of Incentives on Investment Decisions*. Center for Regional Economic Competitiveness and Smart Incentives. November 2020.)



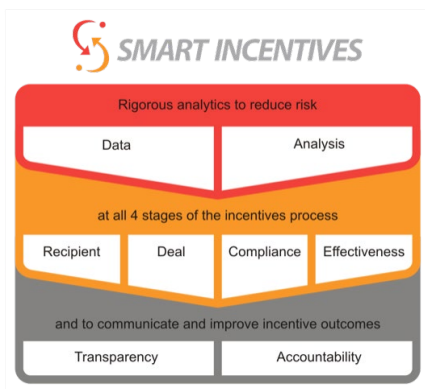
that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

Incentives Best Practices

The project team members have written extensively on what might be considered tax incentives best practices. From those past efforts – as well as the writings of others on this topic, the following are some key best practices that relate to tax incentive design, implementation, and administration. This is by no means an exhaustive list. Where useful for discussion, the project team has referred to these within the chapters on specific incentives that follow.

There has been extensive writing around what constitute business incentives best practices. From the project team’s review of many sources,⁸ it has identified 10 important best practices and sought to incorporate them into the analysis and discussion of this incentive.

As a starting point, business incentives should be viewed as a process, not an event. The award of an incentive and the incentive features are part of that process, and many of the identified best practices reflect that. The process itself should take into consideration each of these factors, which PFM’s subcontractor, Smart Incentives, demonstrates in the following illustration:



Source: Smart Incentives

The 10 best practices are:

- 1. For maximum impact, incentives should be targeted.** Examples of useful targeting include companies or industries that export their goods or services out-of-state; high economic impact companies or industries – such as those with higher wages and benefits, significant job creation, or significant capital investment.
- 2. Incentives should be discretionary.** In most instances, an application process enables the state government to require company disclosure of information related to eligibility criteria and enables the

⁸ Three resources in particular were relied upon on putting together the list of best practices. They are “What Factors Influence the Effectiveness of Business Incentives?” The Pew Charitable Trusts, April 4, 2019, accessed online at <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/04/what-factors-influence-the-effectiveness-of-business-incentives>; “Improving Economic Development Incentives,” Timothy J. Bartik, W.E. Upjohn Institute for Employment Research, 2018, accessed online at https://research.upjohn.org/cgi/viewcontent.cgi?article=1000&context=up_policybriefs; “Best Practices for the Design and Evaluation of State Tax Incentives Programs for Economic Development,” Matthew N. Murray and Donald J. Bruce, January 2017, included within another evaluation at https://media.al.com/news_mobile_impact/other/AL%20ENTERTAIN%20NEWMKTS%203%209%2017.pdf



state to reject applications that do not meet its standards.

3. **Incentives should leverage significant private capital.** Ideally, the incentive should leverage private investment that is at least several multiples of the state investment.
4. **Incentives should provide most of the benefit within 1-3 years and have a limited duration.** Company discount rates are much higher than for the state, and businesses will significantly devalue incentive payments in later years.
5. **Incentives should take into consideration state and/or local as well as industry economic conditions.** Incentives that are provided in high performing areas or for stable and profitable businesses or industries will likely fail the ‘but for test’ – meaning the activity would likely occur without the state incentive.
6. **‘Smart’ incentives help businesses overcome practical barriers to growth.** In particular, customized assistance for locally owned, small and medium-sized businesses can have significant impact.
7. **Incentives should be transparent.** The incentive purpose should be clearly articulated, as are eligibility requirements, and regular, detailed reporting should be required from all program recipients.
8. **Incentives should require accountability.** When upfront financial incentives are offered in return for job creation, retention, or capital investment, there should be contract language in place that allows the state to ‘claw back’ state resources should the company not meet performance requirements.
9. **Incentives should have caps.** To ensure the state’s financial health, program dollar caps or limits should be in place. Incentive programs should also have a limited duration, with sunsets in place to require regular review of incentive performance.
10. **Incentives should be simple and understandable.** The state should be able to easily and effectively administer the incentive, and users should be able to readily comply with its requirements.

While the project team believes this is a strong set of best practices, there may well be others that are as (or more applicable) in specific situations. It is also likely that some of the best practices will be mutually exclusive. For example, application and reporting requirements may reduce the simplicity of business compliance.

Tax Incentive Evaluations

Over the last two decades, there has been increasing interest in conducting rigorous evaluations of tax incentives. While many states have been conducting regular program evaluations of tax incentive programs for many years, some of the increased interest has been created by research and program assistance provided by the Pew Charitable Trusts (Pew) economic development project, which has assisted multiple states in developing incentive evaluation processes.⁹ The National Conference of State Legislatures (NCSL) has also been an important contributor to these efforts, as they maintain a database of state tax incentive evaluations that have been conducted since 2008.¹⁰ Pew and NCSL have jointly created the Incentive Evaluators Network and have sponsored and convened an annual tax incentive evaluators’ roundtable, a two day conference to discuss key incentive evaluations issues. Project team members from PFM, Smart Incentives, and CREC have been regular participants and presenters at these conferences.

⁹ “Economic Development”, Pew Charitable Trusts, accessed online at <https://www.pewtrusts.org/en/projects/economic-development-tax-incentives>.

¹⁰ “State Tax Incentive Evaluations Database”, National Conference of State Legislatures, accessed online at <https://www.ncsl.org/fiscal/state-tax-incentive-evaluations-database>



In the past, Pew has written about state efforts to develop regular tax incentive evaluation processes. As part of those discussions, Pew grouped states into one of three categories ranked by their incentive evaluation processes: leading, making progress, or trailing. While this ranking process has not been updated in several years, it is notable that Pew placed NYS into the ‘trailing’ category – the lowest of the three. While some state programs are subject to regular program review, there is not a systematic process in place to do so on a regular basis. In fact, the last broad-based review in NYS was done a decade ago, in 2013.¹¹

A challenge for this particular set of reports is the sheer number of them that had to be conducted at the same time. There are significant challenges associated with conducting 26 incentive evaluations simultaneously. In many instances, the project team could not delve as deeply into incentive issues because of time and staffing constraints.

It is not surprising that most states that conduct regular evaluations limit the yearly number to four to eight. This provides more opportunity to do more in-depth analysis of the incentives under evaluation. Most do so by establishing a regular cycle for evaluation, where all (or some key set) of tax incentives are subject to review. Among the states, common cycles are four to six years, although there are states that set the review cycle for up to ten years.

A set cycle provides more opportunity to do more in depth analysis of the incentives under evaluation. A regular schedule also helps inform program administrators and policymakers of the incentives that will be under review each year, which allows time to prepare to provide the needed data and information.

One benefit of this review might be in establishing something of a baseline that could be used to set a schedule for more regular review of programs going forward for NYS.

¹¹ Marilyn M. Rubin and Donald J. Boyd, “New York State Business Tax Credits: Analysis and Evaluation”, New York State Tax Reform and Fairness Commission, November 2013, accessed online at <https://reinventalbany.org/wp-content/uploads/2014/09/2013-Business-Tax-Credit-Report-McCall-Solomon.pdf>.



ENTERTAINMENT TAX CREDITS



This section assesses the economic impact associated with a related set of tax incentives, which are targeted at the entertainment industry. They are the:

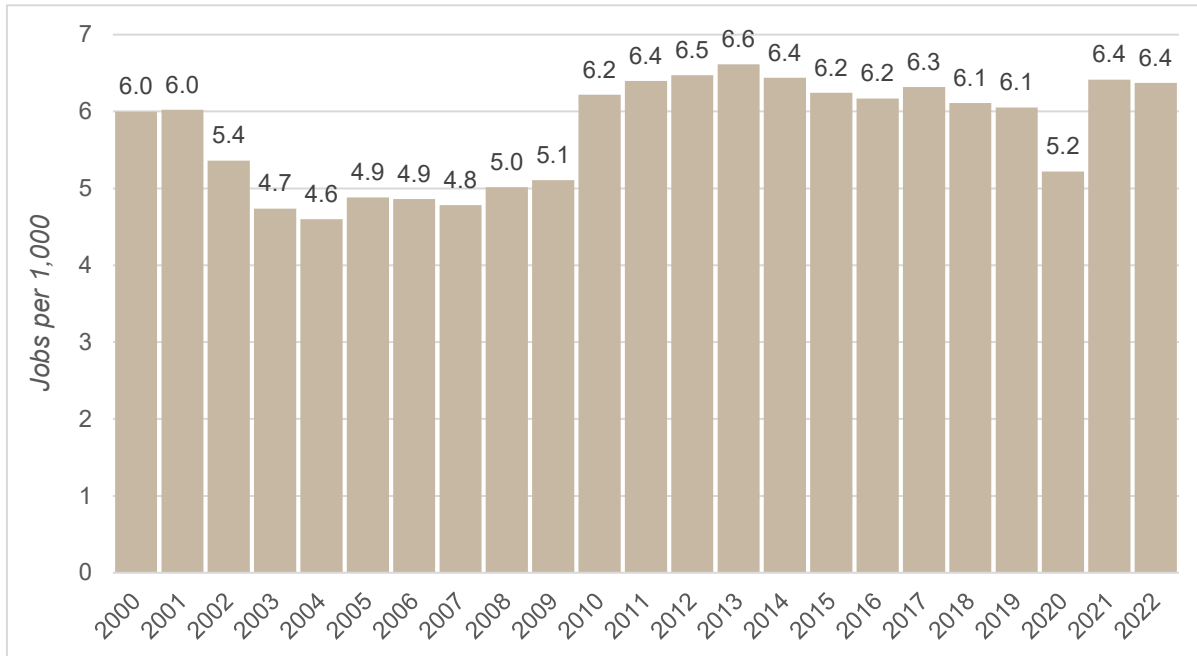
- Empire State Film Production Tax Credit.
- Empire State Film Post-Production Tax Credit.
- New York State Commercial Tax Credit.
- New York City Musical and Theatrical Tax Credit.
- Empire State Musical and Theatrical Production Tax Credit.

For much of the analysis, it is useful to consider these as a group, because they focus on an industry as a whole, and most states do not separate their incentives targeted at the industry the way that NYS does. There are advantages and disadvantages to the NYS approach, and these will be discussed throughout this section.

Industry Employment

The portion of the entertainment industry reflected in these credits has been a small but important component of the NYS workforce for many years. The following chart details the NYS jobs per 1,000 reflected in the North American Industrial Classification System (NAICS) Codes 51211 and 51219, which is the industry group of businesses and establishments primarily engaged in motion picture production and post-production.

Table 1: NYS Motion Picture and Video Production and Post-Production Employment per 1000 Jobs, 2000-2022



Source: PFM analysis of BLS QCEW data for NAICS codes 51211 and 51219

Except for a decline in years 2002 through 2009 and the pandemic-driven steep decline in 2020, the employment per 1,000 has been fairly stable. In the other years provided, employment per 1,000 workers has fit within a range of 6.0 to 6.4.



NYS launched its film production credit in 2004, which was during the down period for employment for the industry. However, it was not until 2010 that employment substantially increased for the industry – which also coincided with the early months of the recovery from the Great Recession in the U.S.¹²

For decades, California and New York have been the primary state locations for this industry group. The following table details employment for the industry in key states and for the entire U.S.

Table 2: Motion Picture and Video Industry Jobs Per Thousand, Five Year Average (2018-2022)

State	Total Motion Picture Employment	Total Employment, All Industries	Motion Picture Jobs Per Thousand
New York	46,799	7,743,001	6.0
California	121,039	14,796,833	8.2
Connecticut	3,259	1,406,585	2.3
Georgia	16,010	3,838,587	4.2
Massachusetts	3,217	3,095,278	1.0
New Jersey	2,712	3,430,916	0.8
Pennsylvania	3,648	5,096,448	0.7
United States	252,772	124,057,061	2.0

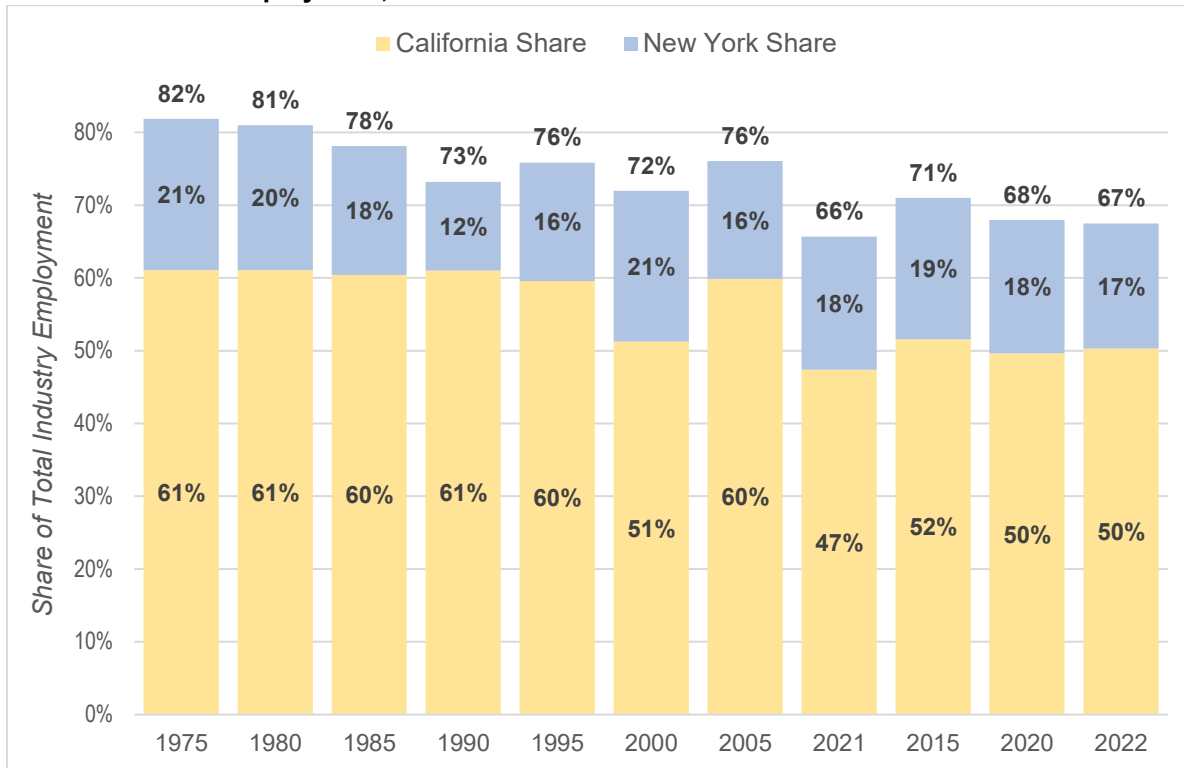
Source: PFM analysis of BLS QCEW data for NAICS codes 51211 and 51219

It is notable that Georgia, with the largest amount of foregone tax revenue through tax credits for this industry, is moving closer to New York on this metric. As the following graph shows, California's decline in market share is more pronounced than is the case for NYS.

¹² According to the National Bureau of Economic Research's business cycle dating committee, the Great Recession began in December 2007 and ended in June 2009. <https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions>



Figure 1: New York and California Share of Nationwide Motion Picture and Video Production and Post-Production Employment, 1975-2022



Source: PFM analysis of BLS QCEW data for NAICS codes 51211 and 51219

Shift Share Analysis

It has been noted that NYS has a mature film production industry, and it has tax incentives targeted at it that have been in place for many years. To help understand what is happening with the industry's growth nationally in comparison to NYS, the project team conducted a shift share analysis. Shift-share analysis is one way to understand these relationships, as it looks at employment within a sector (in this case motion picture and video production and post-production) in a region (in this case NYS) and compares it to employment growth in the entire national economy, as well as employment growth nationally within the industry, and, finally, the regional variable, which subtracts out the national effects. The following compares employment effects from these three components for NYS over the period from 2012 to 2022:

Table 3: New York State Shift-Share Analysis, Motion Picture Video and Production, 2012 and 2022

Description	US: Total Private Employment	US: Motion Picture & Video Production and Post-Production	NYS: Motion Picture & Video Production and Post-Production
2012	110,645,869	223,604	46,543
2022	128,718,060	293,143	50,382
Change in Jobs	18,072,191 (+16.3%)	69,539 (+31.1%)	+3,839 (+8.2%)
Job Change Expected from US Growth in Total Employment			+7,602
Job Change Expected from US Growth in Industry Employment			+6,872
Job Change Attributable to NYS Industry Growth			-10,635

Source: PFM analysis of BLS QCEW data for NAICS codes 51211 and 51219



From this, it can be determined that overall private nonfarm growth in the U.S. economy from 2012 to 2022 was 16.3 percent, while growth in the motion picture video production and postproduction industry nationally was 31.1 percent. By contrast, growth in that industry in NYS for the same time period was just 8.2 percent. When translated into ‘shares’ of the 3,839 of actual job growth, simply matching national growth rates for private employment would have produced 7,602 jobs, and matching the growth rate for the film industry nationally would have produced an additional 6,872 jobs. As a result, NYS’s actual growth of just 3,839 jobs means the growth attributable to the film industry in NYS was *negative* 10,635 jobs.

This suggests that this industry has underperformed both the national economy and the national industry. Whatever economic impacts the credit may have generated, it is not evident from this analysis that it has been a positive contributor to state or industry employment growth in NYS.

New York’s Incentives

Each of the five tax incentives has a different purpose and tax benefits; some have similar goals related to growing parts of the entertainment industry but approach that goal from different angles. Combined, they are a significant financial commitment by NYS to maintain and/or grow this industry.

As previously noted, NYS structures its credits for this industry differently than most states. Most states have a single tax credit for all forms of production, while NYS has separate credits with different requirements for production, post-production, and production of commercials. The NYS approach allows the state to tailor the incentive to specific aspects of the industry. It may provide an ability to target marketing to specific parts of the industry. The specific nature of the credits may result in less flexibility for the state, as there are caps for the various types of activities that, in some years, may limit the use of the credit.

As it relates to live performances, there are no other states that have separate musical and theatrical tax credits for different parts of the state; of course, New York City’s Broadway theatre section is an exceptionally large portion of the industry.

Foregone Revenue

Unlike a tax deduction, which reduces taxable income, a tax credit reduces tax liability. In the case of the NYS incentives included in this report, the tax credits are refundable. As discussed in the previous section of the report, a refundable credit means that if the taxpayer does not have tax liability, the state refunds the difference to the taxpayer – the state pays the taxpayer the full amount of the credit regardless of whether they have state income tax liability.

The following table details the foregone revenue from the five programs. The final year of actual data from the Department of Taxation and Finance is 2019. The forecast for 2023 comes from the annual report on NYS tax expenditures.¹³

Table 4: Entertainment Industry Tax Credits Foregone Revenue

Tax Credit	2019 (actual \$/m)	2023 (forecast \$/m)
Film Production	\$400.1	\$395.0
Film Post-Production	\$11.5	\$ 25.0

¹³ New York State Department of Taxation and Finance & Division of the Budget, New York State Tax Expenditure Report, 2023, accessed online at <https://www.budget.ny.gov/pubs/archive/fy23/ex/ter/fy23ter.pdf>



Tax Credit	2019 (actual \$/m)	2023 (forecast \$/m)
Commercial	\$0.2	\$7.0
New York City Musical and Theatrical	-	\$189.0
Empire State Musical and Theatrical	-	\$8.0
TOTAL	\$411.8	\$624.0

Source: NYS Division of the Budget and Department of Taxation and Finance

The financial impact on NYS, in terms of foregone tax revenue from these five tax credits combined, is larger than for any other tax incentive. The historic investment made by the state is, over the last 10 years, over \$4.6 billion.

The following table provides a summary of other major NYS tax incentives for businesses. It should be noted that the COVID-19 Capital Costs tax credit was a one-time refundable credit for small businesses for costs incurred between January 1, 2021, and December 31, 2022.

Table 5: Business Incentive Tax Credits Most Foregone Revenue

Tax Credit	2019 (actual \$/m)	2023 (forecast \$/m)
Combined Entertainment Industry Tax Credits	\$411.8	\$624.0
COVID-19 Capital Costs	-	\$ 246.0
Excelsior Jobs Program	\$22.3	\$181.0
Brownfield Redevelopment	\$151.4	\$130.0
Investment and Employment Incentive	\$93.1	\$125.0
Rehabilitation of Historic Properties	\$64.8	\$97.0

Source: NYS Division of the Budget and Department of Taxation and Finance

The 'But For' Test

As will be noted in the benchmarking, the combined NYS credits are among the largest (in terms of foregone revenue) among the states. The state has also significantly expanded its cap on the production and post-production tax credits; from \$445 million to \$700 million through 2034. As was previously noted, the only state with a considerably larger market share within this entertainment sector is California. As a result, there is a mature industry already in place in the state, which tends to create positive agglomeration and economies of scale effects.

This raises the question as to whether the magnitude of the investment in this industry is necessary for its continued success – and whether increases in the program caps and changes to eligibility requirements will generate additional economic activity. With a mature industry, it is reasonable to question whether the credits will incent a lot of activity that would have occurred regardless, given the state's comparative advantages.

This determination was discussed in the introductory section. Some of the observations about this sector of the entertainment industry (such as its nomadic and often temporary nature) would suggest a strong case can be made that 'but for' the incentive, much of the activity would have or could have occurred elsewhere.

When also taking into consideration the economies of scale and agglomeration advantages that likely exist in California and New York, it's also quite likely that a lot of activity would occur in this industry in those states with or without the incentives.

One way to gauge the effect of the incentives is to examine economic activity when state incentive packages for the industry have changed. In the case of entertainment industry incentives, states have, at differing points



in time, initiated incentives, dramatically increased the benefits, or ended their state incentive programs. This provides a mechanism for reviewing impacts of those changes. Of course, there are a variety of exogenous variables that must also be taken into consideration. The COVID-19 Pandemic, for example, led to a dramatic reduction in industry activity in 2020, which may have also carried forward into the following year. The current writers and actors strike will, no doubt, have a similar dampening effect on industry activity for as long as it lasts.

Even when factoring in these and similar effects, the performance data related to program changes or elimination is mixed. There is evidence that ‘early adopters’ of related credits saw an increase in economic activity, particularly Georgia, where industry employment grew significantly in 2015 after the State increased its paid tax credits from \$228 million in FY2013 to an estimated \$533 million in FY2018. As noted in the Pennsylvania evaluation of their film credits, industry employment in states that eliminated their credits has continued to expand in Michigan, Florida, and Indiana and remained steady in New Jersey.¹⁴

The primary intent of the credits is to maintain and grow an industry, maintain and grow associated payroll for the industry and its suppliers, and to create and maintain employment opportunities for NYS residents. There are certainly other intended positive impacts, but the primary purpose is centered around high impact economic activity within NYS. That will be the focus of the discussion related to return on investment.

Incentive Studies in Other States

Incentives focused on the entertainment industry, particularly for motion picture, television, and related streaming services, are common among the states. Given their prevalence, it is not surprising that many evaluations of the economic and financial impact as well as return on investment of similar incentives have been conducted. The National Conference of State Legislatures (NCSL) maintains a database of tax incentive evaluations¹⁵ that have been conducted between the years 2008 and 2022. The project team identified 43 evaluations from 22 states that encompass all or parts of the NYS credits evaluated in this study.¹⁶

It is notable that there are very few evaluations that deal with the musical and theatrical industry. Given the unique nature of Broadway, it is at least understandable why no other state makes a comparable tax credit investment in that industry.

Findings in Other State Studies

Many of the other state evaluations had a broader scope that looked at issues beyond economic impact. The methods used to weigh economic impact and return on investment also vary. In general, however, most of the studies identify some basic findings that are also evident, to some degree, in this study. These include:

- The industry is nomadic, and it will shop for locations based on the available incentives.¹⁷

¹⁴ It is notable that New Jersey has reinstated a portion of its industry credits.

¹⁵ “State Tax Incentive Evaluations Database”, National Conference of State Legislatures, accessed online at <https://www.ncsl.org/fiscal/state-tax-incentive-evaluations-database>

¹⁶ A listing of the evaluations contained within the NCSL database may be found in Appendix B.

¹⁷ As was noted in the “Evaluation of Alabama’s Entertainment Industry Incentive Program...” (2017), “perhaps the worst efficiency-related outcome of state entertainment industry incentive programs is that they pit the states against each other in a high-stakes competition for highly mobile activity. This almost certainly results in a significant portion of the benefits going to out-of-state entities and does not leave a lasting economic impact in any particular filming location.”



- Because of the temporary/nomadic nature of the industry, most spending will be for labor costs, and a low proportion will be for capital investment.¹⁸
- Much of the associated spending for the incented projects will occur out of state, which lessens the expected economic impact.¹⁹
- There are indirect positive effects associated with entertainment productions, but it is difficult to attach a dollar value to them.²⁰
- As a result, the return on investment, as measured by state tax dollar collections associated with the incented projects versus the tax incentives, is generally (but not always) determined to be negative for the state.²¹
- There are also doubts that film tax credits have a major impact on employment and film production within the states. A 2018 study on California's Film Production Tax Credit 2.0 found no link between the program and film production within the state, nor did it find that other states' spending in similar programs led to a decrease in filming within California.²²

Outside Studies

Besides state evaluations, there have been many academic studies of related incentives, as well as studies funded by the Motion Picture Association and/or other groups. Among academic studies, one often-cited paper examined the effect of motion picture incentives from 1998 through 2013 on all 50 states. For a variety of reasons, it found little efficacy related to the incentives and growth of the industry in that state. Interestingly, it found that a significant factor that limited growth in other states was the industry concentration in California and New York State.²³ Another academic paper compared the economic impact of the Georgia film tax credit

¹⁸ The Rhode Island Department of Revenue "Evaluation of Motion Picture Production Tax Credits (2022) notes that "The small amount of capital investment can be explained by the fact that many of the ...recipient firms are short-term entities incorporated by out-of-state production firms for the length of the production and lacking a substantial physical presence in the state. These firms do not make typical capital investments such as owning or renting real estate for offices and production space. Furthermore, to the extent that firms with a significant, long-term physical presence in Rhode Island do take advantage of the [credit], these firms' capital investments would not be associated with a single motion picture production and therefore would not be eligible to be considered certified production expenses for the purposes of the [credit]."

¹⁹ The Georgia Department of Audits and Accounts 'Impact of the Georgia Film Tax Credit (2020)' noted that 'While the \$818 million to nonresident workers included is included in the direct labor income, it has little impact on the Georgia economy because nonresidents are expected to spend their wages in their home state. Production companies are typically required to pay for nonresidents' living expenses (e.g., hotel, transportation, per diem) while the worker is away from home. These living expenses were included in our impact analysis. As a result, nonresidents are unlikely to spend significant portions of their wages while in Georgia."

²⁰ The Alabama evaluation notes that "To be sure, certain productions can bring indirect advertising, visibility, and prestige effects that might increase tourism or general interest in an area, but those effects are exceedingly difficult to quantify."

²¹ See, for example, Independent Fiscal Office, "Pennsylvania Film Production Tax Credit, An Evaluation of Program Performance (January 2019), p. 15 for a summary of recent state RIOs from other evaluations.

²² Michael Thom, "Time to Yell 'Cut?' an Evaluation of the California Film and Production Tax Credit for the Motion Picture Industry," *California Journal of Politics and Policy* 10, no. 1, May 13, 2018, accessed online at <https://doi.org/10.5070/p2cipp10138993>.

²³ Michael Thom, "Lights, Camera but No Action? Tax and Economic Development Lessons from State Motion Picture Incentive Programs," *American Review of Public Administration*, 2018, accessed online at <https://doi.org/10.1177/0275074016651958>.



based on a report by the Georgia Department of Economic Development to the author's separate findings. In this case, the author found a significantly lower economic impact.²⁴

Motion Picture Association (MPA) studies have reached different conclusions. The MPA has funded studies in numerous states and has used those to make the case for existing, new, or expanded film tax credits.²⁵

In many instances, these studies tend to focus on different impacts and results. As was noted in a recent informational brief by the Louisiana Legislative Auditor (LLA), return on investment (and, for that matter, economic impact) can be calculated in different ways. The LLA noted, for example, that a study by the Louisiana Department of Economic Development examined return on investment (ROI) based on an increase in household income versus the cost of the credits issued; in contrast, a study by the Louisiana Department of Revenue focused on fiscal ROI – the increase in state revenue versus the cost of the credits issued.²⁶ As will be discussed in the section on return on investment, this is a crucial distinction that will drive some of the evaluation of ROI.

Entertainment Industry Tax Incentives Best Practices

As previously noted, entertainment industry tax incentives are in place in many states, and there has been extensive analysis and discussion of their economic and financial impact, as well as whether they provide a positive return on investment for the states. Many of these studies reach differing conclusions, and there are a variety of factors that may influence outcomes, including the nature of the industry within a state, the incentive design and resources (primarily foregone revenue) dedicated to it, and exogenous variables that may impact on industry activity.

There has been and continues to be much discussion around tax incentives best practices in general and in relationship to this industry. In the introduction, the incentive best practices were identified. As it relates to entertainment industry incentives:

1. ***Incentives should be discretionary.*** *In most instances, an application process enables the state government to require company disclosure of information related to eligibility criteria and enables the state to reject applications that do not meet its standards.*

In most states, these state incentives are an 'as-of-right' tax incentive, where if the taxpayer meets the eligibility requirements, they will receive the credit. Nearly all states require the taxpayer to receive a tax or other form of certificate, including New York and the benchmark states, but there is little discretion on the part of the state to not approve an application that meets the statutory requirements. This is not the case with many major state business incentives programs.

2. ***Incentives should leverage significant private capital.*** *Ideally, the incentive should leverage private investment that is at least several multiples of the state investment.*

²⁴ John Charles Bradbury, "Film Tax Credits and the Economic Impact of the Film Industry on Georgia's Economy," Kennesaw State University Policy Brief, August 15, 2019, accessed online at <https://dx.doi.org/10.2139/ssrn.3407921>.

²⁵See, for example, studies conducted by HR&A for the Motion Picture Association related to the states of New York, Massachusetts, and Louisiana, accessed online at <https://www.motionpictures.org/wp-content/uploads/2014/01/Economic-and-Fiscal-Impacts-of-the-New-York-State-Film-Production-Tax-Credit.pdf>, <https://www.motionpictures.org/wp-content/uploads/2014/01/Economic-Impacts-of-the-Massachusetts-Film-Tax-Incentive-Program-.pdf>, and <https://www.motionpictures.org/wp-content/uploads/2015/04/Economic-Impacts-of-the-Louisiana-Motion-Picture-Investor-Tax-Credit1.pdf>.

²⁶ "Motion Picture Investor Tax Credit," Louisiana Legislative Auditor, Informational Brief, May 8, 2023, pp.3-4. Accessed online at [https://app.la.la.gov/publicreports.nsf/0/703fe38c905111a5862589a6005e378a/\\$file/0000171a.pdf](https://app.la.la.gov/publicreports.nsf/0/703fe38c905111a5862589a6005e378a/$file/0000171a.pdf)



The peer state credits generally provide a credit of from 10 to 35 percent of eligible production expenses. This suggests that the multiple for private investment is in the range of less than 3 to 9 times the foregone revenue. New York is at the higher end of the range in terms of percentage of eligible production expenses that may be reimbursed, and the 'uplifts' available in New York (as well as other states) would reduce this further (although some of the limits on allowable expenses would increase it).

- 3. *Incentives should have a limited duration.* A common rationale for incentives is to assist a nascent business or industry; once they have matured, the incentive should no longer be necessary.**

This is perhaps the most problematic 'best practice' for film credits in general and for NYS in particular. In many instances, film production credits are provided year after year for productions of the same TV shows or for movie productions by the same production companies. In essence, these credits have become a subsidy for these companies and the industry, which has long been a mature part of the state economy.

A common assumption in tax incentive return on investment analysis is that future tax revenue from an industry will eventually outweigh the one-time foregone tax revenue. However, this industry and many of the companies eligible for the credits are able to take them every year, which means the foregone tax revenue is never really recouped – there must be enough economic activity each year to justify the credits. That is an enormously high hurdle, and the analysis in the chapter on economic impact discusses that.

The counterargument is that this industry is mobile, and absent the tax credit, it will locate productions in other states. This is a credible argument, and the ability of other states to attract some major productions because of their credits supports it – Georgia being a primary example. Given the unlimited nature of its credit and some other features, it is not surprising that it has attracted a growing share of the market. That said, California and New York remain the top states for this industry, and that relates to other issues that are important: including industry infrastructure, an available skilled workforce, and supply chains.

- 4. *'Smart' incentives help businesses overcome practical barriers to growth.* In particular, customized assistance for locally owned, small and medium-sized businesses or businesses located in less advantaged regions can have significant impact.**

A notable feature of the New York (and New Jersey) incentives is where it provides a larger percentage credit for productions located outside of the greater New York City region. California has a similar method for providing greater benefit to productions outside of Los Angeles. These all recognize that eligible businesses located outside of these entertainment centers do not have the same advantages (economies of scale, infrastructure, and skilled workforce capacity). These heightened incentives may help attract activity that would otherwise locate in what is already a mature industry in the New York City and Los Angeles regions.

- 5. *Incentives should be transparent.* The incentive purpose should be clearly articulated, as are eligibility requirements, and regular, detailed reporting should be required from all program recipients.**

To their credit, most state film credits require regular reporting. In the case of NYS, there is a requirement for a regular economic impact study of the program. These have also been conducted in other states. Among other strong practices, Connecticut requires a post-production audit by an independent auditing firm, and those costs cannot be claimed as an expense for tax credit purposes.



New Jersey requires an audit of expenses completed by a New Jersey licensed CPA.

6. ***Incentives should have caps.*** *To ensure the state's financial health, program dollar caps or limits should be in place. Incentive programs should also have a limited duration, with sunsets in place to require regular review of incentive performance.*

New York has an incentive cap, although it was recently raised from \$445 million to \$700 million. Other comparable states cap their programs at lesser amounts: \$330 million (California), \$100 million (New Jersey and Pennsylvania). It is notable that three of the comparable states do not have a cap, and one of those, Georgia, has foregone revenue that is generally higher than NYS. The two other states without caps, Connecticut and Massachusetts, have significantly less use of their program (at least in recent years) compared to New York.

Data and Quantifying Impact Challenges

While ROI is a primary focus of the project, the difficulties in arriving at a hard and fast calculation should be acknowledged and understood. A key challenge in nearly every program will be assigning a value to qualitative impacts, and they can be both positive and negative. In most cases, the data necessary to definitively assess the extent of positive qualitative effects is not readily available. Even where it exists, it can be assessed far differently depending on the values one places on the qualitative effects. For this exercise, the qualitative effects are presented, and where data exists to quantify these effects, they will be discussed. In most situations, policymakers will have to weigh the quantitative versus qualitative impacts and conduct their own ROI calculations to account for them.

It is also important to note that the totality of the data should be taken into consideration when assessing the level of confidence in the quantitative ROI calculations. The project team has, for each incentive, identified the data sources and noted instances where the data made available was incomplete. In most instances, the data to run the economic impact model comes from the state agencies administering the programs. It was not a part of the scope to conduct financial or other forms of audit of the data, and in some instances, confidentiality requirements prevented NYS from providing data to the project team.

With those caveats, the following provides the economic impact analysis for each of the five incentives.



Film Production Tax Credit



Executive Summary

History and Purpose

The Empire State Film Production Tax Credit is designed to encourage the production of film projects in the state. The credit was first enacted in 2004. The credit requirements have been relaxed in many areas in recent years. In the FY2024 budget, for example, the cap on the program was raised from \$420 million to \$700 million a year beginning in 2024, with \$45 million of the \$700 million allocated for the post-production tax credit. The credit percent of qualified expenses was also raised from 25 percent to 30 percent, and “above the line” wage/salary costs of producers, writers, directors, actors, and composers were made eligible for the credit to the extent those wages/salaries or other compensation do not exceed \$0.5 million per individual.

Design and Administration

Among the eligibility requirements:

- At least 75 percent of all expenses related to the production must be related to work done at a qualified production facility. All qualified expenditures related to pre-production, location production and post-production in NYS are eligible for calculating the credit.
- There are minimum budget requirements based on the location and percentage of shooting conducted on-site.
- Eligible productions include feature films, episodic television series, television pilots and presentations, television movies and miniseries.
- Qualified production costs for producers, writers, directors, actors, and composers cannot exceed 40 percent of the aggregate sum total of all other qualified production costs.

Benefits

Qualified productions receive a 30 percent refundable tax credit applicable to production costs, based on meeting certain requirements. An additional 10 percent tax credit on labor expenses and other qualified costs are applicable for certain counties and minimum production budgets of \$500,000. An additional credit of 5 percent, for 2 years, will be provided to any series that has filmed at least 6 episodes outside the state immediately prior to relocating to the state. The tax credit is refundable.

For tax credits issued on or after January 1, 2020, the amount of the credit is reduced 0.25 percent. For credits issued on or after January 1, 2023, the amount is reduced by 0.5 percent. The reduced amounts are transferred to the Empire State Entertainment Diversity Job Training Development Fund

Use

This is historically one of the most accessed NYS tax incentives. From 2013-2022, this tax credit averaged \$557.7 million of use. During this time, it experienced a compound annual growth rate (CAGR) of 12.5 percent. Use of the credit is historically tied to wages associated with the credit. This is understandable, as film production is not a capital-intensive industry.

Benchmarking

NYS is unique in having separate credits for production, post-production, commercials, and live performances; most state have one credit that is applicable to most or all of these. NYS has a program cap,



which is typical, although some states (Georgia in particular) do not have a cap. NYS is among the highest dollar value states in terms of use of these credits.

Return on Investment

The starting point for the discussion of return on investment (ROI) relates to economic activity generated by the credit. A recent industry impact study concluded that the Film Production and Post-Production Credits were responsible for over 114,000 jobs, and \$20.5 billion dollars in spending, with \$7.4 billion of that being wages and salaries for New York residents. It is notable that film budgets increased steadily between 2013 and 2019, with the average production budget growing from \$30.0 million to \$45.0 million. During the pandemic these trends accelerated, with an average budget of \$87.0 million.^{27 28}

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Film Production Credit program supported a total of 142,600 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022.

In terms of the total labor income of jobs supported by the program totaled \$8.1 billion over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$16.3 billion over the period. The average labor income per employee directly employed in this sector is nearly \$150,000 per year,

The economic activity associated with the production tax credit generated tax revenues for the State of New York, its county and local governments of approximately \$2,267.4 million. A starting point of whether the program yields a net benefit to the state of New York is the state's investment in the program and its return on that investment. Film Production Credits awarded between 2018 and 2022 represent \$3,087.5 million in foregone revenue to the State of New York and \$452.2 million in direct state taxes and total state taxes (inclusive of indirect and induced effects) of \$960.9 million. Each dollar in foregone revenue returns \$0.15 based on direct taxes to the state, or, including indirect and induced effects, a return of \$0.31 on the dollar. From the economic impact analysis, as evaluated by the program's return to the state in tax dollars, the credit is net negative.

As discussed in the overview to the report, besides the revenue impact from the economic activity, tax incentives can be a springboard to create and sustain business and industry, and that can lead to permanent economic activity and jobs that will provide substantial ongoing benefit to NYS and its residents. It is notable that the jobs that are created pay well above the average wage (as shown in table 13 related to average labor income).

The evidence of the production tax credit's impact on growing the industry is inconclusive at best. As demonstrated in the discussion of industry employment in NYS, after the credit was enacted in 2004, there was no appreciable effect on employment until 2010. While the industry did see an increase in employment thereafter, its national share of industry employment continued to decline. Regardless of the credit's impact (or lack thereof), the fact remains that the motion picture industry in NYS was a mature industry long before the initiation of the credit – at best, it may be considered a defense mechanism in the face of significant credits put in place in other states.

²⁷ "How has the cost of making a movie changed in recent years?", Stephen Follows, March 20, 2023, accessed online at <https://stephenfollows.com/how-has-the-cost-of-making-a-movie-changed-in-recent-years/>.

²⁸ Bryn Sandberg, "Rising Inflation Hits Hollywood as Production Costs 'Have Shot Through the Roof'", The Hollywood Reporter, June 2, 2021, accessed online at <https://www.hollywoodreporter.com/business/business-news/hollywood-production-costs-20211234961515-1234961515/>



Proponents of film production tax credits rely on both quantitative and qualitative impacts to support the creation, retention, or expansion of these credits. Besides the quantitative impacts discussed in the prior section, there are additional impacts that could generate additional economic activity. There is certainly some merit to these arguments.

One qualitative consideration is the increased exposure that NYS and New York City (NYC) receive based on their being locations for films and regular television series. NYC is an iconic city with many notable locations, and regular series such as 'Law and Order' and 'Sex in the City' have provided opportunities for NYC and NYS to be regularly seen on television. There are notable movies as well (including the film versions of 'Sex and City').

Some studies have attempted to attach a dollar value to this exposure, based on exposure to the state or city from movies and television making them more likely to visit, or because of the visual marketing/advertising presented in the movie or television show. These are hard to measure and hard to separate out the appearances of the state that would have occurred without the production credit. Finally, not all movies or television shows consistently depict the filming location in a favorable light. While it is likely that there is some positive branding associated with the film credit, it is not readily quantifiable.

Perhaps a more long-lasting qualitative impact relates to signaling. NYS has, with its credit expansion, its strong support from the Governor, and the extension of the expiration date, signaled to the industry its support. In the long run, this may do more to maintain its market share and role in the state and national economy than presumed tourism or advertising impacts.

Summary Findings

- The NYS production industry is a mature industry and has had a significant share of the U.S. market, although it has slightly declined compared to years prior to the credit being established in 2004.
- While the program is capped, it has recently been raised significantly and is among the higher capped annual dollar values in the U.S.

The starting point for the ROI analysis is use of the IMPLAN model to estimate economic impact.

- The Film Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues, with \$0.15 in direct tax revenue and \$0.31 for all combined state tax revenue for every \$1.00 invested.
- It is highly likely, given the existing workforce and infrastructure, that much of the economic activity would occur in NYS regardless of the credit. At the same time, this production industry is episodic and will be attracted in many instances to lower cost options.
- The jobs that are created tend to be high paying jobs, which creates enduring value. However, it is likely that the production credit will never 'go away' in the sense of leaving behind a stable, job growth industry absent the credit. In this sense, the credit is more an ongoing subsidy than a point-in-time incentive.
- Both NYS and NYC benefit from exposure in film and television, although it is not clear how much of the exposure is because of the credit. It is likely that much of the exposure would exist because of its prominence in U.S. culture. There is also no guarantee that productions receiving the credit will create an entirely positive impression of NYS and NYC.
- Based on an objective weighing of the costs and benefits, the film production credit is at best a break-even proposition and more likely a net cost to NYS.



Background

Incentive Purpose

The Empire State Film Production Tax Credit is designed to encourage the production of film projects in the state.

Legislative History

The credit was first enacted in 2004. In the FY2024 budget, the cap on the program was raised from \$420 million to \$700 million beginning in 2024, with \$45 million of the \$700 million allocated for the post-production tax credit.

The tax credit, along with the post-production tax credit, is effective for tax years beginning on or after January 1, 2004, through 2034. Also, after January 1, 2023, recipients must contribute 0.5 percent of the credit to the Empire State Entertainment Diversity Job Training Development Fund.

Effective December 1, 2002, tangible personal property used or consumed directly and predominantly in the production of a film for sale is exempt, regardless of the medium used to convey the film to the purchaser. The exemption also extends to services rendered to the exempt property and to fuel and utility services used directly and exclusively in production.

The program changes included in the 2024 budget bill included the following:

- Reduced the number of seasons that a relocated talk or variety television series must be filmed outside the state prior to its first relocated season in the state to be eligible for the credits (from 5 to 2).
- Increased the credit for qualified expenses from 25 percent to 30 percent.
- Provided an additional credit of 5 percent, for 2 years, or, to any narrative dramatic or comedy television series with a budget of at least \$1 million per episode that has filmed at least 6 episodes outside the state immediately prior to relocating to the state.
- Modified payout rules for productions to allow taxpayers to receive the credit in the taxable year of the allocation year for which the film has been allocated credit.
- Made “above the line” wage/salary costs of producers, writers, directors, actors, and composers eligible for the credit to the extent those wages/salaries or other compensation do not exceed \$0.5 million per individual; and
- Added to the definition of ‘qualified production costs’ that the aggregate total eligible qualified production costs for producers, writers, directors, actors, and composers shall not exceed 40 percent of the aggregate sum of all other qualified production costs.²⁹

Incentive Design

There are detailed eligibility requirements for the credit:

²⁹ "New York State Film Tax Credit: Program Guidelines", Empire State Development, 2023, accessed online at <https://esd.ny.gov/sites/default/files/Film-Credit-Guidelines-wAppendix-05052023.pdf>.



- At least 75 percent of all expenses related to the production must be related to work done at a qualified production facility. All qualified expenditures related to pre-production, location production and post-production in NYS are eligible for calculating the credit.
- Eligible productions include feature films, episodic television series, television pilots and presentations, television movies and miniseries.
- Beginning in January 2023 all applicants to this program must file a diversity plan listing goals and plans to hire a diverse workforce. Applicants must also record the race/ethnicity and gender of their workforce and vendors.
- The program also incentivizes the relocation of narrative dramatic or comedy television series to New York by allowing qualified productions to claim, for the first season in New York after relocation, qualified relocation costs as qualified production costs up to a cap of \$6.0 million.³⁰

Incentive Benefits

Qualified productions receive a 30 percent refundable tax credit applicable to production costs. An additional 10 percent tax credit on labor expenses and other qualified costs are applicable for certain counties and minimum production budgets of \$500,000.

Changes in 2023 enhanced some program benefits, including:

- Increased the credit for qualified expenses from 25 percent to 30 percent.
- Provided an additional credit of 5 percent, for 2 years, or, to any series that has filmed at least 6 episodes outside the state immediately prior to relocating to the state.
- Modified payout rules for productions to allow taxpayers to receive the credit in the taxable year of the allocation year for which the film has been allocated credit.

From 2015 through 2034, the program allows an additional refundable credit equal to 10 percent of the amount of wages, salaries or other compensation constituting qualified production costs paid to individuals directly employed by a qualified production company for services performed, and 10 percent of the qualified production costs (excluding wages, salaries, or other compensation) where the property and services constituting the qualified costs were performed in one of the counties listed in the next paragraph, in connection with a qualified film with a minimum budget of \$500,000 where the majority of principal photography shooting days in production were shot in one of the listed counties. This is provided that the aggregate total eligible qualified production costs constituting wages, salaries, or compensation for writers, directors, composers, producers, and performers does not exceed 40 percent of the of the aggregate sum total of all other qualified production costs.

Services must be performed, and property used in one or more of the following counties: Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, or Yates.

³⁰ "New York State Film Tax Credit Program", Empire State Development, accessed online at <https://esd.ny.gov/new-york-state-film-tax-credit-program-production>.



Qualified films where the majority of principal photography shooting days in the production are shot in Westchester, Rockland, Nassau, or Suffolk County or any of the 5 NYC boroughs must have a minimum budget of \$1.0 million. If shot in any other county in NYS, the minimum budget is \$250,000.³¹

Incentive Administration

The program is administered by ESD. ESD is required to report, on a quarterly basis, information related to use of the credits, including projected spending, hires, and estimated credits for film and post-production projects deemed eligible to participate in the program. Additional required reporting is actual spending, hires and credits issued to projects that have been completed and audited.³²

For certificates of tax credit issued on or after January 1, 2020, the Commissioner of Economic Development must reduce by 0.25 percent the amount of credit allowed to a taxpayer and report this reduced amount on a certificate of tax credit issued. For certificates issued on or after January 1, 2023, the amount is reduced by 0.5 percent allowed. By January 31 of each year, the Commissioner must report to the NYS Comptroller the total amount of these reductions during the immediately preceding calendar year. On or before March 31 of each year, the Comptroller must transfer without appropriations from the general fund to the Empire State Entertainment Diversity Job Training Development Fund an amount equal to the total reductions reported by the Commissioner in the preceding calendar year.

In 2020, the following provisions applied with respect to reductions in credit:

- The Commissioner reports to the Comptroller by June 1, 2020, the total amount of reductions between January 1, 2020, and May 15, 2020. On or before July 1, 2020, the Comptroller must make the transfer for an amount equal to the reductions in this period.
- By January 31, 2021, the Commissioner must report to the Comptroller the total amount of reductions during the period of May 16, 2020, through December 31, 2020. On or before March 31, 2021, the Comptroller must make the transfer for an amount equal to the reductions in this period.

Incentive Use

As previously noted, the film production tax credit is among the largest of the state's tax incentives. The following table provides the credits taken and the average award amount by year:

³¹ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 24: Empire state film production credit," The New York State Senate, November 3, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/24>.

³² The most recent reports may be found on the ESD website, accessed online at <https://esd.ny.gov/film-tax-credit-2022-quarterly-reports>



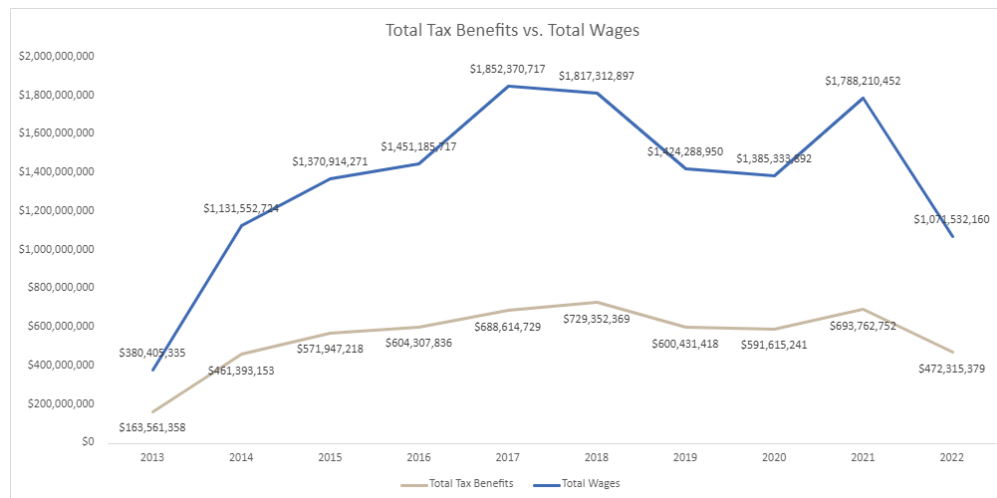
Table 6: Empire State Film Production Tax Credit – Number of Reports and Average Award Amount by Year

Year	No. of Reports	Average Award Amount	Total Tax Benefits	Total Wages	Actual Jobs Created (FTEs)
2013	57	\$2,869,498	\$163,561,358	\$380,405,335	3,962
2014	123	\$3,751,164	\$461,393,153	\$1,131,552,724	9,078
2015	151	\$3,787,730	\$571,947,218	\$1,370,914,271	11,118
2016	187	\$3,231,593	\$604,307,836	\$1,451,185,717	12,830
2017	169	\$4,074,643	\$688,614,729	\$1,852,370,717	13,362
2018	168	\$4,341,383	\$729,352,369	\$1,817,312,897	13,339
2019	157	\$3,824,404	\$600,431,418	\$1,424,288,950	10,826
2020	104	\$5,688,608	\$591,615,241	\$1,385,333,892	10,148
2021	121	\$5,733,576	\$693,762,752	\$1,788,210,452	13,993
2022	124	\$3,808,995	\$472,315,379	\$1,071,532,160	7,740
CAGR			12.5%	12.2%	

Source: Data provided by ESD

The number of jobs created associated with the credit program slowed considerably in 2022. The amount of wages and tax benefits associated with the credit tend to rise and fall together:

Figure 2: Film Production Credit Tax Benefits Versus Wages by Year



Source: Data provided by ESD

The average wage for covered jobs and the cost per job have also exhibited similar growth rates.



Table 7: Film Production Credit Average Wage and Cost of Job Created and Retained

Year	Average Wage Per Job	Average Cost of Job Created and Retained
2013	\$ 96,015	\$41,283
2014	\$124,653	\$50,828
2015	\$123,302	\$51,442
2016	\$113,104	\$47,099
2017	\$138,630	\$51,535
2018	\$136,237	\$54,677
2019	\$131,560	\$55,461
2020	\$136,515	\$58,300
2021	\$127,790	\$49,578
2022	\$138,441	\$61,023
CAGR	4.1%	4.4%

Source: Data provided by ESD

One of the notable features about the film credits in general is the percentage of associated payroll that is returned as a tax credit. In many state incentive programs (both in NYS and the rest of the U.S.), the percentage of payroll that is returned as a tax credit is generally at or under 10 percent. Because the film credits are based on total covered costs, the same benefit expressed as a percent of payroll associated with the credit would be much higher. The following table provides that percentage:

Table 8: Total Tax Benefits as a Percent of Total Wages

Year	Total Tax Benefits	Total Wages	Benefits as a Percent of Wages
2013	\$163,561,358	\$380,405,335	43%
2014	\$461,393,153	\$1,131,552,724	41%
2015	\$571,947,218	\$1,370,914,271	42%
2016	\$604,307,836	\$1,451,185,717	42%
2017	\$688,614,729	\$1,852,370,717	37%
2018	\$729,352,369	\$1,817,312,897	40%
2019	\$600,431,418	\$1,424,288,950	42%
2020	\$591,615,241	\$1,385,333,892	43%
2021	\$693,762,752	\$1,788,210,452	39%
2022	\$472,315,379	\$1,071,532,160	44%

Source: Data provided by ESD



Benchmarking

As has already been noted, NYS differs in how it has organized its tax credits for the industry. While most states have an all-encompassing tax credit that includes production and post-production for the entirety of this industry, NYS has created separate credits and requirements for different aspects of the industry. That makes comparisons somewhat difficult, as incentive use in many states is not disaggregated along the categories of the five NYS incentive programs for the industry.

Given that the category that is most applicable among all states is production tax credits, it is discussed first, followed by the more specialized NYS credits.



Table 9: Comparison of Selected State Production Tax Credits

State	Years in Effect	Data Years	Credit Value (\$m) ³³	Refundable	Cap (\$/m)	Credit Percentage	Credit Requirements
New York	2004-2034	2015-2019	\$443.9	Yes	\$655 ³⁴	30% ³⁵	At least 75% of all expenses must be done at a qualified facility. 'Above the line' wage/salary costs limited to \$500,000 per individual. ³⁶
California	2020-2025 ³⁷	2020-2022	\$125.0	No but may be carried forward or transferred	\$330 ³⁸	20%, 25% for relocating TV series or independent film.	At least 75% for expenses in California; or at least 75% of total photography days must occur wholly in California.
Georgia	2005 - *	2013-2019	\$704.4	No, but the credit is transferrable	No cap	20%	Only production companies are eligible to apply. There is no Georgia registered company requirement or requirement on percentage of work done in the state. There is a salary cap of \$500,000 per person for those paid by salary.
Connecticut	2006 -*	2017-2021	\$122.6	No, but may be carried forward or transferred. ³⁹	No cap	10% - 30% based on amount of expenses. ⁴⁰	Conduct at least 50% of principle photography days in the state; or 50% of post-production costs in the state; or expends \$1 million or more in post-production costs in the state.

³³ Average amount claimed during the noted data years.

³⁴ The program cap is \$700 million, but \$45 million is earmarked for post-production tax credits.

³⁵ As noted in the previous section, the credit can be increased by 10 percent under certain conditions.

³⁶ 'Above the line' wages and salaries are those for producers, writers, directors, actors, and composers.

³⁷ California has an updated program (4.0) that will take effect in 2025.

³⁸ Divided into categories: 40% for existing or developing TV series, 17% for TV series wishing to relocate to California, 35% for feature films, 8 percent for independent films.

³⁹ May be claimed against corporate income or insurance premium tax liability.

⁴⁰ For production total expenses or costs of \$100,000-\$500,000, 10%; \$500,001-\$1,000,000, 15%; over \$1,000,000, 30%.



State	Years in Effect	Data Years	Credit Value (\$m) ³³	Refundable	Cap (\$/m)	Credit Percentage	Credit Requirements
New Jersey	2018-2028	2019-2023	\$100.6	No, but may be carried forward or transferred. ⁴¹	\$100	30%-35% ⁴²	60% of production expenses (exclusive of post-production costs) must be incurred for services and goods purchased through vendors authorized to do business in the state; or qualified film production expenses for a single period must exceed \$1 million for services performed and goods purchased from vendors authorized to do business in the state.
Massachusetts	2005-*	2013-2017	\$68.9	90%; may also be carried forward or transferred for 5 years	No cap	25%	State production expenses must exceed 75% of the total production expenses – not including payroll expenses because of a separate credit. At least 75% of the days spent filming must take place in the state.
Pennsylvania	2004-*	2013-2020	\$62.5		\$100	25%	Production expenses must comprise at least 60 percent of the total Production Expenses.

* There is no program sunset date.

Comparison of State Production Tax Credits (continued)

State	Eligible Projects	State/Local Requirements	Other Benefits
New York	Feature films, episodic TV series, TV pilots & presentations, TV movies & miniseries. ⁴³	Qualified production costs are for tangible property or services used or performed within New York State directly and predominantly in the production of a qualified film. Where a majority of principal photography shooting days in the production of the qualified film are shot in Westchester, Rockland, Nassau, or Suffolk County or any of the five New York City boroughs shall have a minimum budget of \$1 million. A qualified film whose majority of principal photography shooting days in the production of the qualified film are shot in any other county of the state must have a minimum budget of \$250,000. Must file a diversity plan. After 1/1/23, recipients must contribute 0.5% of the credit to the Empire State Entertainment Diversity Job Training Development Fund.	An additional credit of 10 percent is available for counties outside of the Metropolitan Commuter Transportation District. An additional credit of 5% for two years to any series that has filmed at least 6 episodes outside the state immediately prior to relocating to the state.

⁴¹ May be claimed against state corporation business and gross income taxes. May be carried forward for up to seven years.

⁴² 30% for qualified production expenses within 30-mile radius of 8th Avenue/Central Park West, Broadway and West 59th Street/Central Park /south, New York, New York. All others qualify for 35%.

⁴³ Unlike other states, New York has separate credits for TV commercials and post-production work. Other states combine these in their production tax credit.



State	Eligible Projects	State/Local Requirements	Other Benefits
California	Independent and non-independent feature films, TV series, TV pilots & mini-series.		There is a 5-10% credit up-lift for out-of-zone (basically outside of LA) filming, eligible visual effects, and some local labor.
Georgia	Feature films; TV Movies, pilots, or series; commercials, music videos, and certain interactive entertainment. ⁴⁴	Companies must spend \$500,000 or more in Georgia in a single tax year during production and post-production.	There is an additional 10% tax credit earned for certain approved projects that include a five-second-long, embedded Georgia logo in the finished & commercially distributed product.
Connecticut	Feature films; TV series or mini-series; commercials, documentaries, music videos, video games.	Expenditures must be clearly and demonstrably incurred in state. Star salaries is limited to \$20 million in the aggregate and requires the compensation be subject to Connecticut personal income tax. Must provide independent certification (audit) of costs, which cannot be claimed as an expense.	
New Jersey	Feature film, TV series, TV show (including game show, award show or certain gala events ⁴⁵).	End credits must include 'Filmed in New Jersey' statement or logo. Principal photography of the project must commence within 180 days of complete application. There is a 0.5% of tax credit amount issuance fee, which must be paid prior to receipt of the tax credit.	There is an additional 5% credit for expenses incurred through a vendor whose primary place of business is in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, or Salem County. There is a 2% or 4% diversity bonus for plans to hire women and minorities for key creative positions and production crews.
Massachusetts	Feature-length film, video, digital media project, a TV series with a maximum of 27 episodes, a commercial for theatrical or TV viewing or as a TV pilot. Multiple episodes of a TV series or multiple commercials for the same client may be aggregated to qualify.	Must spend \$50,000 or more in Massachusetts qualifying costs during a consecutive 12-month period. Expenses must be directly incurred in the Massachusetts production. Film length productions must include the language "Filmed in the Commonwealth of Massachusetts" in the film credits as well as the Massachusetts Film Office logo. Half hour and one hour productions determination by the Film Office. No credit requirement for commercials.	Payroll credit of 25% of taxpayers total qualifying payroll for employees connected with the filming and production of a motion picture in the state. Qualifying payroll cannot include payments to employee whose total compensation with the production are \$1 million or more. Sales tax exemption for qualified production expenses including meals. Ineligible: Room occupancy taxes, taxes related to equipment purchases, fuel tax.

⁴⁴ Interactive Entertainment Projects are animation, special effects, and video game development.

⁴⁵ Eligible TV shows must be 22 minutes or more in length, intended for a national audience, or a television series or a television show of 22 minutes or more intended for a national or regional audience, including, but not limited to, a game show, award show, or other gala event filmed and produced at a nonprofit arts and cultural venue receiving State funding. Productions featuring news, current events, weather, and market reports or public programming, talk shows, sports events, or reality shows, a production that solicits funds, a production containing obscene material as defined in state law, or a production primarily for private, industrial, corporate, or institutional purposes are not eligible for film tax credits.



State	Eligible Projects	State/Local Requirements	Other Benefits
Pennsylvania	Feature films; TV films, TV talk or game show series, TV commercials, TV pilot, or each episode of a TV series intended as programming for a national audience.	Must include the logo and acknowledgement of support provided by the Commonwealth in the end credits. Place the Pennsylvania logo on all packaging material and hard media. No limits on 'above the line' expenses.	An additional 5% tax credit if a feature film, television film, or television series intended as programming for a national audience that meets the minimum stage filming requirements at a Qualified Production Facility.



It is evident that there are significant differences – but also many similarities between states. The following provides a discussion of these categories.

Years in effect: Most film credits have been enacted in the 21st century. Louisiana was the first state to enact this type of credit, in 1992. Some states have ended their film tax credits, and some have re-instituted (including New Jersey. New York falls into that range as well.

Data years: These vary by programs and relate to the ability of the project team to gather direct-source data, generally as reported by or estimated by the state.

Credit value: Because the data from states varies in terms of availability, the project team has generated average annual dollar values for comparison purposes. This is more useful than using a single year of activity, as there may be exogenous variables that impact one year (the example of COVID-19 or the 2023 writers and actors strikes are notable examples).

Refundable: A refundable tax credit enables the user to receive the full benefit even if they do not have tax liability to offset – the state refunds the difference between the amount of eligible credit and taxpayer liability. New York is the only state in this peer group with a fully refundable credit; Massachusetts will refund 90 percent of the value of the credit. Most other states allow the credit to be carried forward and/or transferred/sold. Of course, the present value of the credit will be diminished in the case of carrying it forward or transferring/selling it. It is notable that California's recently enacted 4.0 program (effective in 2025) will make the credits refundable.

Program Cap: New York recently raised its dollar cap from \$400 million to \$700 million (which includes \$45 million earmarked for post-production credits). This is the largest dollar cap of the four comparison states that have one. Three states do not have a cap, and Georgia has – by far – the largest amount of film credit tax expenditures.

Credit Percentage: The range of credits among comparable states is between 10 and 35 percent, and some states have a range of credits based on geography, budget or other factors. New York's 30 percent credit is at or near the top level among these states.

Credit Requirements: It is typical for states to require that a significant amount of the work or expenditures occur in the state. That helps to ensure that there will be sufficient economic activity and/or use of local labor and vendors as a trade-off for the tax benefit. While there is some nuance, New York's 75% requirements are similar to California and Massachusetts and higher than the other states.

Eligible Productions: All the states include film productions, regular TV series, TV mini-series, and movies. New York has a separate credit for commercials, and most other states fold those into this credit. There are more expansive eligible productions, such as documentaries, music videos, etc. in some but not most states. Most credits cover post-production – as noted, New York has a separate credit for that.

State and Local Requirements: New York has a higher minimum production cost requirement than other states. There are a variety of other state requirements, particularly around acknowledgement of state support. Most states have some limit on 'above the line' expenses that may be claimed for the credit. In California, New Jersey, and New York, there is a reduction in the credit when in proximity to Las Angeles or New York City.

Other Benefits. California has an additional sales tax exemption, while Massachusetts has both a sales tax exemption and a payroll tax credit (although payroll expenses cannot also be claimed on their film production credit). Many states have bonuses or uplifts based on location or types of production, as well as diversity plans.



Peer State Comparisons

California Film & TV Tax Credit Program 3.0

To date, 22 feature films have been accepted under Program 3.0 with a total credit allocation of \$250.0 million. The aggregate expenditures for the 22 feature films totaled \$2.2 billion in California expenditures, and 11 of the 22 feature films have production budgets ranging from \$87.0 million to \$191.0 million.⁴⁶ California does not have a diversity program requirement to be eligible for the credit, while New York does.

Connecticut Digital Media and Motion Picture Tax Credit

Since 2017, the program has experienced sustained use. In the most recent year with data, 2021, 30 projects received a total of \$120.0 million in credits. The projects totaled \$401.0 million in expenditures in the state.⁴⁷

- As opposed to New York's program, Connecticut allows the tax credit to be applied to documentaries and music videos.
- Connecticut does not have a diversity program requirement to be eligible for the credit, while New York does.

The Georgia Entertainment Industry Investment Act

Historically, the program has received a high amount of interest. In 2016, the program supported 69 Film projects totaling \$345.7 million in credits. Projects that received the credit had expenditures of \$1.1 billion. The program has continued to grow. In 2019 the program dispersed \$961.0 million in credits.⁴⁸

- Unlike New York's program, Georgia allows for music videos to apply for the credit.
- Georgia has no requirement on how much of a project must be filmed in the state to qualify for the credit unlike New York, which requires work to be done at a qualified production facility.
- Georgia does not have a diversity program requirement to be eligible for the credit, while New York does.

The Massachusetts Motion Picture Tax Credit Incentives

From 2013 to 2017 this credit has been claimed 701 times at a total of \$344.7 million, which has generated \$1.4 billion in spending and created or maintained 5,572 jobs. For productions filmed in calendar year 2017 that have thus far applied for film tax credits, a total of approximately \$87.4 million in tax credits were generated by 148 individual productions, creating or maintaining 1,153 jobs. In 2017, 14 feature films generated \$61.9 million in credit and the other 134 projects generated \$25.5 million in credits. In 2017, feature films claimed 71 percent of all credit, less than in a typical year. Massachusetts paid an estimated \$65.0 million in fiscal year 2017 for film tax credits both for credits issued in calendar year 2017 and prior calendar years' credits that had not yet been used.⁴⁹

- Massachusetts does not have a diversity program requirement to be eligible for the credit, while New York does.

⁴⁶ "Program Guidelines California Film and Television Tax Credit Program 3.0", California Film Commission, January 15, 2023, accessed online at <https://cdn.film.ca.gov/wp-content/uploads/2022/05/3-0-Program-Guidelines.pdf>.

⁴⁷ "Film Production Credit 14FEB2018", Connecticut State Department of Revenue Services, accessed online at <https://portal.ct.gov/DRS/Publications/Corporation-Credit-Guide/Archive-Credit-Guides/Film-Production-Credit-14FEB2018>.

⁴⁸ "Impact of the Georgia Film Tax Credit", Georgia Department of Audits and Accounts, October 2022, accessed online at <https://www.audits.ga.gov/ReportSearch/download/28730>.

⁴⁹ "Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2017", Commonwealth of Massachusetts Department of Revenue, March 1, 2022, accessed online at <https://www.mass.gov/doc/dor-report-on-the-impact-of-massachusetts-film-industry-tax-incentives-through-calendar-year-2017/download>.



New Jersey Film Tax Credit Program

Since the inception of the program in 2018, a total of 117 productions received the credit and \$502.0 million were awarded in credits. The number of claimants has consistently grown since the program's inception.⁵⁰

- New Jersey and New York also both have diversity efforts within their programs. As part of its incentive NYS requires it as part of the incentive, while New Jersey gives an additional credit based on how well the production meets its diversity targets.
- New Jersey and New York also differ in what types of production they allow to claim the tax credit. New York does not extend tax credits to reality TV, while New Jersey does, if the production invests enough money into the state.

Pennsylvania Entertainment Production Tax Credit

Since the program's inception in 2007 to Fiscal Year 2019-2020, the program received 855 applications and awarded \$818.0 million in tax credits to 509 different film productions.

- Similar to New York, Pennsylvania also has Qualified Production Facilities that will increase the credit awarded.
- Pennsylvania allows game shows to be eligible for the credit.
- Pennsylvania does not have a diversity requirement for eligibility, unlike New York.

Return on Investment

The starting point for the discussion of return on investment (ROI) relates to economic activity generated by the credit. Since its inception in 2004, the New York State Film Production Credit program has attracted 537 film and television projects, generating \$8.7 billion in economic activity for New York State. A recent industry impact study concluded that the Film Production and Post-Production Credits were responsible for over 114,000 jobs, and \$20.5 billion dollars in spending, with \$7.4 billion of that being wages and salaries for New York residents. It is notable that film budgets increased steadily between 2013 and 2019, with the average production budget growing from \$30.0 million to \$45.0 million. During the pandemic these trends accelerated, with an average budget of \$87.0 million.^{51 52}

For the impact analysis, the project team used an IMPLAN model for New York State.⁵³ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include "non-market" transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different

⁵⁰ "New Jersey Film Tax Credit Program Film Tax Credit Activity", New Jersey Economic Development Authority, February 2023, accessed online at https://www.njeda.gov/wp-content/uploads/2023/02/FilmTaxCredit_Activity_Report.pdf.

⁵¹ "How has the cost of making a movie changed in recent years?", Stephen Follows, March 20, 2023, accessed online at <https://stephenfollows.com/how-has-the-cost-of-making-a-movie-changed-in-recent-years/>.

⁵² Bryn Sandberg, "Rising Inflation Hits Hollywood as Production Costs 'Have Shot Through the Roof'", The Hollywood Reporter, June 2, 2021, accessed online at <https://www.hollywoodreporter.com/business/business-news/hollywood-production-costs-2021-1234961515-1234961515/>.

⁵³ A discussion of the IMPLAN economic impact model is provided in Appendix A.



industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Table 10 presents the program direct economic activity as reported by ESD, including the total number of tax claim reports filed, jobs created, wages paid, and tax credits received for in the period 2018 to 2022. The inputs to the model were derived from the reported job creation, aggregated into corresponding industries and group by year to account for any inflationary effects.

Table 10: Empire State Film Production Reported Direct Activity, 2018 to 2022 (Dollars in Millions)

Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$M)	Total Tax Credits Awarded (\$M)
2018	168	13,339	\$1,817.3	\$729.4
2019	157	10,826	\$1,424.3	\$600.4
2020	104	10,148	\$1,385.3	\$591.6
2021	121	13,993	\$1,788.2	\$693.8
2022	124	7,740	\$1,071.5	\$472.3
Total	674	56,047	\$7,486.7	\$3,087.5

Source: Data provided by ESD

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Film Production Credit program supported a total of 142,600 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022.

Table 11: Total Job Impacts in New York State, 2018 to 2022

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2018	13,300	10,300	10,300	33,900
2019	10,800	8,400	8,300	27,500
2020	10,100	7,800	7,800	25,800
2021	14,000	10,800	10,800	35,600
2022	7,700	6,000	6,000	19,700
Total	56,000	43,300	43,200	142,600
<i>Annual Average</i>	<i>11,180</i>	<i>8,660</i>	<i>8,640</i>	<i>28,500</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Empire State Development Corporation. The estimates have been rounded to the nearest ten.

Table 12 presents the total labor income of jobs supported by the program. Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy. The labor income of workers directly supported by the film credits totaled \$8.1 billion over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$16.3 billion over the period.



Table 12: Labor Income Impacts, 2018 to 2022 (Dollars in Millions)

Year	Direct Income	Indirect Income	Induced Income	Total Income
2018	\$1,950.2	\$1,123.8	\$799.8	\$3,873.9
2019	\$1,582.8	\$912.1	\$649.1	\$3,144.0
2020	\$1,483.6	\$855.0	\$608.5	\$2,947.0
2021	\$2,045.8	\$1,179.0	\$839.1	\$4,063.8
2022	\$1,131.6	\$652.1	\$464.1	\$2,247.8
Total	\$8,194.0	\$4,722.0	\$3,360.6	\$16,276.5
<i>Annual Average</i>	<i>\$1,638.8</i>	<i>\$944.4</i>	<i>\$672.1</i>	<i>\$3,255.3</i>

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Empire State Development Corporation.*

The average labor income per employee directly employed in this sector is nearly \$150,000 per year, as shown in Table 13.

Table 13: Average Labor Income

Year	Direct Jobs	Indirect Jobs	Induced Jobs	All Jobs
Average per Employee	\$146,000	\$109,000	\$78,000	\$114,000

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Empire State Development Corporation.*

The economic activity associated with the Empire State Film Production Tax generated tax revenues for the State of New York, its county and local governments, and the U.S. Federal Government. Across all levels of government and inclusive of the indirect and induced effects, the total revenue of the period is estimated to total \$5.6 billion.

Table 14: Total Tax Revenue Impacts, Total 2018 to 2022 (Dollars in Millions)

Tax Revenue	Direct	Indirect	Induced	Total
Total in New York State	\$1,024.5	\$536.4	\$706.5	\$2,267.4
Local Governments	\$490.3	\$248.4	\$375.6	\$1,114.3
County Governments	\$82.0	\$37.7	\$72.5	\$192.1
State of New York	\$452.2	\$250.3	\$258.4	\$960.9
Federal	\$1,693.3	\$1,017.0	\$638.4	\$3,348.8
Total to all Governments	\$2,718.8	\$1,553.5	\$1,344.9	\$5,616.2

Return on Investment to the State of New York

Whether the program yields a net benefit to the state of New York is a function of the state's investment in the program and its return on that investment. Film Production Credits awarded between 2018 and 2022 represent \$3,087.5 million in foregone revenue to the State of New York (see Table 15). For the program to provide a net positive fiscal benefit, it must return more than that investment through the taxes associated with the economic activity or other quantitative and qualitative impacts.



Table 15: Fiscal Return on Investment to New York State, Total 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Tax Revenue	Total Tax Revenue
State of New York Taxes (\$M)	\$3,087.5	\$452.2	\$960.9
Return on \$1.00 in Foregone Revenue		\$0.15	\$0.31

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.*

From the \$3,087.5 million in credits awarded, the Film Production Credit program generated \$452.2 million in direct state taxes and total state taxes (inclusive of indirect and induced effects) of \$960.9 million (see Table 15). Each dollar in foregone revenue returns \$0.15 on direct taxes to the state, or, including indirect and induced effects, a return of \$0.31 on the dollar. From an economic impact perspective, as evaluated by the program's return to the state in tax dollars, the credit is net negative.

Other Quantifiable Economic Benefits

As discussed in the overview to the report, besides the revenue impact from the economic activity, tax incentives can be a springboard to create and sustain business and industry, and that can lead to permanent economic activity and jobs that will provide substantial ongoing benefit to NYS and its residents. It is notable that the jobs that are created pay well above the average wage (as shown in Table 13 related to average labor income).

The evidence of the production tax credit's impact on growing the industry is inconclusive at best. As demonstrated in the discussion of industry employment in NYS, after the credit was enacted in 2004, there was no appreciable effect on employment until 2010. While the industry did see an increase in employment thereafter, its national share of industry employment continued to decline. Regardless of the credit's impact (or lack thereof), the fact remains that the motion picture industry in NYS was a mature industry long before the initiation of the credit – at best, it may be considered a defense mechanism in the face of significant credits put in place in other states.

But-For Test

The IMPLAN model calculates economic impacts from the activity associated with the incentive. However, the model assumes that all this activity occurs because of the incentive. In other words, 'but for' the incentive, none of the economic activity would have been generated. This is generally an unrealistic assumption. As was noted in the introduction, businesses make location decisions based on several factors, including the availability of qualified workers, that may not be influenced at all by the incentive reducing the costs of production. While there is no hard and fast method for determining the activity that would have occurred regardless of the incentive, there have been numerous studies in the economic literature that relate to this specific question.

Regardless, there is fairly strong case that can be made that the film production credit will incent some activity that would otherwise locate elsewhere. It has been documented that the film industry is nomadic, and the relatively short duration of a specific production contributes to this. Second, the industry production credits are more generous (based on total costs of production, as opposed to employment tax credits that are generally a smaller percentage of payroll, which is only one of the costs of production) that is the case in other industries, which creates even greater motivation to seek out the most generous credits.



Qualitative Impacts

Proponents of film production tax credits rely on both quantitative and qualitative impacts to support the creation, retention, or expansion of these credits. Besides the quantitative impacts discussed in the prior section, there are additional impacts that could generate additional economic activity. There is certainly some merit to these arguments.

One qualitative consideration is the increased exposure that NYS and New York City receive based on their being locations for films and regular television series. New York City is an iconic city with many notable locations, and regular series such as *Law and Order* and *Sex in the City* have provided opportunities for the city and state to be regularly seen on television. There are notable movies as well (including the film versions of *Sex and City*).

Some studies have attempted to attach a dollar value to this exposure. For example, economic impact studies conducted for the Motion Picture Association related to production tax credits in the States of Louisiana and Massachusetts used surveys and other methods to estimate its impact on tourism visitors (Louisiana) and a form of in-kind advertising for the state (Massachusetts). For Louisiana, their analysis suggested visitor spending associated with motion picture and television-induced tourism generated state tax revenues of up to \$95 million and local tax revenues of up to \$86 million.⁵⁴ For Massachusetts, their analysis suggested that visual appearances of Massachusetts landmarks in films set and shot in Massachusetts. Their analysis was that a similar number of audience impressions through national television advertising would have cost about \$70 million.⁵⁵ While there may well be benefits that flowed to the state in these specific instances, there are a number of qualifying factors that make it difficult to derive accurate estimates of these positive qualitative impacts. In fact, another study, conducted by Ernst and Young for the Motion Picture Association, admitted that the tourism and related benefits from these credits are 'can be a challenge to measure.'⁵⁶

As a starting point in the discussion of tourism-related spending, it's important to distinguish between movie placement 'but for' the credit and those that would occur in NYS regardless of the credit. Many television shows and movies are likely to use NYS and particularly NYS because of its iconic nature and not simply because of the tax credit. It is notable that the Massachusetts study attributes a few minutes of the film *Billy Ball*, filmed at and around Fenway Park, as advertising generate by the state film credit. In fact, very little of the filming was done in Boston – most of it was done in Oakland and other locations (not surprising, given that the film centered around the Oakland Athletics baseball team, and their general manager). In this case, it is highly likely that the film director and producer would have shot those scenes in Boston regardless, because they were integral to a particular scene in the movie. Separating out the visual shots on NYS that would appear with versus without the film credit is practically impossible.

It should also be noted that not all movies and television productions cast a favorable light on the filming location. A long-standing NYC television series, *Law and Order*, focuses most of its episodes around violent crime in New York City, and it is likely that image also impacts on some viewer's perspective of the city.

⁵⁴ "Economic Impacts of the Louisiana Motion Picture Investor Tax Credit", HR&A Advisors, Inc., April 6, 2015, accessed online at <https://www.motionpictures.org/wp-content/uploads/2015/04/Economic-Impacts-of-the-Louisiana-Motion-Picture-Investor-Tax-Credit1.pdf>.

⁵⁵ "Economic Impacts of the Massachusetts Film Tax Incentive Program, HR&A Advisors, Inc., May 20, 2013, accessed online at <https://www.motionpictures.org/wp-content/uploads/2014/01/Economic-Impacts-of-the-Massachusetts-Film-Tax-Incentive-Program-.pdf>.

⁵⁶ "Evaluating the Effectiveness of State Film Tax Credit Programs", Ernst & Young, 2012, accessed online at https://deadline.com/wp-content/uploads/2012/05/motion-picture-assoc-film-credit-study_120510071748.pdf



In this respect, the fact that this is an 'as-of-right' credit means that the state will not have any opportunity to determine whether the films or television series cast the state in a positive or negative light. As a result, there cannot be an assurance that the productions incented by the state are viewed as a favorable representation of the state.

Perhaps a more long-lasting qualitative impact relates to signaling. NYS has, with its credit expansion, its strong support from the Governor, and the extension of the expiration date, signaled to the industry its support. In the long run, this may do more to maintain its market share and role in the state and national economy than presumed tourism or advertising impacts.

Summary Findings

There are notable design features of the NYS incentive:

- The NYS production industry is a mature industry and has had a significant share of the U.S. market, although it has slightly declined compared to years prior to the credit being established in 2004.
- While the program is capped, it has recently been raised significantly and is among the higher capped annual dollar values in the U.S.
- The credit is refundable, where most similar credits are not.
- It requires the use of qualified film production facilities.

The starting point for the ROI analysis is use of the IMPLAN model to estimate economic impact. This primarily relies on employment, as that is a primary goal of the program.

Based on economic impact that will forego state tax revenue to incent economic activity that generates other forms of state and local government revenue:

- The Film Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues, with only \$0.15 in direct tax revenue for every \$1.00 invested. When all the taxes that flow from that direct activity, as well as all taxes from indirect and induced activities, are included, the Film Production Credit program generates \$0.31 for every dollar invested.
- It is highly likely, given the existing workforce and infrastructure, that much of the economic activity would occur in NYS regardless of the credit. At the same time, this production industry is episodic and will be attracted in many instances to lower cost options.
- The jobs that are created tend to be high paying jobs, which creates enduring value. However, it is likely that the production credit will never 'go away' in the sense of leaving behind a stable, job growth industry absent the credit. In this sense, the credit is more an ongoing subsidy than a point-in-time incentive.
- Both NYS and NYC benefit from exposure in film and television, although it is not clear how much of the exposure is because of the credit. It is likely that much of the exposure would exist because of its prominence in U.S. culture. There is also no guarantee that productions receiving the credit will create an entirely positive impression of NYS and NYC.
- Based on an objective weighing of the costs and benefits, the film production credit is at best a break-even proposition and more likely a net cost to the state.



Film Post-Production Tax Credit



Executive Summary

Purpose and History

First established in 2010, the Empire State Film Post-Production Tax Credit is designed to encourage companies to host their film projects in NYS and to help create and maintain employment within the film industry.

Incentive Design and Administration

The tax credit was first established in 2010, with \$7.0 million dedicated to it. That was increased to \$25.0 million a year for 2015 through 2024. Beginning in 2024 through 2034, the cap was raised to \$45.0 million. After January 1, 2023, recipients must contribute 0.5 percent of the credit to the Empire State Entertainment Diversity Job Training Development Fund.

Post-production costs cost incurred at qualified facilities in NYS are eligible provided they meet thresholds for the proportion of the total work on the project that occurs in state:

- For visual effects and animation, at least \$3 million or 20 percent of the total project visual effects and animation costs must take place in NYS.
- For other post-production (excluding visual effects and animation), at least 75 percent of qualified post-production must take place in NYS.

Companies claiming the Film Production Credit can also claim the Post-Production credit, just not for the same cost. Films produced outside of NYS or that are otherwise ineligible for the Film Production credit can still claim a Post-Production credit on post-production work in NYS provided the project meets the previously described thresholds.

Benefit

Qualified projects receive a refundable credit of 25 percent of qualified post-production costs incurred in NYS. An additional 5 percent credit may be available in the Post-Production Program for costs incurred in Upstate NY, outside the Metropolitan Commuter Transportation District (MCTD).

Use

The use of the credit has fluctuated in the 10 years from 2013-2022. After removing the low first two years (\$0.5 million in 2013, and \$4.0 million in 2014), the credit has had ups and downs that range between \$11.3 million and \$33.8 million.

Jobs created declined dramatically during the 2020 COVID-19 Pandemic and have not recovered to the levels prior to 2020. While wages associated with the program have grown, the total tax benefit has grown more quickly. As a result, average wage growth has not kept pace with program tax credit growth in cost.

Benchmarking

As previously noted, it is difficult to benchmark some of the component parts other than the production credit, because other states do not structure them that way. It appears that NYS has a larger average annual credit use for post-production than Connecticut or New Jersey. The New Jersey credit is similar in the benefits it provides. California approaches it differently, offering a sales and use tax exemption rather than a credit.



Return on Investment

The program has averaged 56 claimants per year since 2018 and distributed an annual average of \$22.4 million in credits. It is notable that film budgets increased steadily between 2013 and 2019, with the average production budget growing from \$30.0 million to \$45.0 million. During the pandemic these trends accelerated, with an average budget of \$87.0 million.

For the impact analysis, the project team used an IMPLAN model for New York State. The inputs to the model were derived from the reported job creation, aggregated into corresponding industries and group by year to account for any inflationary effects. Based on the IMPLAN model, the Post-Production Credit program supported a total of 5,040 total jobs (direct, indirect, and induced) in NYS between 2018 and 2022.

For the associated jobs, the total labor income of jobs supported by the program totaled \$289.3 million over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$574.7 million over the period. It is also notable that the direct jobs in particular pay well above the NYS average income.

The first step in determining whether the program yields a net fiscal benefit to NYS is to compare foregone revenue from the credit to other revenue created by the increased economic activity. In this case, NYS had foregone revenue of \$112 million for the Post-Production Credit program between 2018 and 2022, while the program generated \$16 million in direct state tax revenue, and total state tax revenue of \$33.9 million (including indirect and induced effects). The state's investment provided an overall return of \$0.14 on direct taxes to the state, and \$0.30 per dollar invested based on total state taxes.

In considering other quantifiable benefits:

- Some employment growth in New York's film industry may be attributed to this tax credit. Since the implementation of this credit in 2014, the film and video editor occupation has grown 14 percent and in 2022 was the second largest occupation in the industry, in New York, behind producers and directors.
- The wages associated with the industry are well above NYS and NYC averages.

In considering qualitative benefits:

- It is highly likely that the increased focus on Artificial Intelligence (AI) is going to increase the importance of post-production work related to visual effects and animation. In this respect, the post-production efforts are less focused on 'human' aspects of film and motion pictures and more on computing, technology, and other advanced industries.
- The significant increase in the cap on this credit provides a useful signal of support for this aspect of the industry. As AI becomes even more prominent in this and other industries, there is the potential for this credit to continue to advance market share for NYS.

Summary Findings:

- The Post-Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues. With all taxes from direct, indirect, and induced activities, it generates \$0.30 for every \$1.00 invested.
- Post-production is a growth area within the industry, and it is likely to become even more prominent because of the rise of the use of AI in production and post-production.
- The specialized skills associated with the industry are value-added and pay well above the state's average wage.



- Because most of the work is done within production facilities (as opposed to on location filming of movies or television series) there is greater permanence to the associated employment and a greater expectation that the associated economic activity will stay within the NYS economy.
- The increase in the credit, which is still a small component of the overall production tax credit, is a useful signal of support for this part of the industry.

Background

Incentive Purpose

The Empire State Film Post-Production Tax Credit is designed to encourage companies to host their film projects in NYS and to help create and maintain employment within the film industry.

Legislative History

The post-production tax credit was first established in 2010, with \$7.0 million dedicated to it. That was increased to \$25.0 million a year for the 2015 through 2025. The benefits of the production and post-production tax credit were enhanced during the 2023 legislative session (further described in program benefits). This included increasing the annual funding allocation, beginning in 2024, to \$45.0 million.

The tax credit is effective for tax years through 2034. After January 1, 2023, recipients must contribute 0.5 percent of the credit to the Empire State Entertainment Diversity Job Training Development Fund.

Incentive Design

A film production company can qualify for the post-production credit if it meets either one or both of the following thresholds:

- Visual Effects and Animation - The qualified VFX/Animation costs incurred at a qualified post-production facility in NYS must **either** meet or exceed: 20 percent of the total VFX/Animation costs paid or incurred for VFX/Animation for the qualified film at any post-production facility anywhere, or \$3.0 million.
- Post-production - The qualified post-production costs incurred at qualified facilities in NYS, (excluding cost for VFX/Animation), must meet or exceed 75 percent of the total qualified post-production costs paid or incurred in the post-production of the film at any post-production facilities.
- Fully Animated Production/Post-production - A company engaged in the production of a fully animated film is eligible for the post-production credit if the qualified production and post-production costs meet the VFX/Animation threshold of 20 percent; expenses in the Producer, Director and Deliverable Elements categories are also qualified if they meet the post-production 75 percent threshold.



Companies that are ineligible for the film production credit may qualify for the film post-production credit if costs incurred at a qualified post-production facility (generally, in NYS) meet or exceed 75 percent of the total post-production costs at any post-production facility.⁵⁷

Incentive Benefits

Production companies are eligible to receive a fully refundable credit of 25 percent of qualified post-production costs incurred in New York State (NYS). An additional 5 percent credit may be available in the Post-Production Program for costs incurred in Upstate NY, outside the Metropolitan Commuter Transportation District (MCTD). The MCTD includes New York City, Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester counties.

Incentive Requirements

For certificates of tax credit issued on or after January 1, 2020, the commissioner or economic development will reduce by 0.25 percent the amount of credit allowed to a taxpayer and the reduced amount will be reported on a certificate of tax credit issued pursuant to this section and the regulations determined by the commissioner to implement this program. These reductions are deposited into the empire state diversity job training development fund.

To be eligible for this credit, qualified companies must receive an allocation certificate issued by the New York State Governor's Office of Motion Picture & Television Development.

Incentive Use

The following table provides the credits taken and amount by year:

Table 16: Empire State Film Post-Production Tax Credit – Number of Reports and Average Award Amount by Year

Year	No. of Reports	Average Award per Report	Total Tax Benefits	Total Wages	Actual Jobs Created (FTEs)	Cost Per Job
2013	3	\$165,692	\$497,076	\$1,971,337	25	\$19,883
2014	20	\$199,724	\$3,994,488	\$9,287,075	133	\$30,034
2015	53	\$378,562	\$20,063,806	\$25,545,634	401	\$50,034
2016	36	\$315,190	\$11,346,824	\$14,321,702	212	\$53,523
2017	74	\$456,196	\$33,758,515	\$49,154,732	763	\$44,244
2018	89	\$323,844	\$28,822,077	\$40,771,834	424	\$67,977
2019	52	\$581,387	\$30,232,103	\$48,910,212	665	\$45,462
2020	34	\$415,570	\$14,129,364	\$20,030,764	221	\$63,934
2021	49	\$391,443	\$19,180,714	\$29,668,246	332	\$57,773
2022	56	\$351,383	\$19,677,436	\$28,303,842	337	\$58,390
CAGR			50.5%	34.5%		

Source: Data provided by Empire State Development

⁵⁷ "New York State Film Tax Credit: Program Guidelines", Empire State Development, 2023, accessed online at <https://esd.ny.gov/sites/default/files/Film-Credit-Guidelines-wAppendix-05052023.pdf>.



While wages associated with the program have grown, the total tax benefit has grown more quickly.

Jobs created declined dramatically during the 2020 COVID-19 Pandemic and have not recovered anywhere near the levels prior to 2020.

Average wage growth has not kept pace with program tax credit growth in cost.

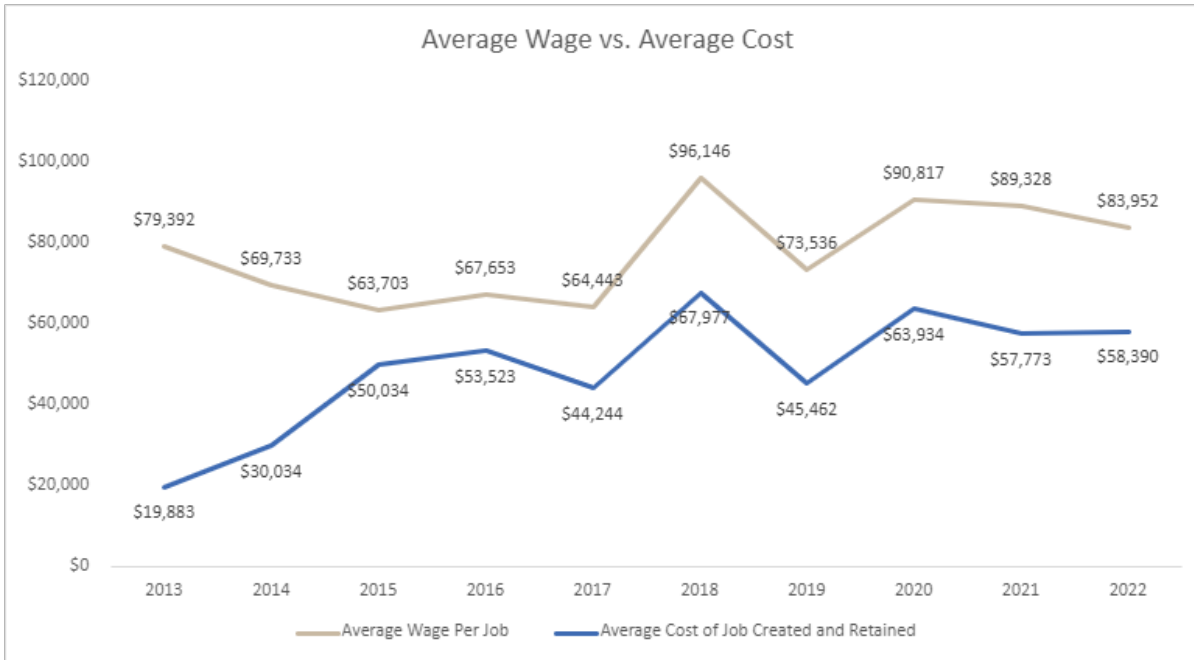
Table 17: Post-Production Credit Average Wage and Cost of Job Created

Year	Average Wage Per Job	Average Cost of Job Created and Retained
2013	\$79,392	\$19,883
2014	\$69,733	\$30,034
2015	\$63,703	\$50,034
2016	\$67,653	\$53,523
2017	\$64,443	\$44,244
2018	\$96,146	\$67,977
2019	\$73,536	\$45,462
2020	\$90,817	\$63,934
2021	\$89,328	\$57,773
2022	\$83,952	\$58,390
CAGR	0.6%	12.7%

Source: Data provided by Empire State Development



Figure 3: Post-Production Credit Average Wage Versus Average Cost per Job



Source: Data provided by Empire State Development

One of the notable features about the film credits in general is the percentage of associated payroll that is returned as a tax credit. In many state incentive programs (both in NYS and the rest of the U.S.), the percentage of payroll that is returned as a tax credit is generally at or under 10 percent. Because the film credits are based on total covered costs, the same benefit expressed as a percent of payroll associated with the credit would be much higher. The following table provides that percentage:

Table 18: Wages as a Percentage of Tax Benefits

Year	Total Tax Benefits	Total Wages	Benefits as a Percent of Wages
2013	\$497,076	\$1,971,337	25%
2014	\$3,994,488	\$9,287,075	43%
2015	\$20,063,806	\$25,545,634	79%
2016	\$11,346,824	\$14,321,702	79%
2017	\$33,758,515	\$49,154,732	69%
2018	\$28,822,077	\$40,771,834	71%
2019	\$30,232,103	\$48,910,212	62%
2020	\$14,129,364	\$20,030,764	71%
2021	\$19,180,714	\$29,668,246	65%
2022	\$19,677,436	\$28,303,842	70%

Source: Data provided by ESD.



Benchmarking

Table 19 compares the reach and impact metrics of comparable state incentive programs to that of the Empire State Post-Production Tax Credit. Because the data availability years are different for each program, the metrics were compared on an “average annual” basis. This methodology provides more useful comparisons for programs across different data years.

Table 19: Comparative Programs to the Empire State Post-Production Tax Credit

State/Program	Operating Years	Data Years	Claimants	AA of Credits Awarded	Post-Production Estimate*
New York: Empire State Film Post-Production Tax Credit	2014-2034	2015-2022	52	\$21 million	N/A
New Jersey: Film Tax Credit Program	2018-*	2018-2022	23	\$101 million	\$13 million
Pennsylvania Entertainment Production Tax Credit	2004-*	N/R	N/R	N/R	N/R
California: Teleproduction or Other Post-Production Service Exemption	1999-*	N/R	N/R	N/R	N/R
Connecticut Film, Tv & Digital Media Tax Credit	2007-*	2014-2016	4**	\$94 million	\$12 million

Notes: N/R stands for Not reported; N/A refers to New York’s production is specific to post-production and there is no need for an estimate.

*Post-production costs vary, but for a benchmark figure to develop a estimate, we used the average of a high and low range from the following online sources: [What is the average percentage of a film budget that is dedicated to post-production?](#); [Unexpected Costs to Consider in Your Production Budget](#). As a result, for this table it is estimated that on average 12.5% of production costs are dedicated to post-production.

Source(s): [CT Film, TV and Digital Media Tax Credit Activity](#); [NJ Film Tax Credit Program. Feb 2023. Film Tax Credit Activity](#)

Pennsylvania’s Entertainment Production Tax Credit has a specific component for post-production activities. Eligibility for the tax credit for post-production expenses must occur at a Qualified Postproduction Facility. Eligible expenses for postproduction activities involving traditional, emerging and new workflow techniques used in postproduction include picture, sound and music editorial, rerecording and mixing; visual effects; graphic design; original scoring; animation; musical composition; mastering; dubbing; purchase of certain music rights. Only expenses incurred at a Qualified Postproduction Facility are eligible for a tax credit under the post-production component of the program.

The New Jersey Film Tax Credit Program provides a tax credit of 30 percent of qualified film production expenses incurred after July 1, 2018, against the corporation business tax and the gross income tax for



certain expenses incurred for the pre-production, production, and post-production of certain films in New Jersey.

California provides a different type of tax incentive through its Teleproduction or Other Post-Production Service sales and use tax exemption. It is a 5.5 percent reduction in the state and local sales and use tax rate on audio and video production equipment sales where the purchased equipment must be used within the state of California and is solely for use within the tele-production or post-production processes. The state's tax expenditure report notes that for 1,103 returns claimed the exemption, and the estimated foregone revenue was \$79 million for the state and \$21 million for local governments.⁵⁸

Return on Investment

The program has averaged 56 claimants per year since 2018 and distributed an annual average of \$22.4 million in credits. It is notable that film budgets increased steadily between 2013 and 2019, with the average production budget growing from \$30.0 million to \$45.0 million. During the pandemic these trends accelerated, with an average budget of \$87.0 million.^{59 60}

The project team used the IMPLAN model to estimate economic impact.⁶¹ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

Table 20 presents the program direct economic activity as reported by ESD, including the total number of entities reporting, jobs created, wages paid, and tax credits received for in the period 2018 to 2022. The inputs to the IMPLAN model were derived from the reported job creation, aggregated into corresponding industries and group by year to account for any inflationary effects.

⁵⁸California Department of Finance, “2022-2023 Tax Expenditure Report”, California Department of Finance, accessed online at https://dof.ca.gov/wp-content/uploads/sites/352/Forecasting/Revenue_and_Taxation/TaxExpenditureReport.pdf.

⁵⁹ “How has the cost of making a movie changed in recent years?”, Stephen Follows, March 20, 2023, accessed online at <https://stephenfollows.com/how-has-the-cost-of-making-a-movie-changed-in-recent-years/>.

⁶⁰ Bryn Sandberg, “Rising Inflation Hits Hollywood as Production Costs ‘Have Shot Through the Roof’”, The Hollywood Reporter, June 2, 2021, accessed online at <https://www.hollywoodreporter.com/business/business-news/hollywood-production-costs-20211234961515-1234961515/>.

⁶¹ There is additional information on IMPLAN in Appendix A.



Table 20: Empire State Post-Production Tax Credit Reported Direct Activity, 2018 to 2022 (Dollars in Millions)

Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$M)	Total Tax Credits Awarded (\$M)
2018	89	424	\$40.8	\$28.8
2019	52	665	\$48.9	\$30.2
2020	34	221	\$20.0	\$14.1
2021	49	332	\$29.7	\$19.2
2022	56	337	\$28.3	\$19.7
Total 2018-2022	280	1,979	\$167.7	\$112.0
<i>Annual Average</i>	<i>56</i>	<i>396</i>	<i>\$33.5</i>	<i>\$22.4</i>

Source: Job Creation Reported by ESD.

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Post-Production Credit program supported a total of 5,040 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022.

Table 21: Total Job Impacts in New York State, 2018 to 2022

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2018	420	330	330	1,080
2019	670	510	510	1,690
2020	220	170	170	560
2021	330	260	260	850
2022	340	260	260	860
Total 2018-2022	1,980	1,530	1,530	5,040
<i>Annual Average</i>	<i>396</i>	<i>306</i>	<i>306</i>	<i>1,008</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.

Table 22 presents the total labor income of jobs supported by the program. Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy. The labor income of workers directly supported by the film credits totaled \$289.3 million over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$574.7 million over the period.

Table 22: Total Labor Income Impacts in New York State, 2018 to 2022 (Dollars in Millions)

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2018	\$62.0	\$35.7	\$25.4	\$123.2
2019	\$97.2	\$56.0	\$39.9	\$193.2
2020	\$32.2	\$18.6	\$13.2	\$64.1
2021	\$48.6	\$28.0	\$19.9	\$96.5
2022	\$49.3	\$28.4	\$20.2	\$97.9
Total	\$289.3	\$166.7	\$118.7	\$574.7

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.



The average labor income per employee directly employed in this sector is nearly \$150,000 per year, as shown in Table 23.

Table 23: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$146,000	\$109,000	\$78,000	\$114,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The economic activity associated with the Empire State Film Production Tax generated tax revenues for the State of New York, its county and local governments, and the U.S. Federal Government. Across all levels of government and inclusive of the indirect and induced effects, the total revenue of the period is estimated to total \$198.3 million.

Table 24: Total Tax Revenue Impacts, Total 2018 to 2022 (Dollars in Millions)

Tax Revenue (\$ Millions)	Direct	Indirect	Induced	Total
Total in New York State	\$36.2	\$18.9	\$24.9	\$80.1
Local Governments	\$17.3	\$8.8	\$13.3	\$39.3
County	\$2.9	\$1.3	\$2.6	\$6.8
State of New York	\$16.0	\$8.8	\$9.1	\$33.9
Federal	\$59.8	\$35.9	\$22.5	\$118.2
Total to all Governments	\$96.0	\$54.9	\$47.5	\$198.3

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Return on Investment to the State of New York

For a starting point of the ROI analysis, it is useful to determine if the foregone revenue from the credit is exceeded by other taxes generated by the incited economic activity. In this case, NYS had forgone revenue of \$112 million for the program between 2018 and 2022. For the program to provide a positive net benefit, it must return more than that investment through the taxes associated with the economic activity from that investment.

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the Post-Production Credit analysis, the project team also based this analysis only on the taxes generated by the job creation.

Table 25: Fiscal Return on Investment to New York State, Total 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Tax Revenue	Total Tax Revenue
State of New York Taxes (\$M)	\$112.0	\$16.0	\$33.9
Return on \$1.00 in Foregone Revenue		\$0.14	\$0.30

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

From the investment of \$112 million, the Post-Production Credit program generated \$16 million in direct state tax revenue and total state tax revenue of \$33.9 million (inclusive of indirect and induced effects). The state's investment provided an overall return of \$0.14 based on direct taxes to the state, and \$0.30 per dollar invested based on total state taxes.



Other Quantitative Economic Benefits

Some employment growth in New York's film industry may be attributed to this tax credit. Since the implementation of this credit in 2014, the film and video editor occupation has grown 14 percent and in 2022 was the second largest occupation in the industry, in New York, behind producers and directors. In 2022, the film and video editor median wage is \$42 an hour. This is considerably higher than the NYS living wage of \$21 an hour or New York City's living wage of \$25.65 an hour.

Programmatic design allowing for a certain percentage of the post-production work to take place out of state provides some flexibility within the program. Post-production is a wide-ranging task that requires the expertise of skilled artists and laborers of many different backgrounds to complete. The stipulation that 75 percent of post-production costs must be incurred at qualified facilities in NY ensures that the majority of the benefit is retained within the state of New York, while also allowing enough flexibility in a production pipeline that can involve people from all over the world. This flexibility allows the credit to be seen as worth applying for by companies.

Other Qualitative Benefits

It is highly likely that the increased focus on Artificial Intelligence (AI) is going to increase the importance of post-production work related to visual effects and animation. In this respect, the post-production efforts are less focused on 'human' aspects of film and motion pictures and more on computing, technology and other advanced industries. This affords additional opportunity and can be a part of the 'creative economy' where NYC in particular has something of a comparative advantage.

In this respect, the significant increase in the cap on this credit provides a useful signal of support for this aspect of the industry. As AI becomes even more prominent in this and other industries, there is the potential for this credit to continue to advance market share for NYS.

Finally, most of this work is done at post-production facilities rather than 'on location,' which suggests a greater opportunity for permanence and a greater likelihood that associated wages create consumption within the NYS economy. By contrast, a significant share of film production budgets is devoted to out-of-state workers (such as actors, directors, and screen writers), where there is a greater likelihood that much of their income will be spent outside of NYS.

Summary Findings

This analysis used a test of return based on the **job creation** to estimate state tax revenues:

- The Post-Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues, with only \$0.14 in direct tax revenue for every \$1.00 invested. When all the taxes that flow from that direct activity for job creation and retention as well as all taxes from indirect and induced activities, then the Post-Production Credit program generates \$0.30 for every dollar invested.
- While these are not particularly promising for NYS, there are other aspects that suggest it may be a worthwhile investment.
- Post-production is a growth area within the industry, and it is likely to become even more prominent because of the rise of the use of AI in production and post-production.



- The specialized skills associated with the industry are value-added and pay well above the state's average wage.
- Because most of the work is done within production facilities (as opposed to on location filming of movies or television series) there is greater permanence to the associated employment and a greater expectation that the associated economic activity will stay within the NYS economy.
- The increase in the credit, which is still a small component of the overall production tax credit, is a useful signal of support for this part of the industry.



Commercial Tax Credit



Executive Summary

Purpose and History

Effective for tax years beginning on or after January 1, 2007, and before January 1, 2029, the New York State Commercial Tax Credit Program is designed to increase the production of commercial filming in the state.

Incentive Design

The program targets a specific level of benefits to different regions of NYS. The two regions are:

- Downstate, which includes the counties within New York City, Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk and Westchester counties (which comprise the Metropolitan Commuter Transportation District).
- Upstate, which includes the area of NYS not covered by the Downstate region.

The threshold for qualified costs for eligible projects in the Downstate region is \$500,000. The threshold for Upstate productions is \$100,000. Up to \$7.0 million per year is allocated for qualified production companies to produce commercials, with an intent to help create and maintain jobs throughout the state. The \$7.0 million per year consists of producing commercials Downstate (\$4.0 million) and Upstate (\$3.0 million).

To be eligible, at least 75 percent of the production costs (excluding post- production costs) paid or incurred directly and predominantly in the actual filming must be incurred within the state.

Incentive Benefits

An applicant can receive a refundable credit of 30 percent on qualified production expenses in the Upstate region and 20 percent on qualified production expenses of \$500,000 in the Downstate region.

Incentive Administration

Qualified companies must receive an allocation certificate issued by the NYS Governor's Office of Motion Picture & Television Development. The NYS Department of Economic Development must submit an annual report that provides the total dollar amount of credits allocated, name and address of each qualified company allocated credits, total amount of credits allocated to each qualified company, total amount of qualified production costs and production costs for each qualified company, and the estimated number of employees, credit-eligible man hours, and credit-eligible wages for each qualified company allocated credits. It must also provide the name and address of each qualified company, the total dollar amount of credits allocated, the total amount of credits allocated to each qualified company, total qualified production costs and production costs for each qualified production company, and the estimated number of employees, credit-eligible man hours, and credit-eligible wages for each qualified company allocated credits.

Use

In 2020, the number of reports and, to a lesser extent, total amount of credit declined, but largely rebounded in 2021. The program has averaged 32 claimants per year between 2012 and 2021, distributing an annual average of \$4.1 million in credits.

Benchmarking

Most states do not have a separate program for commercials. As a result, the ability to benchmark the program is limited. While Georgia includes commercials in its all-encompassing tax credit, they break out the



number of claims and the dollar amount associated with commercials. Georgia offers an across-the-board flat tax credit of 20 percent based on a minimum investment of \$500,000 on qualified productions in Georgia. In the year with most recent data, 2016, the program supported 97 commercial projects totaling \$11.0 million in credits. Projects that received the credit totaled \$39.0 million in expenditures. While Georgia distributed more in credits, New York distributed funds to considerably more projects. In 2016, New York's Commercial Tax Credit awarded \$4.4 million in tax credits to 35 applicants, which represented 335 commercials, a considerably larger reach than Georgia's program. New York distributed an average \$13,000 in credit funds per project. Comparatively, Georgia distributed an average \$113,000 per project.

Return on Investment

For the economic impact analysis, the project team used an IMPLAN model for New York State. The inputs to the model were derived from the reported job creation, aggregated into corresponding industries and group by year to account for any inflationary effects. Based on the IMPLAN model, the Commercial Production Credit program supported a total of 2,500 total (direct, indirect, and induced) jobs in the state of New York between 2017 and 2021.

The total labor income of jobs supported by the program totaled \$143.5 million over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$285.0 million over the period. The average labor income per employee directly employed in this sector is nearly \$150,000 per year.

Whether the program yields a net benefit to the state of New York is a function of the state's investment in the program and its return on that investment. NYS had foregone revenue of \$17 million for the Commercial Production Credit program between 2017 and 2021. From that, the Commercial Production Credit program generated \$7.9 million in direct state taxes and total state taxes of \$16.8 million. The state's investment provided an overall return of \$0.46 on direct taxes to the state, but effectively broke even on the total tax return including indirect and induced effects.

Of course, this would have to be adjusted by the 'but for test' as well as other quantitative or qualitative impacts. As it relates to the 'but for test' there is evidence that the industry is nomadic, and there are few situations where a commercial has to be filmed or produced in a particular location. As a result, there is a strong likelihood that the reduced production costs associated with the credit influence business decisions.

As it relates to qualitative impacts, unlike the production tax credit, there is little opportunity for this credit to generate positive tourism or advertising impacts for the state. It is also notable that there are concerns that the commercial component of the industry may decline, as television viewing that is supported by commercials is being eroded by subscription services that rely on a different business model.

Summary Findings

- The Commercial Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues, with \$0.46 in direct tax revenue for every \$1.00 invested. However, if all the taxes that flow from that direct activity for job creation and retention, including all taxes from indirect and induced activities, then the Commercial Production Credit program generates \$0.99 for every dollar invested.
- It is likely that the commercial tax credit impacts on location decisions.
- It is unlikely that it has other qualitative benefits.
- As a result, it approximately breaks even on a return on investment basis.



Background

Incentive Purpose

The New York State Commercial Tax Credit Program is designed to increase the production of commercial filming in the state.

Legislative History

This credit is effective for tax years beginning on or after January 1, 2007, and before January 1, 2029.

Incentive Design

The program targets a specific level of benefits to different regions of NYS. The two regions are:

- Downstate, which includes the counties within New York City, Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk and Westchester counties (which comprise the Metropolitan Commuter Transportation District).
- Upstate, which includes the area of NYS not covered by the Downstate region.

The barrier to program entry is lower and the benefits higher for productions taking place in the upstate region. The rationale for the bifurcation is that use, and project size will be lower in the Upstate region. As a result, less funds are earmarked for that region out of the total \$7 million available.

The threshold for qualified costs for eligible projects in the Downstate region is \$500,000. The threshold for Upstate productions is \$100,000.

The credit is refundable. To be eligible, at least 75 percent of the production costs (excluding post-production costs) paid or incurred directly and predominantly in the actual filming must be incurred within the state.

Incentive Benefits

Up to \$7.0 million per year is allocated for qualified production companies to produce commercials, with an intent to help create and maintain jobs throughout the state. The \$7.0 million per year consists of producing commercials Downstate (\$4.0 million) and Upstate (\$3.0 million). An applicant can receive a credit of 30 percent on qualified production expenses in the Upstate region and 20 percent on qualified production expenses of \$500,000 in the Downstate region.

Incentive Administration

Qualified companies must receive an allocation certificate issued by the NYS Governor's Office of Motion Picture & Television Development.

The NYS Department of Economic Development must submit an annual report on or before December first of each year to the Governor, Director of the Division of Budget, the temporary President of the Senate, and the Speaker of the Assembly that outlines the following information for the previous calendar year:

- Total dollar amount of credits allocated, name and address of each qualified company allocated credits, total amount of credits allocated to each qualified company, total amount of qualified production costs and production costs for each qualified company, and the estimated number of



employees, credit-eligible man hours, and credit-eligible wages for each qualified company allocated credits.

- For qualified companies allocated credits within the Metropolitan Commuter Transportation District (MCTD): The name and address of each qualified company, the total dollar amount of credits allocated, the total amount of credits allocated to each qualified company, total qualified production costs and production costs for each qualified production company, and the estimated number of employees, credit-eligible man hours, and credit-eligible wages for each qualified company allocated credits.
- For qualified companies allocated credits outside of the MCTD: The same information is to be reported as listed above for companies within the MCTD.
- The number of credits reallocated to all eligible qualified companies outside of the MCTD
- May include recommendations for changes in the calculation or administration of the credit, recommendations for continuing modification or repeal of the credit, and any other information regarding this credit that may be useful and appropriate.⁶²

Incentive Use

The Commercial Tax Credit is a relatively small program, and its \$7.0 million program cap limits future growth. In 2020, the number of reports and, to a lesser extent, total amount of credit declined, but largely rebounded in 2021. The program has averaged 32 claimants per year between 2012 and 2021, distributing an annual average of \$4.1 million in credits. The program has created an average of 268 jobs per year, wages for those jobs are consistently well above average wage for New York State.

Table 26: Commercial Tax Credit Program – Number of Reports and Average Award Amount by Year

Year	Reports	Total Tax Benefits	Average Award Per Report	Actual Jobs Created (FTEs)	Total Wages	Average Wage
2012	36	\$5,827,807	\$161,884	371	\$41,420,150	\$111,760
2013	43	\$5,286,035	\$122,931	409	\$40,706,450	\$99,545
2014	33	\$4,807,337	\$145,677	325	\$44,334,133	\$136,211
2015	34	\$3,588,276	\$105,538	321	\$39,331,514	\$122,512
2016	35	\$4,064,595	\$116,131	272	\$33,638,928	\$123,571
2017	33	\$2,617,914	\$79,331	247	\$30,801,742	\$124,667
2018	30	\$2,918,125	\$97,271	209	\$26,720,213	\$127,580
2019	36	\$4,247,187	\$117,977	238	\$31,398,558	\$131,784
2020	14	\$3,167,916	\$226,280	115	\$15,777,861	\$137,672
2021	27	\$4,081,591	\$151,170	172	\$25,584,664	\$148,666
Total	321	\$40,606,783	\$126,501	2,680	\$329,714,213	\$123,039

Source: Data provided by ESD.

⁶² “Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 28: Empire state commercial production credit,” The New York State Senate, May 12, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/28>.



While the benefits may be higher in the Upstate Region (and the requirements reduced), virtually all of the activity still occurs in the Downstate Region, as shown in Table 27 by total project spending (of which roughly 40 percent is wages). Credit allocation was not available by region.

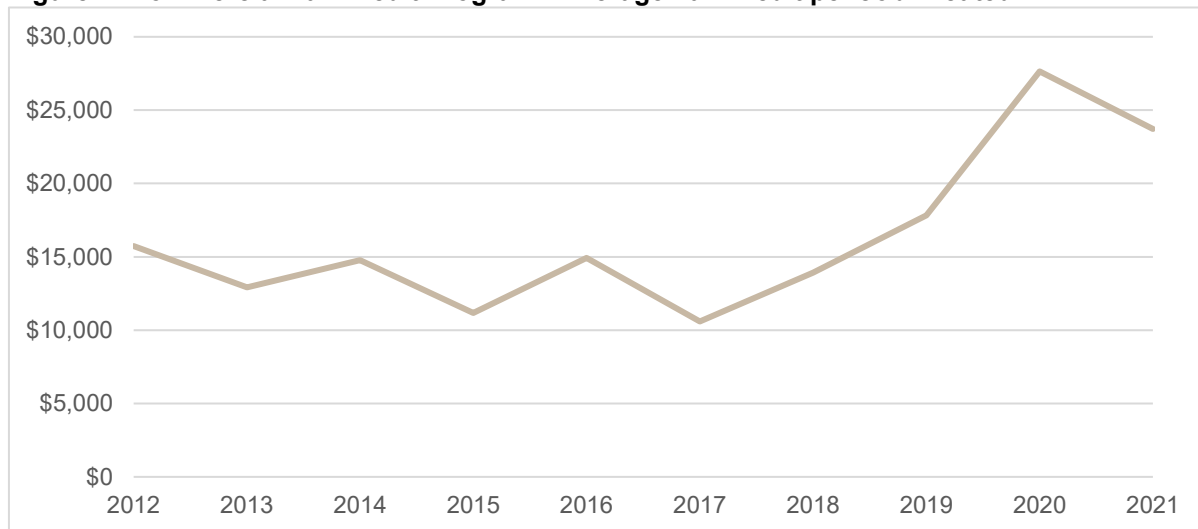
Table 27: Commercial Tax Credit Program – Spending by Year, Upstate v Downstate

Year	Downstate Spending	Upstate Spending	Total Spending
2012	\$99,409,093	\$1,067,652	\$100,476,745
2013	\$97,537,248	\$1,208,208	\$98,745,456
2014	\$106,807,261	\$738,207	\$107,545,468
2015	\$95,045,498	\$1,027,209	\$96,072,707
2016	\$78,958,785	\$738,573	\$79,697,358
2017	\$70,849,819	\$709,591	\$71,559,410
2018	\$66,569,206	\$982,248	\$67,551,454
2019	\$70,673,051	\$1,742,829	\$72,415,880
2020	\$38,439,478	\$286,697	\$38,726,175
2021	\$64,348,706	\$1,730,880	\$66,079,586
Total	\$788,638,145	\$10,232,094	\$798,870,239

Source: Data provided by ESD.

The average cost per job created has ranged from approximately \$12,000 to \$28,000.

Figure 4: Commercial Tax Credit Program - Average Tax Credit per Job Created



Source: Data provided by ESD.



Benchmarking

As previously noted, most states do not have a separate program for commercials. As a result, the ability to benchmark the program is limited. While Georgia includes commercials in its all-encompassing tax credit, they do break out the number of claims and the dollar amount associated with commercials.

Table 28 compares the reach and impact metrics of comparable state incentive programs to that of the Empire State Commercial Tax Credit. Since the data availability years are different for each program, the metrics were compared on an “average annual” (AA) basis. This makes comparing the programs across different data years possible.

Table 28: Comparative Programs

State/ Program	Operational Years	Data Years	AA Claimants	AA Value of Credits Claimed
New York: Commercial Tax Credit	2006-	2010-2021	33	\$4.6 million
Georgia: Film, Television, and Digital Entertainment Tax Credit	2005-	2016	97	\$11.0 million

Source: Georgia: Film, Television, and Digital Entertainment Tax Credit⁶³

Both the NYS and Georgia credits were enacted and remain in effect without a program sunset date.

The Georgia Entertainment Industry Investment Act offers an across-the-board flat tax credit of 20 percent based on a minimum investment of \$500,000 on qualified productions in Georgia. Eligible productions include Feature Films, Television Movies, Pilots or Series, Commercials, Music Videos, and Certain Interactive Entertainment Projects (Animation, Special Effects and Video Game Development). A 10 percent Georgia Entertainment Promotion (GEP) uplift can be earned by including an embedded Georgia logo on approved projects and a link to ExploreGeorgia.org/Film on the project’s landing page.

Historically, the program has received a high amount of interest. In the year with most recent data, 2016, the program supported 97 commercial projects totaling \$11.0 million in credits. Projects that received the credit totaled \$39.0 million in expenditures.⁶⁴

While Georgia distributed more in credits, New York distributed funds to considerably more projects. In 2016, New York’s Commercial Tax Credit awarded \$4.4 million in tax credits to 35 applicants, which represented 335 commercials, a considerably larger reach than Georgia’s program. New York distributed an average \$13,000 in credit funds per project. Comparatively, Georgia distributed an average \$113,000 per project.

While Georgia’s approach allows for ease of access to applicants in the media production industry, NYS’s approach allows for easier ability to separate incentives by sub-industry for applicants to more easily distinguish incentives targeted at their specific sub-industry. Additionally, this allows for easier understanding and ability to tier and target benefits that are specifically designed to the needs of each sub-industry within media production.

⁶³ “Georgia Film Tax Incentives and Applications”, Georgia Department of Economic Development, 2023, accessed online at <https://www.georgia.org/industries/film-entertainment/georgia-film-tv-production/production-incentives>.

⁶⁴ “Impact of the Georgia Film Tax Credit”, Georgia Department of Audits and Accounts Performance Audit Division, January 2020, accessed online at <https://www.audits.ga.gov/ReportSearch/download/23536>.



This difference in approach may be a reason for the difference in outcomes. By creating a program that is specifically targeted to commercials, it appears that NYS has positioned its incentive to have a wider reach and support more projects on with less burden on the state.

Return on Investment

Table 29 presents the program direct economic activity as reported by ESD, including the total number of tax claim reports filed, jobs created, wages paid, and tax credits received for in the period 2017 to 2021. For the impact analysis, the project team used an IMPLAN model for New York State.⁶⁵ The inputs to the model were derived from the reported job creation, aggregated into corresponding industries and group by year to account for any inflationary effects.

Table 29: Commercial Tax Credit Direct Economic Activity, 2017 to 2021

Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$M)	Total Tax Credits Awarded (\$M)
2017	33	247	\$30.8	\$2.6
2018	30	209	\$26.7	\$2.9
2019	36	238	\$31.4	\$4.2
2020	14	115	\$15.8	\$3.2
2021	27	172	\$25.6	\$4.1
Total	140	981	\$130.3	\$17.0

Source: Job Creation Reported by Empire State Development Corporation

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Commercial Production Credit program supported a total of 2,500 total (direct, indirect, and induced) jobs in the state of New York between 2017 and 2021.

Table 30: Total Job Impacts in New York State, 2017 to 2021

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2017	250	190	190	630
2018	210	160	160	530
2019	240	180	180	610
2020	110	90	90	290
2021	170	130	130	440
Total	980	760	760	2,500
<i>Annual Average</i>	<i>196</i>	<i>150</i>	<i>150</i>	<i>500</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.

⁶⁵ A discussion of the IMPLAN economic impact model is provided in Appendix A.



Table 31 presents the total labor income of jobs supported by the program. Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy. The labor income of workers directly supported by the film credits totaled \$143.5 million over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$285.0 million over the period.

Table 31: Labor Income, 2017 to 2021 (Dollars in Millions)

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2017	\$36.1	\$20.8	\$14.8	\$71.8
2018	\$30.6	\$17.6	\$12.6	\$60.8
2019	\$34.8	\$20.1	\$14.3	\$69.2
2020	\$16.8	\$9.7	\$6.9	\$33.3
2021	\$25.2	\$14.5	\$10.3	\$50.0
Total	\$143.5	\$82.7	\$58.8	\$285.0
<i>Annual Average</i>	<i>\$28.7</i>	<i>\$16.5</i>	<i>\$11.8</i>	<i>\$57.0</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The average labor income per employee directly employed in this sector is nearly \$150,000 per year, as shown in Table 32.

Table 32: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$146,000	\$109,000	\$78,000	\$114,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The economic activity associated with the Commercial Production Credit Program generated tax revenues for the State of New York, its county and local governments, and the U.S. Federal Government. Across all levels of government and inclusive of the indirect and induced effects, the total revenue of the period is estimated to total \$98.3 billion.

Table 33: Total Tax Revenue Impacts, Total 2017 to 2021 (Dollars in Millions)

Tax Revenue	Direct	Indirect	Induced	Total
Total in New York State	\$17.9	\$9.4	\$12.4	\$39.7
Local Governments	\$8.6	\$4.4	\$6.6	\$19.5
County	\$1.4	\$0.7	\$1.3	\$3.4
State of New York	\$7.9	\$4.4	\$4.5	\$16.8
Federal	\$29.7	\$17.8	\$11.2	\$58.6
Total to all Governments	\$47.6	\$27.2	\$23.6	\$98.3

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Other Quantifiable Economic Benefits

The direct average wages associated with the credit are significantly higher than the NYS average. While many of the projects associated with the production tax credit will have a significant share of the budget dedicated to workers that are likely from out-of-state, it is more likely that the workers associated with this credit are NYS-based. This creates greater opportunity for benefit from the program spending.



Return on Investment to the State of New York

As a starting point, whether the program yields a net benefit to the state of New York is a function of the state's investment in the program and its return on that investment. Empire State Development Corporation invested \$17 million for the Commercial Production Credit program between 2017 and 2021.

Table 34: Fiscal Return on Investment to New York State, Total 2017 to 2021

Total State Costs and Return (2017-2021)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State Taxes (\$M)	\$17.0	\$7.9	\$16.8
Return on \$1.00 in Foregone Revenue		\$0.46	\$0.99

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Empire State Development Corporation.*

From the investment of \$17 million, the Commercial Production Credit program generated \$7.9 million in direct state taxes and total state taxes of \$16.8 million, based on economic activity. The state's investment provided an overall return of \$0.46, but it effectively broke even on the total tax return including indirect and induced effects.

Other Qualitative Economic Benefits

As it relates to qualitative impacts, unlike the production tax credit, there is little opportunity for this credit to generate positive tourism or advertising impacts for the state. It is also notable that there are concerns that the commercial component of the industry may decline, as television viewing that is supported by commercials is being eroded by subscription services that rely on a different business model.

Summary Findings

This analysis used a test of return based on the **job creation** to estimate state tax revenues:

- The Commercial Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues, with \$0.46 in direct tax revenue for every \$1.00 invested. However, if all the taxes that flow from that direct activity for job creation and retention, including all taxes from indirect and induced activities, then the Commercial Production Credit program generates \$0.99 for every dollar invested.
- It is likely that the commercial tax credit impacts on location decisions.
- It is unlikely that it has other qualitative benefits.
- As a result, it approximately breaks even on an ROI basis.



New York City Musical and Theatrical Tax Credit



Executive Summary

Purpose and History

The New York City (NYC) Musical and Theatrical Tax Credit Program's goal is to jump start the entertainment industry and support tourism in NYC, by offsetting some of the additional costs associated with producing a show as New York's economy recovers from the Covid-19 pandemic. The credit was originally effective for tax years beginning on or after January 1, 2021, and before January 1, 2024. In 2024, the credit was extended for applying for the credit to June 30, 2025.

Design

Productions must occur in a qualified facility in NYC. Qualifications are primarily based on the location of the facility, with a Level 1 facility being in Manhattan containing 500 seats or more, and a Level 2 facility being in Manhattan containing 100 seats or more. There is a production cap of \$3 million for Level 1 facilities and \$350,000 for Level 2 facilities.

- For both levels, live theatrical productions must constitute 75 percent or more of the facility's gross receipts.
- Recipients must implement a NYS-approved diversity and arts jobs training plan and take actions to increase access to productions for low-income residents.
- If a production generates more than two times more revenue than their ongoing production costs after receiving a tax credit through the New York City Musical and Theatrical Production Tax Credit program, it will be required to contribute to the New York State Council for The Arts Cultural Program Fund, up to 50 percent of the tax credit.

Originally the program had a total expenditure cap of \$100.0 million and was scheduled to end March 31, 2023. It was expanded to \$200.0 million in 2022 and to \$300.0 million in 2023. It is now scheduled to sunset in 2025.⁶⁶

Benefit

Qualified production companies can receive tax credits of 25 percent of qualified production expenditures, up to \$3 million per production for Level 1 facilities and \$350,000 for Level 2 facilities.

Use

The credit has experienced growth once beyond the 2020 COVID-19 Pandemic. Not surprisingly, in 2021, the project hires grew by about six times and actual jobs created (based on FTEs) by about five times more than 2020. Across the board, the program metrics increased substantially in 2021.

Return On Investment

Based on economic impact, the credit does not provide a positive return on investment. However, given the importance of the industry for tourism and related businesses, and the short-term nature of the credit, it is likely that it is a reasonable return on investment for NYS.

Summary Findings

⁶⁶ Philip Boroff, "New York Extends \$3 Million Broadway Tax Credit; Disney's 'Aladdin' Approved", Broadway Journal, May 8, 2023, accessed online at <http://broadwayjournal.com/new-york-extends-3-million-broadway-tax-credit-disneys-aladdin-approved/>.



- The New York City Musical and Theatrical Production Credit program does not provide a positive return to the state in terms of direct, indirect and induced activities, where it generates \$0.23 for every dollar invested.
- There are, however, significant economic impacts related to the specific nature of this industry and its impact on NYS. These start with the tourism impact of Broadway, where nearly half of ticket sales are to those outside of NYC and its suburbs. Those sales import revenue and economic activity that is largely not captured by the IMPLAN model.
- Beyond ticket sales, there is a further relationship with restaurants, hotels, and related sales, and they are also not entirely captured within the model.
- Finally, the value of Broadway as an iconic institution cannot be dismissed. Assistance that assures its existence as the center of theatre in the U.S. is a qualitative benefit to NYS and NYC.
- Based on this set of circumstances, the project team believes this to be a credit with at least the expectation of a positive return on investment.

Background

Incentive Purpose

The New York City (NYC) Musical and Theatrical Tax Credit Program's goal is to jump start the entertainment industry and support tourism in NYC, by offsetting some of the additional costs associated with producing a show as New York's economy recovers from the Covid-19 pandemic. In essence, it provides similar support for productions in NYC as the Empire State Musical and Theatrical Production Tax Credit does for the rest of the state.

Legislative History

The credit was originally effective for tax years beginning on or after January 1, 2021, and before January 1, 2024.

In the 2024 budget bill, the following changes were made to the credit:

- Extended the current \$3.0 million per production credit cap to productions that have their first performance prior to January 1, 2024.
- Increased the aggregate program cap by an additional \$100.0 million, to \$300.0 million.
- Ensured the obligation of producers to make contributions to the New York State Council on the Arts Cultural Programs Fund continues until December 31, 2027.
- Extended the deadline for applying for the credit an additional 2 years, from June 30, 2023, to June 30, 2025.
- Revised the per production cap, which is now \$3.0 million per production for Level 1 facilities and \$350,000 for Level 2 facilities.



Incentive Design

Productions must occur in a qualified facility in NYC. Qualifications are primarily based on the location of the facility, with a Level 1 facility being in Manhattan containing 500 seats or more, and a Level 2 facility being in Manhattan containing 100 seats or more.

The credit is refundable. Eligibility to take the credit is for the period starting on the production start date and ending on the earlier of the date the qualified production expended sufficient expenditures to reach its credit cap, September 30, 2025, or the date the qualified production closes. The final tax year for the credit ends on January 1, 2026.⁶⁷

Incentive Benefits

Qualified production companies can receive tax credits of 25 percent of qualified production expenditures, up to \$3 million per production for Level 1 facilities and \$350,000 for Level 2 facilities. Originally the program had a total expenditure cap of \$100.0 million and was scheduled to end March 31, 2023. It was expanded to \$200.0 million in 2022 and to \$300.0 million in 2023. It is now scheduled to sunset in 2025.⁶⁸

Incentive Use

The credit has experienced growth once beyond the 2020 COVID-19 Pandemic. Not surprisingly, in 2021, the project hires grew by about six times and actual jobs created (based on FTEs) by about five times more than 2020. Across the board, the program metrics increased substantially in 2021.

There has been fluctuation in the average wage rates, and it is likely that the COVID-19 Pandemic led to the significant reduction in 2020. It is notable that there was a rebound in 2021.

Due to how the program is structured, larger shows, which typically hire more employees, receive a higher share of the tax credit. One criticism of the program is that it does not take the need of the production into account. Shows that would have secured funding regardless of the credit's existence benefit the same as shows that might not have. There is no publicly available data on how much of the \$300.0 million has been spent, and on what shows. Also, there is no publicly available data on shows that have been successful enough to start paying into the Arts Cultural Program Fund.

⁶⁷ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 24-C: New York city musical and theatrical production tax credit," The New York State Senate, June 23, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/24-C>.

⁶⁸ Philip Boroff, "New York Extends \$3 Million Broadway Tax Credit; Disney's 'Aladdin' Approved", Broadway Journal, May 8, 2023, accessed online at <http://broadwayjournal.com/new-york-extends-3-million-broadway-tax-credit-disneys-aladdin-approved/>.



Benchmarking

The two New York credits have similar goals and objectives and differ in the part of the state where they may be used, with the NYC credit limited to the counties that make up the MCTD, and the Empire State credit available in the remaining counties. Because all of the other peer state programs are available statewide, the two NYS programs are included in the benchmarking.

The industry was hit hard by COVID-19 because of the inability to host live performances. There has been steady growth post COVID, but the market size has not yet reached pre-pandemic levels with the market size forecasted to be \$8.7 million for 2023. In a study of 143 performing arts organizations done by TRG Arts, they found that tickets sold were down by 40 percent in 2021-2022. Even so, Broadway experienced continuous growth in weekly attendance to shows during 2022. Attendance in the 2018-2019 season was close to 15 million, plummeting to 7 million in 2021-2022. Now in 2022-2023, attendance has already reached 12.2 million.

For the benchmarking, because the data availability years are different for each program, the metrics were compared on an “average annual” (AA) basis. This methodology makes comparing the programs across different data years possible.

Table 35: Comparative Programs

State/ Program	Operational Years	Data Years	AA Value of Credits Claimed (in millions)	AA Jobs Created	Expenditures Generated by the Credit (in millions)
Empire State Musical and Theatrical Tax Credit	2015*	2015-2022	\$2.6	401	\$8.9
New York City Musical and Theatrical Production Tax Credit	2021-2025				
Louisiana: Musical and Theatrical Production Income Tax Credit	2007-2025	2015-2018	\$6.0	341	\$25.0
Illinois: Live Theatre Production Tax Credit	2012-2029	N/R	N/R	615	\$9.0
Rhode Island: Musical and Theatrical Production Tax Credits	2014*	2021-2023	\$0.9	N/R	N/R
Maryland: Theatrical Production Tax Credit	2022-2027				

* Is currently running with no scheduled sunset date.

The Rhode Island Musical and Theatrical Production Tax Credit⁶⁹ equates to 30 percent of the total production, performance, and transportation (tangible property of the production and persons moved to and from the state) expenditures for qualified theater productions. The minimum production budget is \$100,000 and the maximum credit allowed is \$5 million per production. The maximum amount of credits that may be allocated in a tax year is \$15 million.⁷⁰

⁶⁹ “Musical and Theatrical Production Tax Credits”, Rhode Island General Laws, 2022, accessed online at <http://webserver.rilin.state.ri.us/Statutes/title44/44-31.3/44-31.3-2.HTM>.

⁷⁰ “2022 Rhode Island Tax Expenditure Report”, State of Rhode Island Department of Revenue January 14, 2022, accessed online at <https://dor.ri.gov/revenue-analysis/reports>.



Qualified expenses include but are not limited to design, construction and operation, including sets, special and visual effects, costumes, wardrobes, make-up, accessories; costs associated with sound, lighting, staging, payroll, transportation expenditures, advertising and public relations, rentals, per diems, accommodations, and facility expenses.

The credit can be carried forward for the following three tax years. The credit may also be transferred by sale or other method to any individual or entity. That assignee also has the same rights to use or assign the credits as the assignor.

*The Louisiana Musical and Theatrical Production Income Tax Credit*⁷¹ provides different transferrable income tax credits, with a \$10.0 million program cap and \$1.0 million project cap, for musical or theatrical productions and facilities. \$5.0 million is reserved for non-profit organizations. The following are the types of credits available:

- Qualified production expenditures made from investments in a state-certified musical or theatrical production.
- An additional 7 percent of credit can be gained for payroll expenditures to Louisiana residents and a credit of 0.000072 percent for employing college, university, and vocational-technical students.
- The construction, repair, or renovation of facilities related to productions and performances. For state-certified musical or theatrical infrastructure projects the amount of the credit is shown below.

Table 36: Louisiana Musical and Theatrical Production Tax Credit on Base Investment

Investment Size	Credit on base investment		
	Before July 1, 2015	Between July 1 2015-2017	After July 1 2017
\$100,000>\$300,000	10%	7.2%	7%
\$300,000>\$1,000,000	20%	14.4%	14%
>\$1,000,000	25%	18%	18%

NYS’s program has a narrower scope. Like Rhode Island, eligibility for the Louisiana credit includes infrastructure costs. Louisiana’s maximum credit, including additional payroll credits, of 25 percent is the same as New York’s flat rate of 25 percent.

The credit is applicable for the 12 months prior to and after certification. Once approved, the Office of Entertainment Industry Development (OEID) issues the initial certification letter. Expenses for the project are then tracked and reported to a CPA for review. The results of the review are then relayed to OEID for final verification for the tax credit.

New York’s program does not require a fee for verification. However, overall required documentation for reporting seems similar. Both states require payroll and general ledger reports indicating how money is being spent.

⁷¹ “Musical and Theatrical Production Income Tax Credit”, Louisiana State Legislature, 2013, accessed online at <https://www.legis.la.gov/Legis/Law.aspx?d=453224>; “Incentives”, Louisiana Department of Entertainment, accessed online at <https://www.louisianaentertainment.gov/live/live-performance-production-program#:~:text=Louisiana>.



*The Illinois Live Theatre Production Tax Credit*⁷²⁷³ is a transferable tax credit of 20 percent up to \$100,000 per worker to qualified theatre productions taking place in Illinois. Eligible applicants are theater producers, owners, licensees, operators, or presenters. Like other similar programs, a certificate must be issued by the Department of Commerce and Economic Opportunity, the administering agency.

A production must run longer than 8 weeks with at least 6 performances per week, be pre-Broadway, which means that it is scheduled for Broadway's Theater District in New York City within 12 months after its Illinois presentation, or a commercial Broadway tour that plays in more than 2 other markets outside of Illinois within 12 months of its shows in state.

- Theaters of at least 1,200 seats are required for eligibility.
 - New York requires less seat capacity for eligible theatres, but Illinois does not require a minimum revenue ratio for ticket sales.
- In total, \$500,000 can be awarded per accredited production per year. If the recipient of the credit only receives a portion of the award they were entitled to, they cannot carry the award to future tax years.
 - With no project cap in New York, Illinois's project cap is half of Louisiana's.
 - While Illinois explicitly states there is no carryforward, New York does not.
- Reports should include the effectiveness of the program (I.E., jobs created or retained), revenue impact of the program, and the overall success of the program.
- The Live Theatre Production Tax Credit brought \$72.0 million spending to Illinois and created or maintained 4918 jobs. The bulk of spending yearly is brought in by Broadway in Chicago with the rest of spending done for commercial advertising by larger companies. Broadway in Chicago made up 38.9 percent of spending by those who claimed the credit in 2022. Hires are typically short-term assignments, and some residents may have worked on more than one project, therefore the numbers do not represent unique individuals.

Benchmarked Program Comparisons

- Generally, each program appears to be structured similarly with slight variations in eligibility. Theaters are certified and eligible expenses broadly include production and performance-related expenses. Louisiana and Rhode Island allow for additional infrastructure-related expenses.
- All programs require a certification for the theater, production, or project to be eligible. New York requires certification for both the theater and the production, whereas Louisiana only requires a certification for the project itself.
- The Empire State Musical and Theatrical Production Credit program has less funding than peer state programs, with no clear program cap for Illinois's program. Comparison programs contain a project minimum, cap, or both. There appears to be no project minimum or cap for the NYS program.

The Maryland Theatrical Production Tax Credit is a refundable credit of 25 percent of qualified production costs incurred within the State by Theatrical Production entities. To qualify, estimated total direct production costs incurred in Maryland must exceed \$100,000. The maximum award is \$2.0 million for a single Theatrical

⁷² "Live Theater Production Tax Credit Act", Illinois General Assembly, June 1, 2012, accessed online at <https://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=003500170HArt%2E+10&ActID=3392&ChapterID=8&SeqStart=100000&SeqEnd=1500000>.

⁷³ "Illinois Live Theater Production Tax Credit Program", Illinois Department of Commerce and Economic Opportunity, accessed online at <https://dceo.illinois.gov/whyillinois/film/live-theater-tax-credit.html>.



Production. As of now, no individual or corporation has applied for this tax credit.⁷⁴ The intended impact is to attract theatrical productions, both touring and pre-Broadway, to the state.

New York City Musical and Theatrical Tax Credit Program

Table 37: Comparative Programs

State/ Program	Operational Years	Funding Type	Maximum Allowable Disbursement	Firms Eligible to Receive Benefit
New York: New York City Musical and Theatrical Production Tax Credit	2021-2025	Tax Credit	\$ 3 million per show	Musical and Theatrical Production Companies in Manhattan
Maryland: Theatrical Production Tax Credit	2022-2027	Tax Credit	\$2 million per show	Theatrical Production Companies

- New York and Maryland’s programs are very similar.
 - They provide the same percentage of expenses as a tax credit, though New York allows up to \$1.0 million more to be dispersed to each production.
- The difference between the programs is intention.
 - New York City is a well-established destination and hub for large scale theatrical productions.
 - Maryland is not trying to compete in that arena, but it is trying to subsidize touring productions, or pre-Broadway runs of shows, to its state.

Return on Investment

Table 38 presents the program direct economic activity from the New York City Musical and Theatrical Production Tax Credit as reported by ESD, including the total number of tax claim reports filed, jobs created, wages paid, and tax credits received for in the period 2021 to 2023. For the impact analysis, the project team used an IMPLAN model for New York State.⁷⁵

IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

⁷⁴ “Theatrical Production Tax Credit”, Maryland Department of Commerce, accessed online at <https://commerce.maryland.gov/fund/theatrical-production-tax-credit>.

⁷⁵ A discussion of the IMPLAN economic impact model is provided in Appendix A.



- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

The inputs to the model were derived from the reported job creation, aggregated into corresponding industries and group by year to account for any inflationary effects.

Table 38: New York City Musical and Theatrical Production Tax Credit Direct Activity, 2021 to 2023 (Dollars in Millions)

Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$M)	Total Tax Credits Awarded (\$M)
2021	1	65	\$3.1	\$0.9
2022	23	3,864	\$188.1	\$55.0
2023*	4	1,334	\$44.9	\$11.3
Total 2021-2023	28	5,263	\$236.2	\$67.2
<i>Annual Average</i>	<i>9</i>	<i>1,754</i>	<i>\$78.7</i>	<i>\$22.4</i>

*2023 partial year as of data sent in March of 2023

Source: Job Creation Reported by ESD.

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the New York City Musical and Theatrical Production Credit program supported a total of 7,080 total (direct, indirect, and induced) jobs in the state of New York between 2021 and 2023.

Table 39: Total Job Impacts in New York State, 2021 to 2023

Year	Direct	Indirect	Induced	Total
2021	70	10	10	90
2022	3,860	680	650	5,200
2023	1,330	240	230	1,790
Total 2021-2023	5,260	930	890	7,080
<i>Annual Average</i>	<i>1,753</i>	<i>310</i>	<i>297</i>	<i>2,360</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported ESD. The estimates have been rounded to the nearest ten.

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 40: Labor Income, 2021 to 2023 (Dollars in Millions)

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2021	\$4.4	\$1.0	\$1.0	\$6.4
2022	\$259.3	\$61.7	\$57.8	\$378.9
2023	\$89.5	\$21.3	\$20.0	\$130.8
Total 2021-2023	\$353.2	\$84.1	\$78.8	\$516.0
<i>Annual Average</i>	<i>\$117.7</i>	<i>\$28.0</i>	<i>\$26.3</i>	<i>\$172.0</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.



Table 41: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$67,000	\$91,000	\$89,000	\$73,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 42: Total Tax Revenue Impacts, Total 2021 to 2023 (Dollars in Millions)

Tax Revenue	Direct	Indirect	Induced	Total
Total in New York State	\$15.2	\$10.4	\$19.2	\$44.9
Local Governments	\$0.0	\$0.0	\$0.0	\$0.0
County	\$7.6	\$3.3	\$4.8	\$15.6
State of New York	\$7.6	\$7.2	\$14.4	\$29.2
Federal	\$85.4	\$24.6	\$27.7	\$137.8
Total to all Governments	\$100.7	\$35.1	\$46.9	\$182.7

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 43: Fiscal Return on Investment to the New York State (2021 to 2023)

Total State Costs and Return (2021-2023)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State of New York Taxes (\$M)	\$67.2	\$7.6	\$15.6
Return on \$1.00 in Foregone Revenue		\$0.11	\$0.23

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

From the investment of \$67.2 million, the New York City Musical and Theatrical Production Credit program generated \$7.6 million in direct state taxes and total state taxes of \$15.6 million. The state's investment provided an overall return of \$0.11 on direct taxes to the state, and \$0.23 per dollar invested based on total state taxes.

But-For Test

The New York City musical and theatrical industry is unique in the U.S. Broadway is clearly the center of this industry, and this would suggest that much of the activity may well have taken place without the credit. At the same time, the significant upheaval associated with the industry related to COVID-19 suggests that capital may have been difficult to raise for new productions. If nothing else, it may well have been that job creation would have lagged 'but for' the credit. As a result, the project team is more willing to accept that the credit was necessary for the industry to return to prior levels of activity, particularly related to employment.

Other Quantifiable Economic Benefits

This program has received broad support from The Broadway League and has been cited as a valuable tool for raising capital for new shows. Almost three dozen productions began to file for this program within the first



year alone.⁷⁶ This tax credit is primarily used by producers to fundraise for productions, with the tax credit reducing risk to potential investors.

There are significant quantifiable benefits that cannot be readily captured by the IMPLAN model, because it cannot comprehend the importance and impact on the city (and state economy) related to Broadway shows. While it is asserted that there is a significant tourism impact from the Film Production Tax Credit, there can be no credible disagreement that Broadway has a significant impact on NYS and NYC tourism. According to the Broadway League, in the 2022-2023 season, 47 percent of ticket purchases for Broadway shows were by theatregoers from the United States but outside New York City and its suburbs, and 17 percent of theatregoers (or 2.1 million admissions) were from other countries. This was comparable with pre-COVID seasons.⁷⁷

Besides the ticket revenue, there are associated spending from those from outside of NYS. This primarily includes restaurant sales, as there is a symbiotic relationship between dining in the area and Broadway shows. Of course, for out-of-town visitors it also includes hotel stays, transportation, and purchases subject to state and local sales tax. These are not sufficiently captured by IMPLAN, and they are significant.

Other Qualitative Economic Benefits

The significant upheaval to the industry related to COVID-19 cannot be discounted. The assistance to the industry could be seen as an investment in its health over and beyond the immediate economic impact. The industry is part of the 'creative economy,' and Broadway is a nationally recognized brand that is unique to NYS, in much the same way that Hollywood is unique to California. Its continued viability creates, in the project team's view, greater visibility for NYS than many of the productions supported by other entertainment tax credits.

⁷⁶ Michael Paulson, "As Broadway Struggles, Governor Proposes Expanded Tax Credit", The New York Times, January 19, 2022, accessed online at <https://www.nytimes.com/2022/01/19/theater/broadway-hochul-tax-credit.html>.

⁷⁷ "The Demographics of the Broadway Audience, 2022-2023 Season", The Broadway League, accessed online at <https://www.broadwayleague.com/research/research-reports/>.



Summary Findings

This analysis used a test of return originally based on the **job creation** to estimate state tax revenues:

- The New York City Musical and Theatrical Production Credit program does not provide a positive return to the state in terms of direct, indirect and induced activities, where it generates \$0.23 for every dollar invested.
- There are, however, significant economic impacts related to the specific nature of this industry and its impact on NYS. These start with the tourism impact of Broadway, where nearly half of ticket sales are to those outside of NYC and its suburbs. Those sales import revenue and economic activity that is largely not captured by the IMPLAN model.
- Beyond ticket sales, there is a further relationship with restaurants, hotels, and related sales, and they are also not entirely captured within the model.
- Finally, the value of Broadway as an iconic institution cannot be dismissed. Assistance that assures its existence as the center of theatre in the U.S. is a qualitative benefit to NYS and NYC.
- Based on this set of circumstances, the project team believes this to be a credit with at least the expectation of a positive return on investment.



Empire State Musical and Theatrical Tax Credit



Executive Summary

Purpose and History

Effective for tax years beginning on or after January 1, 2015, the Empire State Musical and Theatrical Production Tax Credit Program's goal is to increase the Musical and Theatrical presence in upstate New York. The credit seeks to induce music and theatrical production companies to host shows at locations in Upstate New York and conduct pre-tour activities and technical rehearsals.

Incentive Design and Administration

An eligible company must produce a live, dramatic state presentation in a qualified production facility on a tour consisting of 8 or more shows in 3 or more localities. Any qualifying expenses spent in excess will be subtracted from the next year's amount. The program is available for tax years ending before January 1, 2026.

Incentive Benefits

The program allocates \$8.0 million in credits annually. Qualified companies may be eligible to receive a fully refundable credit of 25 percent for certain production and transportation expenditures.

Performance-related expenses are eligible if the show has not yet performed in any facility, other than a qualified production facility, following the completion of the technical period in a qualified production facility. A performance location must have a seating capacity of at least 1,000 seats with 75 percent of revenue coming from ticket sales.

Use

The use of the credit has been sporadic, and in the years 2017-2020, the claims have been between two and four per year. There was an increase, to 10 in 2021.

Return on Investment

The return on investment calculated based on state taxes generated by the economic impact is very small, and qualitative benefits are unlikely to increase that significantly.

Summary Findings

- If all the taxes that flow from that direct activity for job creation, included all taxes from indirect and induced activities, then the Empire State Musical and Theatrical Production Credit program generates \$0.06 for every dollar invested.
- It is likely that much (if not most) of the economic activity is related to the tax credit.
- While growing the industry in other parts of NYS outside of New York City is a worthwhile goal, even when considering qualitative impacts, it does not create a positive return on investment.



Background

Incentive Purpose

The Empire State Musical and Theatrical Production Tax Credit Program's goal is to increase the Musical and Theatrical presence in upstate New York. According to Statista, between 2019 and 2020 the market size for the live performance theater industry in NYC was cut in half from approximately \$10.0 million to \$5.5 million. Drawing from the strength of Broadway, the credit seeks to induce music and theatrical production companies to host shows at locations in Upstate New York and conduct pre-tour activities and technical rehearsals.

Legislative History

The credit is effective for tax years beginning on or after January 1, 2015, and before January 1, 2026.

Incentive Design

An eligible company must produce a live, dramatic state presentation in a qualified production facility on a tour consisting of 8 or more shows in 3 or more localities.⁷⁸ Any qualifying expenses spent in excess will be subtracted from the next year's amount.

Incentive Benefits

The program allocates \$8.0 million in credits annually. Qualified companies may be eligible to receive a fully refundable credit of 25 percent of the following production and transportation expenditures:

- Pre-tour production costs for design, construction, and operation, including sets, special and visual effects, costumes, wardrobes, makeup, accessories, and costs associated with sound, lighting, and staging.
- All salaries, wages, fees, per-diems, and other compensation, including related benefits for services performed. Total allowable expenses are not to exceed \$200,000 per week.
- Technical and crew production costs, such as expenditures for qualified production facilities, props, makeup, wardrobe, costumes, equipment used for special effects, sound recording, set construction and lighting.

Performance-related expenses are eligible if the show has not yet performed in any facility, other than a qualified production facility, following the completion of the technical period in a qualified production facility. A performance location must have a seating capacity of at least 1,000 seats with 75 percent of revenue coming from ticket sales.

Incentive Requirements

An annual report is required to be submitted to the Governor, temporary president of the senate, and the speaker of the assembly every year evaluating the effectiveness of the program in stimulating growth of the musical and theatrical industry in the state. This report is to be submitted on February 1 of each year. Metrics may include the number of qualified productions that received a credit, the amount of credits claimed for each expense type, and other impacts from the program, like employment. Data captured in this report is based on

⁷⁸ "Fiscal Year 2024 Annual Report on New York State Tax Expenditures", New York Division of The Budget, Department of Taxation, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.



data available from the application filed for credit allocation.⁷⁹

Incentive Use

The use of this credit has been sporadic. While the NYS Tax Expenditure Report estimates an increase in use of the credit, that has not been the actual experience.

Table 44: Musical and Theatrical Production Tax Credit Details by Year

Year	Actual Tax Expenditures (Personal Income Tax)	Actual Tax Expenditures (Corporate Franchise Tax)
2015	Less than \$0.1 million	\$0
2016	\$0.7 million	\$1.8 million
2017	\$1.2 million	\$0.4 million
2018	\$0	\$0.8 million
2019	Less than \$0.1 million	\$2.3 million
2020*	\$1.0 million	\$3.0 million
2021*	\$2.0 million	\$6.0 million
2022*	\$2.0 million	\$6.0 million
2023*	\$2.0 million	\$6.0 million

*Tax expenditures for years 2020 through 2023 are State's forecasted values
Source: FY2021-2024 Annual Reports on New York State Tax Expenditures

The average wage associated with the program has declined (probably mostly because of the COVID-19 disruption), but the program average cost per job has also declined.

Table 45: Musical and Theatrical Production Tax Credit Details by Award

Start Date	End Date	Assistance Amount	Total Public-Private Investment	Project Hires (FTEs)
6/7/2018	8/8/2019	\$762,859	\$5,027,506	243
8/9/2018	3/9/2020	\$153,670	\$777,098	130
5/11/2018	5/12/2020	\$172,023	\$782,466	97
11/5/2018	6/30/2021	\$447,851	\$3,714,865	189

*Note: All awards have closed, so the assistance amount is equal to the sum of disbursements to date.
Source: ESD Database of Economic Incentives

Table 46: Musical and Theatrical Production Tax Credit Average Wage and Cost of Jobs Created and Retained

Year	Average Wage Per Job	Average Cost of Job Created and Retained
2017	\$101,067	\$78,185
2018	\$77,921	\$63,969
2019	\$68,148	\$40,751

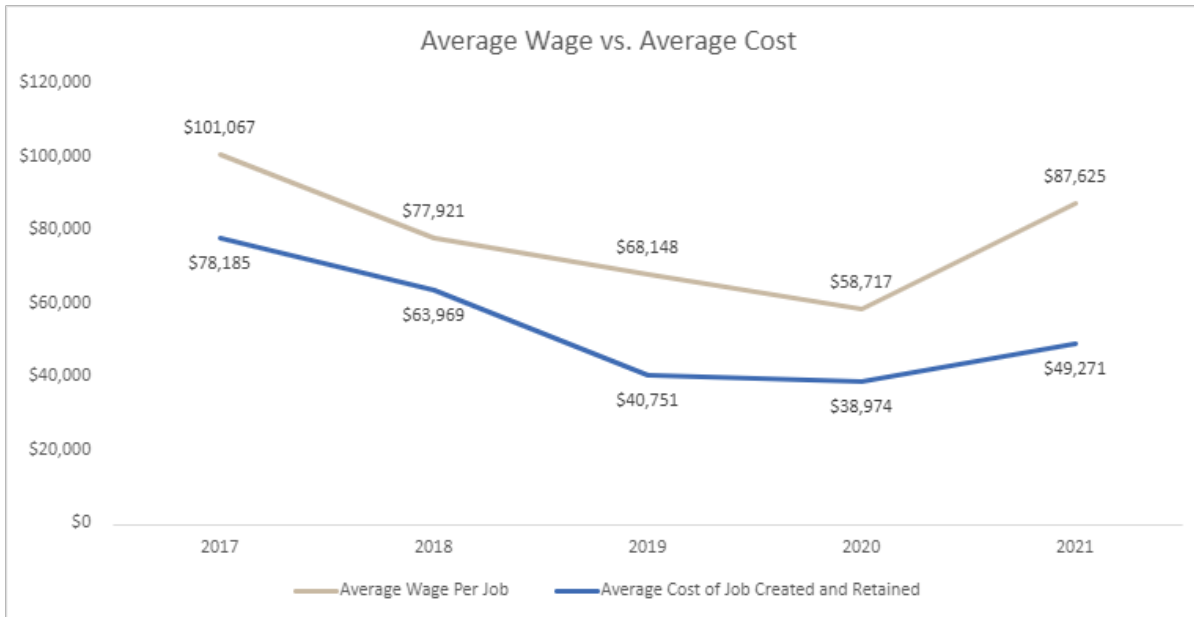
⁷⁹ "Empire State Music and Theatrical Production Tax Credit Program", Empire State Development, accessed online at <https://esd.ny.gov/empire-state-music-and-theatrical-production-tax-credit-program>.



Year	Average Wage Per Job	Average Cost of Job Created and Retained
2020	\$58,717	\$38,974
2021	\$87,625	\$49,271

Source: Data provided by Empire State Development

Figure 5: Musical and Theatrical Production Tax Credit Average Wage Versus Average Cost per Job



Source: Data provided by Empire State Development

The program had a significant increase in both tax benefits and total wages in 2021. It cannot be determined at this time if this was an aberration.

Table 47: Musical and Theatrical Production Tax Credit – Tax Benefits and Wages by Year

Year	Total Tax Benefits	Total Wages
2017	\$1,798,249	\$2,324,532
2018	\$1,471,284	\$1,792,178
2019	\$2,445,066	\$4,088,851
2020	\$1,052,304	\$1,585,355
2021	\$6,060,293	\$10,777,821

Source: Data provided by Empire State Development



Figure 6: Musical and Theatrical Production Tax Credit – Tax Benefits Versus Total Wages by Year



Source: Data provided by Empire State Development

Return on Investment

Job Creation, Temporary Hires, Number of Jobs Retained

The project team submitted a request to the Empire State Development Corporation (ESDC) for the most recent five years of data for the Empire State Musical and Theatrical Production Credit program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Impacts such as employment, payroll, and leveraged investment.

For the impact analysis, the project team used an IMPLAN model for New York State. The project team aggregated industries into sectors that correspond to the reported **job creation** for theaters. Table 48 presents the job impacts imported to IMPLAN for the analysis with the annual impacts by sector grouped by year to account for any inflation effects.



Table 48: Reported Job Creation Impacts, 2017 to 2021

Year	No. of Reports	Actual Jobs Created (FTE)
2017	2	23
2018	2	23
2019	4	60
2020	3	27
2021	10	123
Total 2017-2021	21	256

Source: Job Creation Reported by Empire State Development Corporation

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Empire State Musical and Theatrical Production Credit program supported a total of 360 total (direct, indirect, and induced) jobs in the state of New York between 2017 and 2021.

Table 49: Total Job Impacts in New York State, 2017 to 2021

Year	Direct	Indirect	Induced	Total
2017	20	-	-	30
2018	20	-	-	30
2019	60	10	10	90
2020	30	10	10	40
2021	120	30	30	170
Total	260	50	50	360
Annual Average	50	10	10	72

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.

Impact on Revenues for New York State and its Municipalities

Table 50: Estimated Taxes in New York State, Total for 2017 to 2021 (Dollars in Thousands)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$0.0	\$139.1	\$469.4	\$608.6
County	\$0.0	\$14.3	\$90.6	\$104.9
State	\$243.5	\$183.7	\$323.3	\$750.5
Total State, County, Local	\$243.5	\$337.2	\$883.2	\$1,463.9

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.



Table 51: Total Taxes, Total for 2017 to 2021 (Dollars in Thousands)

Total Taxes)	Direct	Indirect	Induced	Total
State, County, Local	\$243.5	\$337.2	\$883.2	\$1,463.9
Federal	\$2,939.7	\$906.0	\$800.1	\$4,645.8
Total Taxes	\$3,183.2	\$1,243.2	\$1,683.4	\$6,109.8

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD

Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 52: Labor Income, 2017 to 2021 (Dollars in Thousands)

Year	Direct	Indirect	Induced	Total
2017	\$1,086.1	\$355.2	\$378.3	\$1,819.6
2018	\$1,086.1	\$355.2	\$378.3	\$1,819.6
2019	\$2,833.3	\$926.6	\$987.0	\$4,746.9
2020	\$1,275.0	\$417.0	\$444.1	\$2,136.1
2021	\$5,808.2	\$1,899.6	\$2,023.3	\$9,731.1
Annual Average	\$2,417.7	\$790.7	\$842.2	\$4,050.7

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD

Table 53: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$47,000	\$73,000	\$78,000	\$56,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD

The But-For Test

The musical and theatrical industry in NYS is primarily centered in New York City, and this production credit is focused on expanding that industry reach. Given that there is less industry infrastructure and workforce in other parts of the state, it is more likely that those productions will not locate in the areas eligible for the tax credit without it. Thus, there is a greater confidence that the activity is taking place because of the credit.

Table 54: Reported Direct Impacts, 2017 to 2021

Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$ Thousands)	NY State Investment (\$ Thousands)
2017	2	23	\$2,324.5	\$1,798.2
2018	2	23	\$1,792.2	\$1,471.3
2019	4	60	\$4,088.9	\$2,445.1
2020	3	27	\$1,585.4	\$1,052.3
2021	10	123	\$10,777.8	\$6,060.3



Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$ Thousands)	NY State Investment (\$ Thousands)
Total 2017-2021	21	256	\$20,568.7	\$12,827.2

Source: Impacts Reported by Empire State Development Corporation

Other Qualitative Impacts

Seeking to broaden and expand the industry’s reach in NYS may provide additional opportunities to residents with these skills outside of NYC. This is part of the ‘creative economy’ that, in other parts of the country, has spurred niche development and put otherwise not well-known communities in the spotlight.

Summary Findings

The first step in an ROI analysis is to determine the tax revenue generated by the credit. Because the credit is focused on job creation within the industry, for the Empire State Musical and Theatrical Production Credit analysis, the project team based this analysis only on the taxes generated by the job creation.

Table 55: Fiscal Return on Investment to New York State. Total 2017 to 2021

Total State Costs and Return (2017-2021)	Total Credits Awarded	Direct Tax Revenue	Total Tax Revenue
State of New York Taxes (\$ thousands)	\$12,827.2	\$243.5	\$750.5
Return on \$1.00 In Foregone Revenue		\$0.02	\$0.06

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

From foregone revenue of \$12.8 million, the Empire State Musical and Theatrical Production Credit program generated \$243,500 in direct state taxes and total state taxes of \$750,500. The state’s investment provided an overall return of \$0.02 per \$1.00 in direct taxes to the state, and \$0.06 per dollar invested based on total state taxes.

- The Empire State Musical and Theatrical Production Credit program does not provide a positive return to the state in terms of direct state taxes revenues, with \$0.02 in direct tax revenue for every \$1.00 invested or, if all the taxes that flow from that direct activity for job creation, including all taxes from indirect and induced activities, then the Empire State Musical and Theatrical Production Credit program generates \$0.06 for every dollar invested.
- It is likely that much (if not most) of the economic activity is related to the tax credit.
- While growing the industry in other parts of NYS outside of New York City is a worthwhile goal, even when considering qualitative impacts, it does not create a positive return on investment.



REAL ESTATE AND LAND USE TAX CREDITS



Brownfields



Executive Summary

Purpose and History

Brownfields incentive programs exist in many states, and in NYS it provides tax credits for those who remediate and redevelop contaminated sites in the state. The program was created in 2005 and has been modified – the latest iterations, referred to as Generation 3, was effective for applications from July 1, 2015, through December 31, 2022.

Use

In “Generation 3” of the Brownfield Cleanup Program (BCP), the Department of Environmental Conservation has issued 404 Certificates of Completion that have translated into \$2.3 billion in tax credits. Total investment in site remediation over the same period is approximately \$22.4 billion; the credits awarded are equivalent to approximately 17 percent of the total cost of remediation. In the five most recent years of the BCP, the program invested about \$1.9 billion and generated an estimated 96,900 total jobs.

Benchmarking

New York has no program cap and distributes tax credits based on where the project spends money, with a partial project cap based on the total value of the property. Massachusetts and Colorado distribute the credit based on the total amount spent on the project, and Delaware on the type of organization applying.

Return on Investment

In the five most recent years of the BCP, the program invested about \$1.9 billion and generated an estimated 96,900 total jobs. From the investment of \$1.9 billion, the Brownfield Cleanup Program generated \$219 million in direct state taxes and total state taxes of \$483 million. This would translate into an overall return of \$0.11 in direct taxes to the state and \$0.25 based on total state taxes.

However, the economic impact does not take into consideration the positive tax impacts on the parcel and also adjacent properties. A federal study of NYS Brownfields cleanup projects estimated that tax revenue associated with remediation via the federal tax credit was positive for the state.

There are also a variety of positive externalities associated with credit, with improvements to the overall environment. This and the improvements in property values will vary from project to project.

Summary Findings

While the IMPLAN model estimate of economic impact that translates into tax revenue suggests a low return on investment, this does not take into consideration improvements in overall local property tax revenue for the remediated property and those in close proximity to it. Other studies demonstrate a positive return on investment when those are taken into consideration, although specific impacts will vary based on local circumstances.

Given the positive externalities associated with improvements to the environment and opportunities for returning property to productive use, it is likely that the program is a net benefit to the state and its residents.



Background

Incentive Purpose

Environmental Zones Chapter 1 of the Laws of 2003 establishes the Brownfield Cleanup Program that, among other things, provides tax credits to those who remediate and redevelop brownfield sites in New York State.

Legislative History⁸⁰

The Brownfield Tax Credits are effective for tax years beginning on or after April 1, 2005, with eligibility contingent on a site being accepted into the Brownfield Cleanup Program before January 1, 2033.

There have been three iterations, or “generations,” of the Brownfield Cleanup Program (BCP) since its inception. While the changes to the law have been small in most respects, it is necessary to identify the generation of the project to determine the requirements for the successful completion of the project activities. The generations are defined as follows:

- Generation 1 (Gen1): Sites with approved applications through June 22, 2008.
- Generation 2 (Gen2): Sites with approved applications between June 23, 2008, and June 30, 2015; and,
- Generation 3 (Gen3): Sites with approved application dates of July 1, 2015, through December 31, 2022.⁸¹

The legislative changes were intended to reduce the foregone revenue associated with brownfield remediation. For example, Generation 1 sites were generally eligible for larger tax credit awards than Generation 2, and Generation 2 sites were generally eligible for larger tax credits than Generation 3.

The state fiscal year (SFY) 2022-23 Enacted Budget amended the Brownfield Redevelopment Tax Credit to allow the site preparation component to be claimed for up to seven years from the issuance of the certificate of completion (COC) when the COC was issued to the taxpayer between July 1, 2015, and June 24, 2021. This change was prompted by the delay or ceasing of work on sites during the eligibility period due to the COVID-19 pandemic. The amendment of the definition of “site preparation costs” was erroneously written so that it applied to taxpayers accepted into the program between these dates, rather than those issued a COC. The effect is that taxpayers continue to have five years to claim the relevant credits instead of seven years.

Incentive Design

A taxpayer who has entered into a Brownfield Cleanup Agreement (BCA) with the Department of Environmental Conservation (DEC) may be eligible for tax credits relating to the cleanup and redevelopment of a brownfield site. The credit amount is the sum of the tangible property, site preparation, and on-site groundwater remediation credit components.⁸²

⁸⁰ “Fiscal Year 2024 Annual Report on New York State Tax Expenditures” New York Division of the Budget, Department of Taxation and Finance, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.

⁸¹ “BCP Generations and Required Completion Dates”, New York State Department of Environmental Conservation, July 2017, accessed online at https://www.dec.ny.gov/docs/remediation_hudson_pdf/bcpgensdates0717.pdf

⁸² Brownfield Redevelopment Tax Credit”, New York State Department of Taxation and Finance, accessed online at <https://www.tax.ny.gov/pit/credits/brownfield-redevelopment-credit.htm#Acceptance%20on%20or%20after%207/1/15>.



Incentive Benefits

The tangible property credit component is equal to 10 percent of the total expenditures, plus an additional 5 percent for various additional qualifications such as the site being in a Brownfield Opportunity area. This credit is subject to the limitation of:

- The lesser of \$35 million or three times the costs included in the calculation of the site preparation and on-site groundwater remediation components, or
- The lesser of \$45 million or six times the costs included in the calculation of the site preparation and on-site groundwater remediation components if the site is used primarily for manufacturing activities.

Site preparation and on-site groundwater remediation credits equal 22-50 percent of the total expenditures, depending on the usage of the site. Unrestricted use equates to 50 percent of expenditures, while industrial track four (another acceptable use category defined by DEC) equates to 22 percent.⁸³ As of 2022, project applications require a non-refundable \$50,000 fee that an applicant can attempt to have waived if they can prove it put them under undue financial hardship.

Incentive Administration⁸⁴

To claim the credits, a taxpayer must apply to and be accepted into the Brownfield Cleanup Program and receive a COC from the DEC.

The taxpayer must submit information to sufficiently demonstrate that the site qualifies for any credit components. Information demonstrating credit qualification includes:

- The notice accepting participation issued by the department of environmental conservation.
- Location within an environmental zone.
- Location within a disadvantaged community.
- Location within a designated brownfield opportunity area, development in conformance with the goals and priorities established for that area, and meeting conformance determinations pursuant to subdivision ten of section nine hundred seventy-r of the general municipal law.
- Site development for affordable housing.
- Site to be used primarily for manufacturing.
- Site remediated to Track 1⁸⁵; and
- Site developed as a renewable energy facility site.

If the site is receiving the credit component for being located within a designated Brownfield Opportunity Area⁸⁶, the taxpayer shall submit a certification from the Secretary of State that the development is in conformance with the Brownfield Opportunity Area Plan.

⁸³ “Brownfield Redevelopment Tax Credit Rate Structure: For the Site Preparation, On-Site Groundwater Remediation, and Tangible Property Credit Components”, New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pdf/stats/policy_special/brownfield_credit_reports/BRTC%20Rate%20Structure.pdf.

⁸⁴ “Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 21: Brownfield redevelopment tax credit,” The New York State Senate, May 12, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/21>.

⁸⁵ Track 1 in this case means a property that has been remediated to the point of having no restrictions related to its use.

⁸⁶ Brownfield Opportunity Areas are designated by the New York Department of State. The program is meant to identify and promote opportunities to remediate multiple brownfields and other vacant or abandoned properties. Source: https://dos.ny.gov/system/files/documents/2020/03/dos-boa-fact-sheet_2020.pdf



If the COC issued to the taxpayer is revoked by a determination pursuant to the environmental conservation law, the amount of any credit allowed shall be added back in the taxable year in which the determination is final and no longer subject to judicial review.

Incentive Use

For this analysis, the project team considered only applications and COCs from “Generation 3” of the program. Applications have been largely consistent since 2015, with a low of 68 applications (2016) and a high of 112 (2021). Approximately 53 percent of approved applications also received a COC. The following table provides detail by year.

Table 56: Total Brownfield Tax Credit Applications & COCs by Year

Year	Applications Received	Applications Approved	Certificates of Completion
2015	97	98	48
2016	68	50	57
2017	105	85	63
2018	106	95	32
2019	89	86	59
2020	90	93	48
2021	112	86	42
2022	83	76	55
Total	750	750	404

Source: Data Provided by New York State Department of Environmental Conservation

The most recent generation of the program has awarded more than \$2.3 billion in tax credits for site preparation, tangible property, and water remediation costs. Tangible property is the largest share of the awards made, totaling more than \$1.5 billion.

In 2021, the total tax credit award amount increased by nearly 2.4 times compared to the 2015 tax year. The following table shows detail by tax year for the program.

Table 57: Total Brownfield Tax Credits Issued by Year

Tax Year	Total	Site Preparation	Tangible Property	Water Remediation
2015	\$122,630,245	\$53,614,326	\$67,194,441	\$1,821,478
2016	\$295,121,257	\$135,768,663	\$157,545,035	\$3,569,491
2017	\$326,528,489	\$88,466,482	\$236,981,969	\$1,080,018
2018	\$427,286,162	\$99,997,778	\$326,349,558	\$938,826
2019	\$374,794,026	\$152,758,224	\$214,146,020	\$7,889,782
2020	\$373,083,999	\$130,850,348	\$236,992,834	\$5,245,621
2021	\$416,310,265	\$94,178,793	\$321,839,243	\$292,229
Total	\$2,335,754,443	\$755,634,614	\$1,561,049,100	\$20,837,445

Source: Data Provided by New York State Department of Environmental Conservation

The Allowable Use of the project is dictated by its COC. The most common Allowable Use over the study period was Restricted Residential (170 COCs) followed by Unrestricted (100), and Commercial (92). The total



number of projects receiving COCs in the most recent Generation was 404. The table below shows detail by year and by allowable use of the cleanup site.

Table 58: Certificates of Completion Issued by Allowable Use

Year COC Received	Unrestricted	Residential	Restricted Residential	Commercial	Industrial	Multiple Uses Allowed	Total
2015	7	2	22	14	2	1	48
2016	9	4	26	15	0	3	57
2017	10	1	27	20	0	5	63
2018	8	1	17	5	0	1	32
2019	11	2	28	15	0	3	59
2020	18	1	14	10	0	5	48
2021	17	1	15	7	0	2	42
2022	20	4	21	6	0	4	55
Total	100	16	170	92	2	24	404

Source: Data Provided by New York State Department of Environmental Conservation

The DEC tracks COCs by DEC Region, as opposed to the ESD Regions used in many other programs in New York State. In the most recent Generation of COCs, the New York City Region received the most COCs (302), followed by Western New York (274), and the Lower Hudson Valley Region (106). The top two Regions in terms of volume of COCs make up more than 50% of the total awarded.

Table 59: Certificates of Completion Issued by DEC Region, 2015-2022

DEC Region	COC Count
Long Island	15
New York City	302
Lower Hudson Valley	106
Capital Region	12
Eastern Adirondacks	4
Western Adirondacks	7
Central New York	32
Western Finger Lakes	55
Western New York	274
Total	807



Benchmarking

Brownfield remediation programs are common among the states (and the federal government had a program as well, although it expired on January 1, 2012). Contaminated sites can pose a public health hazard, but the costs of remediation may make it difficult to accomplish, even if the site improvements would unlock great economic potential.

According to the state business incentives database maintained by CREC, 24 states have at least one Brownfields program, and many states have two or more. Among those programs, tax credits are in the minority, with five states offering this form of incentive (besides New York, the others are Colorado, Iowa, Massachusetts, and South Carolina). Additional project research identified the states of Florida, Kentucky, Mississippi, Missouri, and New Jersey as offering tax credits. More common are low interest loan or grant programs. This is another example where the design of the assistance may signal a preference for a non-tax incentive.

The following table compares the reach and impact metrics of comparable state incentive programs to that of the Brownfield Tax Credit. Since the data availability years are different for each program, the metrics were compared on an “average annual” basis (AA). This methodology makes comparing the programs across different data years possible.

Table 60: Comparable Brownfield Remediation Tax Incentive Programs

State/ Program	Operational Years	Data Years	AA Claimants	AA Value of Credits Claimed
New York: Brownfield Tax Credit	2005-2030	2016-2019	53	\$130.5 million
New Jersey: Brownfield Redevelopment Incentive	2023-2025	N/R	N/R	\$50 million
Massachusetts: Brownfields Tax Credit Program	1998-2029*	2016-2020	24	\$22 million

**The Massachusetts program was set to expire on January 1, 2024, but the state budget legislation signed into law in August 2023 extended the program to January 1, 2029.*

Among the comparable programs reviewed, the New York state program is relatively complex in terms of eligibility. The New York program also has the largest eligible expense values, and therefore the largest value of credits claimed. While it is true that construction and construction labor costs tend to be higher in the Northeast, New Jersey’s new program has lower project caps and an overall program cap to manage foregone revenues.

Table 61: Program Design Characteristics

State	Percentage of costs eligible	Project Cap	Program Cap
New York	10% / 15%	\$35 million / \$45 million	None
New Jersey	50% / 60%	\$4 million / \$8 million	\$50 million
Massachusetts	25% / 50%	None	None

Additional Benchmarking Comments

New York’s Brownfield program is larger than the benchmarked programs and distributes more incentives to more recipients than any of the comparators. The NYS program is also refundable, where most are not (although Iowa provides a refundable credit for non-profit organizations). Each Brownfield program has the



same goal of incentivizing the cleanup of polluted land, but each state has different targets and ways of incentivizing individual projects.

The variations are significant among all the state Brownfield tax credit programs. The percent of qualified expenses provided by the credit varies from 15 percent in Iowa to 100 percent in Missouri – although Missouri is unique in requiring applicants to create at least 10 new jobs or retain at least 25 existing jobs to be eligible for the credit; Missouri's credit is also not refundable but is transferable. There are also programs where the eligible uses are prioritized: Florida, for example, provides a 75 percent credit for affordable housing or healthcare properties, while other properties receive a 50 percent credit. Iowa provides additional credit for meeting 'green' development standards. Finally, Kentucky's credit is unique in that it is negotiated (although with a low project cap of \$150,000).

Return on Investment

Economic Impact Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for NYS.⁸⁷ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include "non-market" transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

The project team submitted a request to the NYS Department of Environmental Conservation (NYSDEC) for the most recent five years of data for the Brownfield Cleanup Program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Type of project activities.
- Value of qualified expenditures and foregone revenue.

The project team aligned the program activities (Site Preparation, Tangible Property, and Water Remediation) with IMPLAN industry sectors. The program does not report job creation and retention, so all employment estimates were generated by the IMPLAN model based on these expenditures. Table 62 presents the expenditure impacts imported to IMPLAN for the analysis with the annual impacts by sector grouped by year to account for any inflation effects.

⁸⁷ More information on the IMPLAN model may be found in Appendix A.



Table 62: Reported Qualified Expenditures, 2017 to 2021

Year	Site Preparation	Tangible Property	Water Remediation	Total Costs	NY State Foregone Revenue
2017	\$296,135,031	\$1,980,017,537	\$5,352,997	\$2,281,505,565	\$326,528,489
2018	\$272,003,089	\$2,529,697,766	\$3,861,073	\$2,805,561,928	\$427,286,162
2019	\$521,562,844	\$1,590,654,848	\$22,046,578	\$2,134,264,270	\$374,794,026
2020	\$348,858,695	\$1,560,977,931	\$14,199,007	\$1,923,995,600	\$373,083,999
2021	\$230,617,227	\$2,285,773,186	\$1,013,594	\$2,517,404,007	\$416,310,265
Total	\$1,669,176,886	\$9,947,121,268	\$46,473,249	\$11,662,731,370	\$1,918,002,941

Source: Qualified Expenditures Reported by NYS Department of Environmental Conservation (NYSDEC)

The project team used the exact numbers as reported for inputs to the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Brownfield Cleanup Program supported a total of 86,900 total (direct, indirect, and induced) jobs in the state of New York between 2017 and 2021.

Table 63: Total Job Impacts in New York State, 2017 to 2021

Year	Direct	Indirect	Induced	Total
2017	10,700	6,300	2,700	19,700
2018	12,900	7,700	3,200	23,900
2019	9,300	5,400	2,500	17,300
2020	8,400	4,900	2,200	15,500
2021	11,100	6,600	2,800	20,500
Total	52,400	31,000	13,400	96,900
Annual Average	10,480	6,180	2,680	19,380

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by NYS Department of Environmental Conservation (NYSDEC). The estimates have been rounded to the nearest ten.

Impact on Revenues for New York State and its Municipalities

Table 64: Estimated Taxes in New York State, Total for 2017 to 2021 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$394.7	\$260.1	\$117.0	\$771.8
County	\$79.4	\$49.0	\$22.6	\$151.0
State	\$219.5	\$182.9	\$80.4	\$482.8
Total State, County, Local	\$693.7	\$492.0	\$219.9	\$1,405.6

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by NYS Department of Environmental Conservation (NYSDEC).

Table 65: Total Taxes, Total for 2017 to 2021 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$693.7	\$492.0	\$219.9	\$1,405.6
Federal	\$329.6	\$472.5	\$198.4	\$1,000.5



Total Taxes	Direct	Indirect	Induced	Total
Total Taxes	\$1,023.3	\$964.5	\$418.3	\$2,406.1

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by NYS Department of Environmental Conservation (NYSDEC).*

Other Quantifiable Economic Benefits

It is well established that remediating brownfield properties has a positive impact on tax revenues for both the parcel that has been remediated but also adjacent properties. A 2017 study appearing in the *Journal of Environmental Assessment Policy and Management* attempted to quantify the impact on local residential property tax revenue based on the Federal Brownfields Remediation program. Using a sample of 48 brownfield sites that were remediated through the Federal program, the authors reviewed the pre-cleanup residential tax base near each brownfield site, estimated property value increases, and applied local assessment ratios and other tax laws to the property tax base to measure any increase in revenues. The study included two brownfield sites in New York State, the data for which is shown in Table 67. The property tax base and property tax revenue assume just a 5 percent increase in property values – a conservative estimate given prior research.⁸⁸

Table 66: Average Impact of Brownfields Cleanup on Residential Property Tax Revenue

Number of Brownfields Analyzed	Mean Number of Properties within 2.07km	Mean Assessed Value of Properties within 2.07km	Residential Property Tax Base	Residential Property Tax Revenue
2	5.523	\$75,694	\$20,900,000	\$420,528

Typical grants at the Federal level are \$200,000 each, which in this case would total \$400,000 for two projects. Since the nearby properties return \$420,528 in revenue annually, the investment is positive within the first year – and this does not even include the increased property tax from the projects themselves which surely adds to the total. There is no reason to believe the impacts of the New York State credit would be any different in direction or magnitude.

This increase in property values represents a significant return on the initial investment from New York State. Given the volume of projects across New York State – the Department of Environmental Conservation issued 404 Certificates of Completion since 2015 – a massive number of adjacent properties are likely to be benefitting from this “halo effect.” Further analysis can provide a more precise estimate of the total tax revenues associated with brownfield sites awarded in the State’s program.

A recent program evaluation of the Iowa Brownfields program also found gains in property values in communities with completed Brownfield projects. It did note, however, that the magnitude of the increase varies from project to project.⁸⁹

Brownfield redevelopment can also reduce overall government costs when Brownfield sites are located in industrialized areas near a city center. When developers avoid these sites, they tend to move further away, which increases infrastructure and other local government costs.⁹⁰ It is likely that proximity to transportation

⁸⁸ Karen A. Sullivan, “Brownfields Remediation: Impact on Local Residential property Tax Revenue”, *Journal of Environmental Assessment Policy and Management*. Vol. 19, No. 3, September 2017, accessed online at <https://www.worldscientific.com/doi/pdf/10.1142/S1464333217500132>.

⁸⁹ “Iowa’s Redevelopment Tax Credit,” Iowa Department of Revenue, December 2023, accessed online at <https://tax.iowa.gov/sites/default/files/2023-12/Redevelopment%20Tax%20Credit%20Evaluation%20Study%202023.pdf>.

⁹⁰ “Brownfield Development: Why Public Investments Can Pay Off” Kotval-K, Z. *Economic Development Quarterly*, 2016, pp. 275-282.



and other infrastructure as well as other local factors will have an impact on the magnitude of changes in property values.

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 67: Labor Income, 2017 to 2021 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2017	\$329.4	\$489.7	\$211.0	\$1,030.1
2018	\$376.9	\$597.6	\$250.8	\$1,225.3
2019	\$345.3	\$419.3	\$197.6	\$962.2
2020	\$281.3	\$380.9	\$170.9	\$833.1
2021	\$318.9	\$512.8	\$214.0	\$1,045.7
Annual Average	\$330.4	\$480.0	\$208.9	\$1,019.3

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by NYS Department of Environmental Conservation (NYSDEC).*

Table 68: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$31,000	\$77,000	\$78,000	\$53,000

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by NYS Department of Environmental Conservation (NYSDEC).*

The But-For Test

Since the “true” level of the Brownfield Cleanup Program’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

In the case of the Brownfield Cleanup Program, the state does not break even on its investment even in the unlikely event this incentive is 100 percent responsible for the tax revenue generated by program participants. However, as discussed in the prior section on Other Quantitative Impacts, the foregone revenue calculation is just one dimension of the return on investment. It is likely that the program would have a positive fiscal balance when including nearby property tax increases, as well.

Qualitative Impacts

Brownfield Redevelopment incentives are intended to return contaminated real estate to productive use. This has a host of positive externalities beyond the new tax revenues. The primary goal of the program is remediating polluted or contaminated sites that would not otherwise be financially feasible given market rates and conditions. To the degree that the credit enables more private actors to clean up these lands, it is a positive to the community and to the environment. Employment effects can also be significant – as shown in the economic impact analysis in this section – and some states take additional action to ensure local hiring.



Florida offers a \$2,500 tax credit per local hire for a brownfield redevelopment project.⁹¹

Increased property values are another commonly cited impact of brownfield redevelopment. However, not all parcels are equal in impact. Studies in Milwaukee and Minneapolis found residential and park projects have the highest impact, and commercial projects and industrial projects have lower impacts.⁹² The authors of the studies also highlighted factors that increase the magnitude of change in property values such as colocation with major roadways, higher household incomes prior to redevelopment, and distance from railways. It is important to note the contradiction in this impact, as brownfields tend to be located in lower income and less desirable geographic locations.

The concept of 'signaling' has been noted as a possible benefit from some tax incentives. In this case, Brownfield sites are often in neglected areas of a community, and there is a benefit to residents in those neighborhoods to go beyond the possible increase in property values and gets more to a sense of pride of ownership and neighborhoods. Of course, this benefit cannot be readily quantified.

Finally, depending on its end use, restored sites may be tourism and recreation attractions. Across the U.S., professional and amateur sports complexes have often been built on or near remediated Brownfield sites. These have the potential to create additional revenue streams and spur economic activity.

Summary Findings

Whether the program yields a net benefit to the state of New York is a function of several factors, including the state's foregone revenue and its return on that investment. NYS awarded \$1.9 billion for the Brownfield Cleanup Program between 2017 and 2021.

Table 69: Reported Qualified Expenses and NY State investment, 2017 to 2021

Year	Total Costs	NY State Foregone Revenue
2017	\$2,281,505,565	\$326,528,489
2018	\$2,805,561,928	\$427,286,162
2019	\$2,134,264,270	\$374,794,026
2020	\$1,923,995,600	\$373,083,999
2021	\$2,517,404,007	\$416,310,265
Total	\$11,662,731,370	\$1,918,002,941

Source: Impacts Reported by NYS Department of Environmental Conservation (NYSDEC)

Using only state taxes provides the most conservative measure of return to the state itself. For the Brownfield Cleanup Program analysis, the project team also based this analysis only on the taxes generated by the job creation supported by the qualified expenditures.

⁹¹ Marie Howland, "Employment Effects of Brownfield Redevelopment: What Do We Know From the Literature?", National Center for Environmental Economics, January, 2007, accessed online at https://www.epa.gov/sites/default/files/2014-12/documents/employment_effects_of_brownfield_redevelopment.pdf.

⁹² De Sousa et. al., "Assessing the Effect of Publicly Assisted Brownfield Redevelopment on Surrounding Property Values", Economic Development Quarterly, January 20, 2009, accessed online at <https://doi.org/10.1177/0891242408328379>.



Table 70: Fiscal Return on Investment to New York State, Total 2017 to 2021

Total State Costs and Return (2017-2021)	Total Tax Credits Awarded	Direct Tax Revenue	Total Tax Revenue
State of New York Taxes (\$M)	\$1,918	\$219	\$483
Return on \$1.00 in Foregone Revenue		\$0.11	\$0.25

Source: Economic Impact Analysis by Fourth Economy based on Qualified Expenses Reported by NYS Department of Environmental Conservation (NYSDEC).

From the foregone revenue of \$1.9 billion, the Brownfield Cleanup Program generated \$219 million in direct state taxes and total state taxes of \$483 million. The state’s investment provided an overall return of \$0.11 based on direct taxes to the state and a return of \$0.25 based on total state taxes.

As discussed in the qualitative impacts section, the ROI calculations here are incomplete due to a combination of lack of specific data as well as the level of analysis enabled by the scope of this evaluation. In terms of specific data, being able to more accurately measure the jobs created per project as well as the relative quality of these jobs would be beneficial. Contamination levels are captured and reported through the application process, but quantifying the return on a given project requires more detailed analysis of the relative value of the property in question, the relative severity of the contamination, and the value of the associated environmental impacts. As shown in the Federal brownfields program study referenced in this section, the state and local tax revenue increases would be significant and would provide a more complete accounting of the return on foregone revenues.



Historic Property Rehabilitation



Executive Summary

Purpose and History

The program encourages the rehabilitation of certified historic properties in qualifying census tracts and is an enhancement to the existing federal tax credit program. The tax credit has been in place, depending on the type of tax it is credited against, since 2007-2010. It is effective for tax years before January 1, 2030.

Use

In “Generation 3” of the Brownfield Cleanup Program (BCP), the Department of Environmental Conservation has issued 404 Certificates of Completion that have translated into \$2.3 billion in tax credits. Total investment in site remediation over the same period is approximately \$22.4 billion; the credits awarded are equivalent to approximately 17 percent of the total cost of remediation. In the five most recent years of the BCP, the program invested about \$1.9 billion and generated an estimated 96,900 total jobs.

Benchmarking

This is a common type of state program. NYS’ average annual value of credits claimed is among the higher amounts of benchmarked states; NYS does not have a program cap, while several other states do. NYS limits use to census tracts with below average income levels, where most states do not. NYS also has a relatively low eligible percentage of qualified redevelopment expenses. Based on federal data, NYS has significantly higher project construction costs and awards than any other state.

Return on Investment

From the \$371 million invested, the IMPLAN model estimates that the program generated \$32.8 million in direct state taxes and total state taxes of \$122.2 million. This would translate, for state tax revenue alone, into an overall return of \$0.09 of direct taxes to the state and a return of \$0.33 based on total state taxes. However, the IMPLAN model does not take into account the future likely productive value of the rehabilitated property, which will generate income for its owner, additional property tax revenue for local governments, and, in many cases, needed additional housing units as well. This is particularly the case for the NYS program, which requires the credit be taken in census tracts that are below average in terms of average income levels.

Other studies have demonstrated a variety of positive externalities associated with the use of rehabilitation tax credits, including reductions in crime, increased tourism, and increased foot traffic. Meanwhile, administrative costs are minimal because it piggybacks on the federal credit, meaning the federal government pays for the expenses associated with determining eligibility.

The credit also aligns with multiple incentive best practices, including having strong eligibility requirements, low administrative expenses, being targeted to areas of economic need, and having strong reporting requirements.



Background

Incentive Purpose

New York State offers this tax credit to encourage the rehabilitation of certified historic properties in qualifying census tracts. The program also serves as an enhancement to the existing federal tax credit program administered by the National Parks Service.

Legislative History

For personal income tax and corporate franchise tax filers, this credit is effective for tax years beginning on or after January 1, 2007. For insurance premium tax filers, this credit is effective for tax years beginning on or after January 1, 2010. The credit is effective for tax years beginning on or after January 1, 2010, and before January 1, 2030.

Incentive Design

For commercial properties that qualify for the federal rehabilitation tax credit and are located in a qualifying census tract, the applicant can claim an additional state tax credit. As it relates to a qualifying census tract, they must meet a federal definition of a targeted area⁹³ or be located within a census tract that is at or below 100 percent of the State median family income in the most recent American Community Survey.

For qualified rehabilitation projects placed in service on or after January 1, 2015, the credit is refundable.

Incentive Benefits

For tax years 2010 through 2025, the credit equals 100 percent of the allowable amount of the federal credit (which is 20 percent of all qualified expenses for the rehabilitation, not to exceed \$5 million) for the same historic structure located in NYS. Smaller projects (with qualified rehabilitation expenditures of \$2.5 million or less) may qualify for a credit amount credit of 30 percent of all qualified expenses for the rehabilitation.

Incentive Administration

The Department of Historic Preservation maintains the map file of qualifying census tracts, which are calculated using data from the most recent five-year period. The credit does not require an application form for New York State (NYS); applicants only need to comply with the federal process, complete an agency media agreement⁹⁴, and pay any review fees.

The State relies on the application and review process of the federal tax credit program. First, the property must be determined to be historic or significant to a historic district. Second, the proposed redevelopment work and qualified redevelopment expenses are identified and submitted. It is at this stage that NYS would provide a letter to the applicant confirming the historic nature of the property and location in a qualifying census tract. Third, the applicant documents the completed work and final expenses. The Department of Historic Preservation receives all reported data from the National Park Service.

⁹³ The IRC Code, section 143(j) identifies these as areas of chronic economic distress. This can be a census tract where 70 percent or more of the families have income which is 80 percent or less of the statewide median family income. The U.S. Secretary of Housing and Urban Development can also take into consideration the condition of the housing stock, including the age of the housing and the number of abandoned and substandard residential units.

⁹⁴ The media agreement covers required signage during construction and as a finished product, the submission of professional photography of the finished product, and notification of any media opportunities such as ribbon cuttings related to the property.



Data from the federal program is relatively strong both in terms of quantity of metrics and fidelity of the data provided by applicants. The Department of Historic Preservation uses this data to track utilization.

Incentive Use

From 2013 to 2022, rehabilitation credit use has varied. Awards peaked in 2018 at 175 credit awards, and 105 credit awards were made in 2022. In total, the State awarded 1,126 total credits from 2013 to 2022.

Table 71: Number of Historic Rehabilitation Tax Credits Awarded by Year

Tax Year	Number of Awards
2013	111
2014	72
2015	105
2016	134
2017	125
2018	175
2019	121
2020	105
2021	73
2022	105
Total	1,126

Source: Data provided by the New York Department of Parks, Recreation, and Historic Preservation

The state cap (and location requirements) reduces the amount of the available state credit in relationship to the federal credit. Given that both are based on 20 percent of eligible costs, the following table identifies the differential from the state's more restrictive criteria and project cap.

Table 72: Federal Versus NYS 20 Percent Credit Value (Dollars in Millions)

	Total Costs	Federal Credit	State Credit - Maximum
2013	\$775.8	\$155.2	\$82.4
2014	\$414.6	\$82.9	\$54.5
2015	\$475.1	\$95.0	\$79.2
2016	\$666.2	\$133.2	\$93.9
2017	\$799.8	\$160.0	\$120.0
2018	\$932.1	\$186.5	\$166.3
2019	\$391.1	\$78.2	\$73.0
2020	\$1,027.8	\$205.6	\$107.3
2021	\$1,000.0	\$200.0	\$90.1
2022	\$1,027.8	\$205.6	\$107.3
Total	\$7,510.3	\$1,502.2	\$974.0

Source: Data provided by the New York Department of Parks, Recreation, and Historic Preservation

A comparison of the federal credits awarded and the maximum that would be allowed under the state credit program criteria suggests that in some years, very large projects have a significant constraining effect on the amount of state credits versus the federal credit. In 2021, for example, the state credit amount was 45 percent of the federal credit amount. By contrast, in 2019, the state credit was 93 percent of the federal credit.



It is also notable that the amount of actual claimed credits is less than what is maximum amount eligible for the tax credit. The following, from the NYS tax expenditure report, identifies actual amounts claimed for 2013 through 2020.

Table 73: Maximum versus Claimed State Credit (Dollars in Millions)

	State Credit - Maximum	State Credit - Claimed
2013	\$82.4	\$26.0
2014	\$54.5	\$33.9
2015	\$79.2	\$71.0
2016	\$93.9	\$73.5
2017	\$120.0	\$65.1
2018	\$166.3	\$72.8
2019	\$73.0	\$64.8
Total	\$669.3	\$407.1
Total	\$7,510.3	\$1,502.2
		\$974.0

Source: Data provided by the New York Department of Parks, Recreation, and Historic Preservation

Geography is another relevant factor in the impact of the program. As the following table shows, the total credit awards are listed according to Empire State Development Districts. Approximately 50 percent of award funding is located in either New York City or Western New York (WNY).

Table 74: State Credits Awarded by Economic Development District, 2013-2022 (Dollars in Millions)

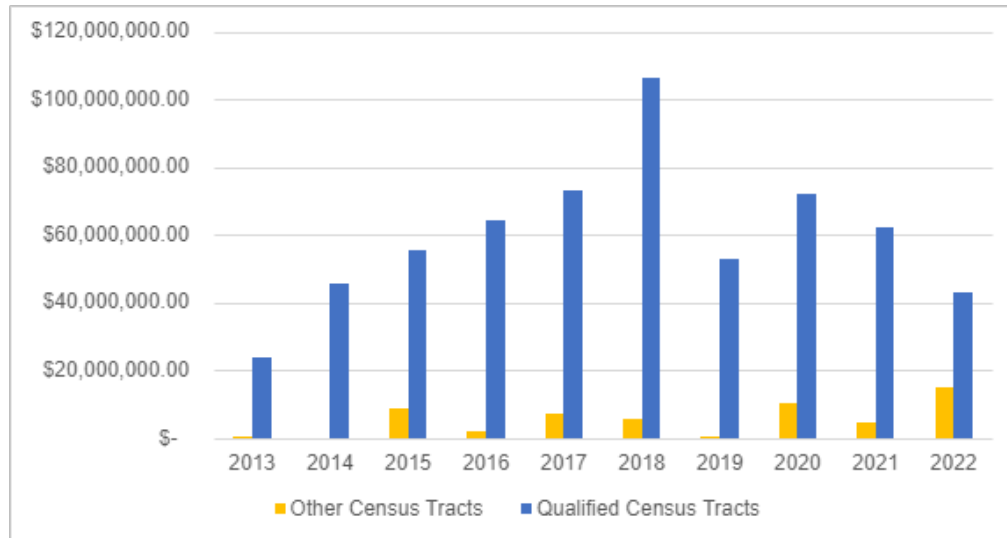
District	State Credit	Percent of total
New York	\$178.6	27.6%
WNY	\$148.4	22.9%
Capital Region	\$109.8	17.0%
CNY	\$ 61.8	9.6%
Finger Lakes	\$ 60.0	9.3%
Southern Tier	\$ 42.0	6.5%
Mid-Hudson	\$ 15.8	2.4%
North Country	\$ 14.8	2.3%
Mohawk Valley	\$ 13.6	2.1%
Long Island	\$ 1.9	0.3%
Capital District	\$ 0.7	0.1%
Grand Total	\$647.6	100%

Source: Data provided by the New York Department of Parks, Recreation, and Historic Preservation

The evaluation criteria set out in the State’s RFP for this project list “creating economic opportunity” as a relevant factor, and the Rehabilitation of Historic Properties program has a measurable impact along these lines. The program requirements incentivize projects located in qualifying census tracts; a designation calculated by the Department of Historic Preservation that identifies low-income census tracts. The vast majority of funding in a given year is related to projects planned in qualifying census tracts – the average proportion is approximately 92 percent over the study period.



Figure 7: State Credit in Qualified Census Tracts

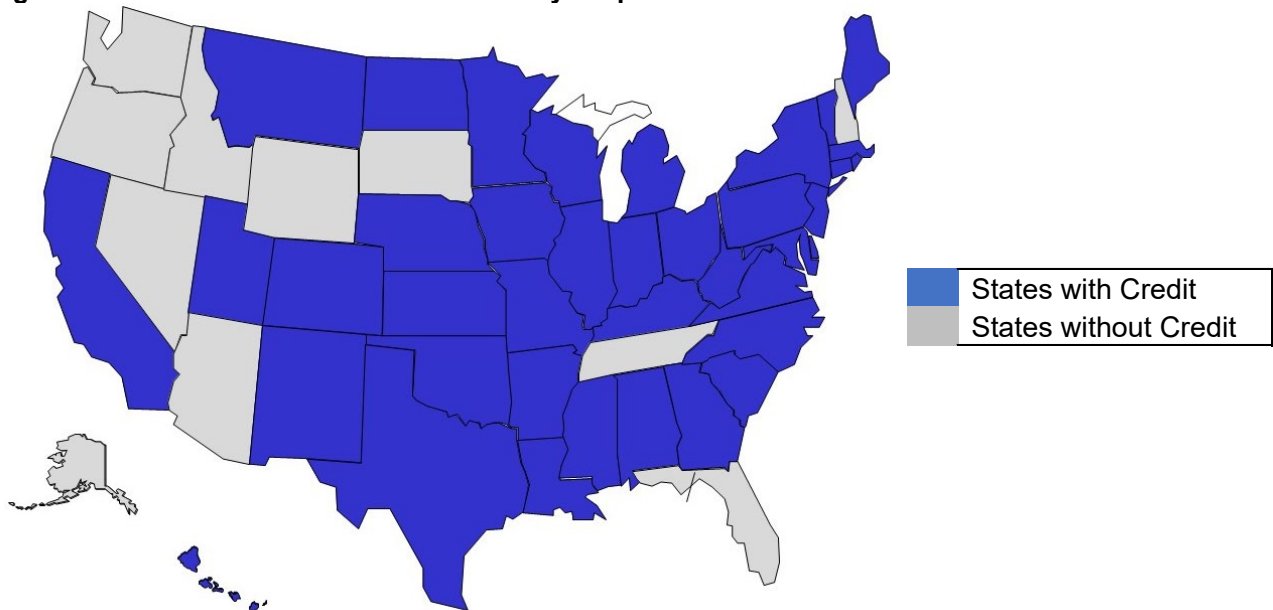


Source: Data provided by the New York Department of Parks, Recreation, and Historic Preservation

Benchmarking

State historic property rehabilitation tax credits are common. As the following state map shows, a large majority of states have active programs.

Figure 8: States with Rehabilitation of History Properties Tax Credits



Source: National Trust for Historic Preservation



To better understand the efficacy of New York State’s Rehabilitation of Historical Properties Tax Credit program, this benchmark analysis uses qualitative data to examine similar incentive programs in the region and throughout the country. States review in this analysis are split in terms of whether the program has a “sunset” date provided. In the case of New York, the State has both a sunset date and reversion clause that would reset the program to an earlier design.

Table 75: Comparable Historic Property Rehabilitation Tax Incentive Programs (dollars in millions)

State/ Program	Operational Years	Data Years	Average Annual Value of Credits Claimed
New York: Rehabilitation of Historic Properties Credit	2010-2025	2015-2019	\$69.4
Georgia: State Income Tax Credit Program for Rehabilitated Historic Property	2004-2024/2027†	2013-2022	\$15.1
Delaware: Delaware Historic Preservation Tax Credit	2002-*	2017-2022	\$7.7
Connecticut: Historic Rehabilitation Tax Credit	2006-*	2017-2021	\$26.7
Massachusetts: Historic Rehabilitation Tax Credit	2006-2027	2018-2022	\$51.3
Pennsylvania: Historic Preservation Tax Credit (HPTC)	2012-*	2013-2018	\$3.0
Virginia: Historic Rehabilitation Tax Credit	1997-*	2013-2022	\$69.5
Louisiana: Rehabilitation of Historic Structures Tax Credit	2002-2029	2013-2022	\$72.7

* Is currently running with no current scheduled sunset date.

† The tax credit for principal residence sunsets in 2024, the credit for all other properties sunsets in 2027

New York State has a relatively low eligible percentage of qualified redevelopment expenses (QREs). Other states such as Connecticut, Louisiana, and Pennsylvania offer higher rates of QRE eligibility for meeting additional geographic criteria, such as low-income areas or rural areas. There is variety across the group in terms of differentiation across applicant type and whether the project and /or the program overall have a cap on dollar values. Best practice would indicate having at least a program cap, as is done in Delaware, Massachusetts, and Pennsylvania. In Delaware, the State divides its cap among tiers of projects to ensure different types of applicants are able to access the credit, such as downtown development projects.

Table 76: Comparable Program Design Characteristics

State	Percent of QRE	Project Cap	Program Cap
New York	20%	\$5 million	None
Georgia	25%	\$100,000 Individual / \$10 million Commercial	None
Delaware	100% Indiv. / 30% / 20%	\$5,000 / \$30,000 / None	\$5 million*
Connecticut	25% / 30%	\$4.5 million	None
Massachusetts	20%	None	\$55 million
Louisiana	25% / 35%	None	None
Virginia	25%	None	None
Pennsylvania	25% / 30%	\$500,000	\$5 million

* The cap is divided among targeted policy areas and geographies

Given the availability of federal program application data, most states either report economic impact through the National Park Service analysis or conduct analysis based on the same data. This data is not consistently reported across states, but the federal program data can be used to compare volumes across the comparable



states.⁹⁵ New York has far and away the highest project construction costs – more than double the next highest state Pennsylvania.

Table 77: Federal Rehabilitation Tax Credit, by State

State	Number of approved applications	Estimated QRE at Project Completion
New York	116	\$1,195,028,584
Georgia	51	\$137,966,910
Delaware	4	\$139,612,294
Connecticut	8	\$135,494,328
Massachusetts	74	\$390,231,294
Louisiana	47	\$388,195,946
Virginia	80	\$322,530,960
Pennsylvania	66	\$551,902,474

Impact Analysis of Other State Programs

While the value of the awards made by New York state is not an outlier among the programs for which data is available, the number of awards is far and away the highest. Georgia is the next largest at 63 awards. Positive externalities associated with these programs include preservation of historically significant buildings, increase property values in target geographies, and reduce blight. Comparable states also report jobs created, though in all reports publicly available these figures are estimated using economic impact analyses similar to the IMPLAN output found in this evaluation.

It is notable that an evaluation of the Pennsylvania Historic Preservation Tax Credit identified the low yearly tax credit cap (\$3 million) and per project cap (\$500,000) as impediments to program success. It noted that the credit was insufficient to motivate large projects and, historically, only offset roughly one percent of total QREs.⁹⁶ In that respect, the data suggests the NYS operates more effectively.

Table 78: Impact of Select Comparable Programs

State	Data Year (most recent available)	Number of Awards	Value of Tax Credits Claimed
New York	2022	105	\$57,679,956
Georgia	2022	63	\$18,240,997
Connecticut	2021	32	\$38,863,939
Massachusetts	2022	N/A	\$54,700,000
Louisiana	2022	N/A	\$76,213,150
Virginia	N/A	N/A	N/A
Pennsylvania	2017-2018	21	\$3,000,000

⁹⁵ “Federal Tax Incentives for Rehabilitating Historic Buildings: Annual Report for Fiscal Year 2022”, National Park Service, U.S. Department of the Interior, March 2023, accessed online at <https://www.novoco.com/public-media/documents/nps-htc-annual-report-fy-2022-03082023.pdf>.

⁹⁶ “Pennsylvania Historic Preservation Tax Credit: An Evaluation of Program Performance,” The Independent Fiscal Office, January 14, 2019, accessed online at https://documents.ncsl.org/wwwncsl/Fiscal/evaluationDB/Pennsylvania_Historic_Preservation_Tax_Credit_An_Evaluation_of_Program_Performance.pdf



State Comparisons

New York offers one of the lowest percentages of eligible expenses as a tax credit, but still disperses the third most tax credits of all of the benchmark programs. New York is unique among the benchmarks in three key areas.

- The percentage of expenses as a credit it offers, and the types of properties that are covered under the program are entirely tied to the Federal rehabilitation program. No other state is so explicitly based on the Federal program.
- That it offers an increased percentage of expenses as a credit for projects that cost less than \$2.5 million. None of the benchmark programs offer increased credit for smaller scale work.

New York requires the property to be in a census tract at or below state median wage. Other state's programs have requirements based on the type of property being rehabilitated. These programs are relatively common among the states. Many states, like Louisiana, are increasing the size of their programs.

Return on Investment

Economic Impact Model Methodology and Definitions

The project team used an IMPLAN model for New York State for the impact analysis.⁹⁷ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

The project team submitted a request to the Department of Parks, Recreation & Historic Preservation for the most recent five years of data for the Rehabilitation of Historic Properties Tax Credit (RHPTC) program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Type of project activities.
- Value of qualified expenditures and state investment.

⁹⁷ More information about IMPLAN may be found in Appendix A.



The project team used an IMPLAN model for New York State for the impact analysis and grouped the project expenditures into residential and non-residential activities that align with IMPLAN sectors. The program does not report job creation and retention, so all employment estimates were generated by the IMPLAN model based on these expenditures. The analysis included only annual project expenditures and state credits for projects that achieved a Part 3 approval in the corresponding year. Table 79 presents the job impacts imported to IMPLAN for the analysis with the annual impacts by sector grouped by year to account for any inflation effects. Table 80 presents the corresponding 20% state credit.

Table 79: Reported Part 3 Approved Project Costs, 2018 to 2022

Year	Residential	Non-Residential	Total
2018	\$234,668,305	\$400,206,882	\$634,875,187
2019	\$157,619,620	\$168,300,502	\$325,920,122
2020	\$95,882,432	\$797,797,555	\$893,679,987
2021	\$250,142,673	\$482,006,142	\$732,148,815
2022	\$78,092,886	\$839,926,814	\$918,019,700
Total	\$816,405,916	\$2,688,237,895	\$3,504,643,811

Source: Project Costs Reported by Department of Parks, Recreation & Historic Preservation

Table 80: Reported Part 3 Approved Project Credits

Year	Residential	Non-Residential	Total
2018	\$46,842,389	\$65,219,294	\$112,061,683
2019	\$29,189,667	\$24,243,056	\$53,432,723
2020	\$14,085,502	\$68,053,344	\$82,138,846
2021	\$26,325,034	\$40,342,992	\$66,668,026
2022	\$15,223,433	\$42,456,523	\$57,679,956
Total	\$131,666,025	\$240,315,209	\$371,981,234

Source: Project Costs Reported by Department of Parks, Recreation & Historic Preservation

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Rehabilitation of Historic Properties Tax Credit (RHPTC) program supported a total of 24,400 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022.

Table 81: Total Job Impacts in New York State, 2018 to 2022

	Direct	Indirect	Induced	Total
2018	2,500	1,200	1,000	4,600
2019	1,200	600	500	2,300
2020	3,300	1,500	1,300	6,200
2021	2,700	1,300	1,100	5,100
2022	3,400	1,500	1,400	6,300
Total	13,100	6,100	5,300	24,400
Annual Average	2,620	1,220	1,060	4,900

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Parks, Recreation & Historic Preservation. The estimates have been rounded to the nearest ten.



Impact on Revenues for New York State and its Municipalities

Table 82: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Millions)

Taxes in New York State (\$ Millions)	Direct	Indirect	Induced	Total
Local Governments	\$6.7	\$103.0	\$45.7	\$155.3
County	\$0.7	\$21.4	\$8.8	\$30.9
State	\$32.8	\$58.0	\$31.4	\$122.2
Total State, County, Local	\$40.2	\$182.4	\$85.9	\$308.5

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Parks, Recreation & Historic Preservation.

Table 83: Total Taxes, Total for 2018 to 2022 (Dollars in Millions)

Total Taxes (\$ Millions)	Direct	Indirect	Induced	Total
State, County, Local	\$40.2	\$182.4	\$85.9	\$308.5
Federal	\$234.7	\$75.5	\$77.7	\$387.9
Total Taxes	\$274.9	\$257.9	\$163.7	\$696.4

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Parks, Recreation & Historic Preservation.

Other Quantifiable Economic Benefits

There are several other benefits to the State economy via the RHPTC. These have been explored in detail in other evaluations of similar credits in other states. For example, in Virginia, a preservation advocacy group conducted a study on a subset of projects receiving rehabilitation of historic properties tax credits. Assessed values of those properties increased by \$194.6 million.⁹⁸ A study in Wisconsin found that the cumulative property tax assessment value of the projects in its Historic Tax Credit program increased 607 percent and increased state and local taxes on these projects by 84 percent.⁹⁹ Ohio found its taxes on Historic Property Tax Credit parcels increased 355 percent, with adjacent and “radial” properties increasing 55 and 30 percent, respectively.¹⁰⁰ An Iowa tax credit evaluation found property value growth rates higher for properties within close proximity to tax credit properties in comparison to similar properties in another similar area.¹⁰¹

New York has a unique tax structure and economy from these states, but it is clear there is a consistent, directional increase in both the assessed value of historic properties receiving the credit and a powerful secondary effect on nearby properties. When considering the scale of the State program, which awarded more than 1,100 credits since 2013, the number of positively impacted properties and communities is significant.

⁹⁸ Eric Bowen et al., “The Economic Impact of Historic Rehabilitation in West Virginia”, West Virginia University, 2015, accessed online at https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1016&context=bureau_be.

⁹⁹ “Wisconsin Historic Tax Credit Analysis,” Baker Tilly International, April 2017, accessed online at https://www.wisconsinhistory.org/pdfs/hp/WI-HTC-2017_report_pages.pdf

¹⁰⁰ “Ohio Historic Preservation Tax Credit 2015 Comprehensive Report,” Ohio Development Services Agency, December 1, 2015, accessed online at <https://development.ohio.gov/static/community/redevelopment/2015OHPTCComprehensiveReport.pdf>

¹⁰¹ “Iowa’s Historic Preservation Tax Credit,” Iowa Department of Revenue, Tax Research and Program Analysis Section, December 2019, accessed online at <https://tax.iowa.gov/historic-preservation-tax-credit-program-evaluation-study>.



Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 84: Labor Income, 2018 to 2022 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2018	\$198.7	\$95.0	\$77.1	\$370.8
2019	\$98.4	\$47.8	\$38.4	\$184.5
2020	\$269.9	\$124.8	\$103.7	\$498.3
2021	\$217.9	\$103.9	\$84.5	\$406.3
2022	\$275.1	\$126.8	\$105.6	\$507.5
Annual Average	\$212.0	\$99.7	\$81.8	\$393.5

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Parks, Recreation & Historic Preservation.*

Table 85: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$81,000	\$80,000	\$78,000	\$80,000

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Parks, Recreation & Historic Preservation.*

The ‘But For’ Test

As noted in the introduction, the ‘but for’ test is an important step in the process of determining the benefit of an incentive, but it is practically impossible to quantify with any degree of certainty. Since the “true” level of the Rehabilitation of Historic Properties tax credit’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

In the case of the Rehabilitation of Historic Properties tax credit program, the state does not break even on its investment even in the unlikely event this incentive is 100 percent responsible for the tax revenue generated by program participants.

From a broader perspective, the existence of the program per project dollar cap and the wide disparity between the federal credit and the state credit suggests that there are large projects where the tax credit is not as much of a motivating factor. In these cases, a significantly smaller percentage of eligible expenses are offset by the state credit in those cases.

Qualitative Impacts

Other evaluations of similar state programs have noted the difficulty in assessing the value of property improvements that may be part of longer-range economic and community development efforts. As the program evaluation from Pennsylvania notes at the start, “The Historic Preservation Tax Credit differs from other tax credits because short-term economic development is not a primary goal. Rather, the credit seeks to revitalize distressed communities, preserve state and local heritage and facilitate longer-term economic



development.” The evaluation also identified longer-term positive spillover effects ‘that are difficult to quantify.’ That is certainly the case for NYS as well.

Preserving historic properties can be considered a qualitative impact on its own. A historic structure adds character to its neighborhood and serves as an educational and cultural attraction, whether on its own or as part of a historic neighborhood. Positive environmental impacts are another key benefit. Rehabilitating a structure, by definition, requires reusing materials and reducing waste and debris from demolition. One study in the state of Illinois found that preserving historical structures reduces carbon emissions equivalent to keeping more than 2,500 cars off the road per year.¹⁰²

Case studies of individual projects have shown reductions in crime, increased tourism, and increased foot traffic in the areas surround rehabilitated properties. There is also evidence that affordable housing is incentivized through the program, as real estate developers can offset some costs of construction and combine their rehabilitation with additional tax credits. At the Federal level, the Department of Housing and Urban Development advertises the federal Historic Tax Credit as a strategy to develop affordable housing.¹⁰³ Similar activity is likely happening at the State level, especially when considering the geographic preference for low-income census tracts where affordable housing units are needed. Adding to this is the catalytic potential of the program. Several case studies offer compelling examples of how incentivizing the reuse of these buildings create new residential and commercial space to be activated. In one example, The Annex in Rochester, NY, both created affordable housing units and also important commercial space to contribute to the revitalization of downtown.¹⁰⁴

Summary Findings

ROI Discussion

Whether the program yields a net benefit to the state of New York is a function of several factors, including the program’s foregone revenue and its return on that investment. Department of Parks, Recreation & Historic Preservation awarded nearly \$372 million for the Rehabilitation of Historic Properties Tax Credit (RHPTC) program between 2018 and 2022. For the program to provide a positive net benefit, it must return more than the foregone revenue through the taxes associated with the economic activity or other quantitative or qualitative impacts.

¹⁰² “The Impact of Historic Tax Credit Investment in Illinois”, Illinois Department of Natural Resources, 2023, accessed online at <https://dnrhistoric.illinois.gov/preserve/statecredit-economic-impact.html>.

¹⁰³ “Using the Historic Tax Credit for Affordable Housing”, US Department of Housing and Urban Development, 2023, accessed online at <https://www.hudexchange.info/programs/environmental-review/historic-preservation/tax-credit/>.

¹⁰⁴ “New York State Rehabilitation Tax Credits: Commercial Case Study”, Preservation League of New York State, accessed online at https://static1.squarespace.com/static/5ce6e114ce7798000182c79f/t/5cf56f430ac9a200012fb3f8/1559588676259/23537_annex_the_mills_at_high_falls_tax_credit_case_study_-_rochester.pdf.



Table 86: Reported State Credits for Part 3 Approved Projects, 2018 to 2022

Year	Residential	Non-Residential	Total
2018	\$46,842,389	\$65,219,294	\$112,061,683
2019	\$29,189,667	\$24,243,056	\$53,432,723
2020	\$14,085,502	\$68,053,344	\$82,138,846
2021	\$26,325,034	\$40,342,992	\$66,668,026
2022	\$15,223,433	\$42,456,523	\$57,679,956
Total	\$131,666,025	\$240,315,209	\$371,981,234

Source: Impacts Reported by Department of Parks, Recreation & Historic Preservation

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the Rehabilitation of Historic Properties Tax Credit (RHPTC) analysis, the project team based this analysis only on the taxes generated by the job creation supported by the qualified expenditures.

Table 87: Fiscal Return on Investment to New York State, Total 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Tax Revenue	Total Tax Revenue
State of New York Taxes (\$M)	\$372.0	\$32.8	\$122.2
Return on \$1.00 in Foregone Revenue		\$0.09	\$0.33

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Parks, Recreation & Historic Preservation.

From the investment of \$372 million, the Rehabilitation of Historic Properties Tax Credit (RHPTC) program generated \$32.8 million in direct state taxes and total state taxes of \$122.2 million. The state's investment provided an overall return of \$0.09 on direct taxes to the state and a return of \$0.33 based on total state taxes.

While this calculation suggests the RHPTC program does not offer significant direct return on investment, there are other factors to consider. For one, the program drafts off of a strong Federal credit that provides the initial incentive to complete a project. This allows the State to reap the full benefit of the improvements made under the program at a reduced cost than would otherwise be needed to spur the same behaviors. It also reduces state administrative costs associated with the incentive.

The preservation of historic properties offers several significant qualitative impacts, including preserving history, reducing environmental impacts, and potentially increasing tourism and educational opportunities. Given that a large number of states have similar credits, it appears that policymakers value these impacts, even if short-term economic impact models suggest little immediate value.

While more challenging to quantify, the historical importance of New York as an original colony up to its status as an international destination certainly is reinforced through the continued maintenance and use of these structures. Studies in other states have demonstrated significant increases in property assessments, which in turn drive higher tax revenues that could be argued are partially attributable to the RHPTC program.

While a direct study of specific tax incentive projects would be in conflict with the RFP requirement to not report on specific taxpayers, it would be reasonable to assume the directional impacts would be positive in New York state, as was the case in other states that undertook this type of study. When taken together, it is likely that the return on investment for this incentive is a net positive for the state.



BROAD-BASED EMPLOYMENT AND INVESTMENT TAX CREDITS



Excelsior Jobs Programs



Executive Summary

Incentive Purpose and History

Effective for tax years beginning on or after January 1, 2011, the Excelsior Jobs Program (Excelsior) supports job growth and investments in targeted industries. The program targets traditional major sectors, including manufacturing and finance, as well as emerging industries, such as knowledge, technology, and innovation-focused companies.

Design and Benefits

Administered by Empire State Development (ESD), Excelsior is a suite of five fully refundable, discretionary tax credits that may be taken over a period of 10 years. Projects that meet certain environmental criteria can have the time period for receiving credits lengthened to 20 years. The tax credits are awarded, based on the credit, as a percentage of payroll, a percent of qualified investments, a percentage of total research expenditures, or a percent of real property taxes.

The total aggregate amount of credits that may be awarded in a year is capped by an annual schedule set in state law, and the cumulative authorized cap through 2030 is \$3.1 billion. The amount awarded each year has stayed below the yearly caps, and any amount still not awarded through the end of 2029 may be awarded through 2039.

There are two tracks for the program, a growth track that requires meeting industry-specific minimum job creation requirements, and an investment track (for those who cannot meet the job creation requirements) if they retain a certain number of employees and make total investments that are at least 10 times the awarded tax credit.

Incentive Administration

The Excelsior Jobs program includes several mechanisms intended to ensure credits are deployed effectively and that only eligible businesses who have met their pledged job and investment commitment will receive benefits. These include an extensive application process, program discretion on the part of ESD to select program participants, and substantial reporting requirements for participants and the agency itself.

Incentive Use

Between 2013 and 2022, the Excelsior Jobs program grew from 25 projects receiving credits totaling \$10.4 million to 210 projects receiving \$69.4 million in credits, according to data provided by ESD (Table 89). The figures presented are the total benefit across all components of the Program. The average size of the credit award per participant has remained relatively consistent, fluctuating between \$228,000 and \$461,000, an average of approximately \$351,000 per recipient per year. In total, the Excelsior Jobs program awarded \$336.3 million to 366 unique recipients over the 10-year period.

Return on Investment

ESD reports that the Program created 134,228 net new full-time equivalent jobs between 2013 and 2022, paying an aggregate of \$9,297.7 million in wages. The pace of job creation has steadily increased over the life of the program, with almost 80 percent of the total job creation coming in the second half of the 10-year period.



For the impact analysis, the project team used an IMPLAN model for NYS. The project team aggregated industries into sectors corresponding to the job creation reported by ESD. Because the Excelsior Jobs Program is fundamentally a job creation incentive, the return-on-investment analysis presented in this section is primarily based on the employment growth attributed to the program.

The project team used the exact job numbers as reported as inputs to the model but rounded the resulting impacts for reporting. Based on the IMPLAN model, the Excelsior Jobs Program supported a total of 205,900 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022. On average, Excelsior supported over 40,000 jobs per year.

Summary Findings

From the \$249.7 million in credits awarded, the Excelsior jobs program generated \$689.6 million in direct state taxes, and total state taxes (inclusive of indirect and induced effects) of \$1.3 billion. Each dollar in foregone revenue returned \$2.76 or a net gain of \$1.76 based on direct taxes to the state, or, including indirect and induced effects, a return of \$5.25 on the dollar for a gain of \$4.25. From a purely fiscal perspective, as evaluated by the program's return to the state, the Excelsior jobs program is strongly net positive. Given other quantitative and qualitative benefits, it is extremely likely that Excelsior is a net benefit to the state. Given that the qualification process for the program is extensive, it is also likely that a significant share of the economic activity associated with the program would not have occurred without the incentive.

The Excelsior program aligns with most of the incentive best practices that apply to this type of program. It is a discretionary program that contains high eligibility requirements and has a yearly program cap. It is targeted to key industries and businesses in the state with high average wage levels. It has extensive internal and external reporting requirements. The one area where it doesn't necessarily align with best practices is the long period in which qualified businesses can take the

Background

Incentive Purpose

The Excelsior Jobs Program (Excelsior) is to support job growth and investment in targeted industries. As stated in the enabling legislation, the program is intended to both incentivize growth in New York's "traditional economic pillars including the manufacturing and financial industries" and to "ensure the State emerges as a leader in the knowledge-, technology-, and innovation-based economies."¹⁰⁵

By including an annual cap on costs and a requirement for recipients to demonstrate they have met their commitments before receiving credits, the Excelsior program is designed to provide greater fiscal accountability than the Empire Zone program it replaced.¹⁰⁶ The program is comprised of five tax credits and administered by Empire State Development (ESD).¹⁰⁷

¹⁰⁵ "Consolidated Laws of New York, Chapter 15 (COM), Article 17, Section 351: Statement of legislative findings and declaration", The New York State Senate, September 22, 2014, accessed online at <https://www.nysenate.gov/legislation/laws/COM/351>.

¹⁰⁶ "Majority Passes Excelsior Job Creation Program to Create Jobs and Spur Economic Growth", The New York Senate, June 22, 2010, accessed online at <https://www.nysenate.gov/newsroom/press-releases/2010/majority-passes-excelsior-job-creation-program-create-jobs-and-spur>

¹⁰⁷ "Excelsior Jobs Program Overview", Empire State Development, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Excelsior-Jobs-Program-Overview-NOV2022.pdf>.



Legislative History

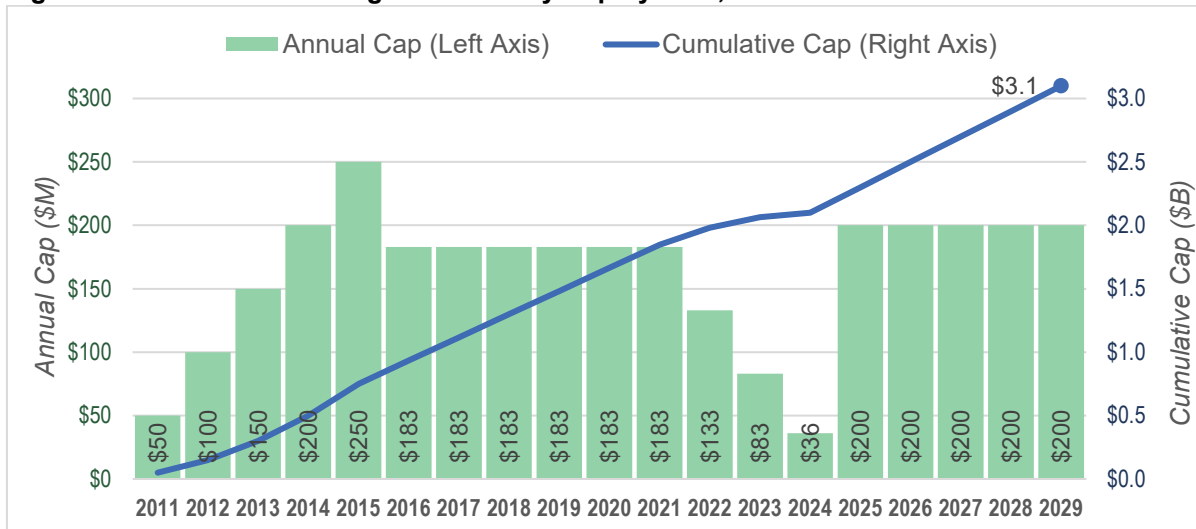
The program was established in Chapter 59 of the Laws of 2010, with the credit effective for tax years beginning on or after January 1, 2011. Since its inception, the program has undergone several legislative changes, including modifications to the annual program caps, two extensions of the program’s sunset date, the extension of the original five-year benefit period to ten years, the addition of enhancements for environmentally targeted projects, and the introduction a credit for employers providing childcare services.¹⁰⁸

Incentive Design

The program is a suite of five fully refundable, discretionary tax credits. Participants can claim credits over a period of 10 years. Projects meeting certain environmental criteria are eligible for enhanced tax credits, which may include an extension of the benefit period to 20 years.¹⁰⁹

The total aggregate amount of credit that may be awarded each year is capped by an annual schedule set in state law. The current statute set caps through 2029, with annual amounts that vary from a low of \$36 million for 2024 to a high of \$250 million for 2015. Cumulatively, the authorized cap is \$3.1 billion. As discussed in the Incentive Use subsection below, actual awards to date have stayed well below the capped maximum. Any amount still unawarded at the end of 2029 may be awarded through 2039. Green CHIPS projects (environmentally sensitive enterprises in the semiconductor industry as described in the following subsection) are bound by separate cap of \$500 million per year through 2049.¹¹⁰

Figure 9: Excelsior Jobs Program Statutory Cap by Year, 2011 to 2029



Source: Consolidated Laws of New York, Chapter 15, Article 17, Section 359: Cap on tax credit

Businesses apply by submitting a consolidated funding application (CFA), which gets routed to one of 10 regional ESD offices. There are two paths for an applicant to enter the program:

¹⁰⁸“Fiscal Year 2024 Annual Report on New York State Tax Expenditures”, New York State Division of the Budget, 2023, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>; “Learning from Past Mistakes”, Citizen’s Budget Commission, October 20, 2015, accessed online at <https://cbcny.org/research/learning-past-mistakes>.

¹⁰⁹ “Excelsior Jobs Program”, Empire State Development, accessed online at <https://esd.ny.gov/excelsior-jobs-program>.

¹¹⁰ “Consolidated Laws of New York, Chapter 15 (COM), Article 17, Section 359: Cap on tax credit”, The New York State Senate, August 19, 2022, accessed online at <https://www.nysenate.gov/legislation/laws/COM/359>.



- **The Growth Track:** a business must operate in a strategic industry and meet industry-specific minimum job creation requirements. Applicants meeting higher requirements for job creation *and* hitting set investment targets are admitted as “Regionally Significant Projects”.
- **The Investment Track:** with some exceptions, businesses in strategic industries that do not meet Growth Track job creation targets enter the program if they retain a certain number of employees *and* make total investments (inclusive of capital investments and wages paid to retained employees) of at least 10 times the awarded tax credit (i.e. a minimum benefit-cost ratio of 10:1).

The eligibility requirements vary by industry, as detailed in Table 88.

Table 88: Excelsior Jobs Program Eligibility Criteria

Strategic Industry	Job Growth Track			Investment Track	
	New Jobs	New Jobs	Investment	Retained Jobs	Investment Benefit:Cost
Scientific R&D*	5	10	\$3M	25	10:1
Software Development*	5	n/a	n/a	25	10:1
Agriculture*	5	10	\$250,000	25	10:1
Manufacturing*	5	10	\$1M	25	10:1
Financial Services	25	100	\$3M	25	10:1
Back Office	25	100	3M	25	10:1
Distribution	50	100	\$15M	25	10:1
Music Production	5	n/a	n/a	n/a	n/a
Entertainment Company	100	200	n/a	n/a	n/a
Life Sciences	5	20	n/a	25	10:1
Other	n/a	150	\$3M	n/a	n/a

*Eligible for enhanced green project tax credits if the business activity is aimed at reducing emissions or supporting clean energy.

†Eligible for Excelsior Real Property Tax Credit

By statute, 75 percent of the credit amount is allocated to the businesses on the Job Growth track with the remaining 25 percent allocated to Investment Track business; however those proportions can be reallocated if the credits are under the statutory cap.¹¹¹ As of the close of 2022, nearly 90 percent of credits awarded and 95 percent of credits committed have been to projects on the Job Growth Track.¹¹²

Incentive Benefits

The benefit conferred by the Excelsior Jobs Program is the sum of its component credits. As a discretionary credit, the actual amount awarded is negotiated between the applicant and ESD. The credits are all fully refundable. The credit period is limited to 10 years for most projects, however “green CHIPS projects” are eligible to enter a second 10-year period.

There are two types of credit enhancements available to environmentally targeted projects:

¹¹¹ “Consolidated Laws of New York, Chapter 15 (COM), Article 17, Section 359: Cap on tax credit”, The New York State Senate, August 19, 2022, accessed online at <https://www.nysenate.gov/legislation/laws/COM/359>.

¹¹² PFM Calc from ESD Excelsior 2023 Q3 Quarterly Report, Charts A-L.



- A **green project** is a business operating in select industries (as noted with asterisks in Table 88) engaged in manufacturing products and/or developing technologies aimed at reducing emissions or supporting use of clean energy.
- A **green CHIPS project** is an enterprise that either manufactures semiconductors and related equipment or supplies materials or services to that sector. For this designation, a project must include sustainability measures and commit to creating at least 500 new jobs and investing at least \$3 billion dollars within ten years.¹¹³

The five credits of the Excelsior Jobs Program are:

1. **Excelsior Jobs Tax Credit:** a credit of up to 6.85 percent of wages per net new job. For a qualified green project or green CHIPS project, the credit may be as high as 7.5 percent of wages per net new job.
2. **Excelsior Investment Tax Credit:** a credit equal to 2 percent of the cost of qualified investments in New York. The credit is increased to 5 percent of the cost of qualified investments for green projects and the construction of childcare service facilities.
3. **Excelsior Research and Development Tax Credit:** a credit for in-state research and development expenditures, equal to 50 percent of the Federal Research and Development tax credit, up to 6 percent of total research expenditures in the State or, in the case of green CHIPS projects, up to 8 percent.
4. **Excelsior Real Property Tax Credit:** a geographically targeted credit available only to participants either located in areas formerly designated as Investment Zones under the Empire Zones Program or committing to the job creation and investment targets necessary to qualify as a Regionally Significant Project. The credit in year one is 50 percent of the property taxes assessed and paid in the year prior to a taxpayer's application to the Excelsior program and is gradually phased out over the ten-year period.
5. **Excelsior Child Care Services Tax Credit:** participants can claim a credit for childcare services expenditures in the state. This is equal to 6 percent of expenditures for the operation, sponsorship, or direct financial support of a childcare services program.¹¹⁴

Incentive Administration

The Excelsior Jobs program includes several mechanisms intended to ensure credits are deployed effectively and that only eligible businesses who have met their pledged job and investment commitment will receive benefits.

To apply for the program, business must submit a CFA, which includes detail on the background of the company, the project plan and timeline, a funding plan, and projected job creation and anticipated wages. ESD maintains discretion in evaluating applicants including overall economic impact, the level of economic distress in a project region, the office's determination of project's financial viability, and the degree to which the likelihood of proposed activity depends on the availability of credits.

¹¹³ "Excelsior Jobs Program Overview", Empire State Development, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Excelsior-Jobs-Program-Overview-NOV2022.pdf>.

¹¹⁴ "Excelsior Jobs Program Overview", Empire State Development, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Excelsior-Jobs-Program-Overview-NOV2022.pdf>.



Approved applicants will enter into a formal agreement with ESD that outlines a preliminary schedule of benefits including the business’s job and/or investment requirements and the amount of tax credit that will be awarded when demonstrating they have met those requirements.

Participants are required to submit an annual Performance Report, along with supporting evidence, to demonstrate they have met their job and/or investment commitments. If ESD’s review of the Performance Report confirms commitments have been met, the Department will issue a Certificate of Tax Credit indicating the amount of credit that may be claimed in that year. Benefits may be pro-rated or denied if the actual activity falls short of the agreed upon requirements.¹¹⁵

ESD is required to publish a quarterly report on the Department’s website. The reports include a narrative summary of applications, admissions, and credits issued, as well as a series of attachments detailing that information at the applicant level by tax year.¹¹⁶

Incentive Use

Between 2013 and 2022, the Excelsior Jobs program grew from 25 projects receiving credits totaling \$10.4 million to 210 projects receiving \$69.4 million in credits, according to data provided by ESD (Table 89). The figures presented are the total benefit across all components of the Program. The average size of the credit award per participant has remained relatively consistent, fluctuating between \$228,000 and \$461,000, an average of approximately \$351,000 per recipient per year. In total, the Excelsior Jobs program awarded \$336.3 million to 366 unique recipients over the 10-year period.

Table 89: Excelsior Jobs Program Incentive Use Summary by Year 2013 to 2022

Year	Projects	Credit Awarded	Average Credit per Project
2013	25	\$10,383,361	\$415,334
2014	50	\$11,406,201	\$228,124
2015	48	\$15,955,915	\$332,415
2016	58	\$15,200,380	\$262,076
2017	77	\$33,704,637	\$437,723
2018	120	\$45,864,749	\$382,206
2019	103	\$34,503,653	\$334,987
2020	139	\$64,070,885	\$460,942
2021	128	\$35,791,783	\$279,623
2022	210	\$69,437,833	\$330,656
Total	958*	\$336,319,397	\$351,064

*The total shown is the total number of project reports over the period, which represents 366 unique projects reporting over multiple years.

Source: Data provided by Empire State Development Corporation

¹¹⁵ “Excelsior Jobs Program Regulations, Section 192.1”, State of New York, March 28, 2023, accessed online at <https://esd.ny.gov/sites/default/files/ExcelsiorRegs%20-2023-GC-updated-final-050123.pdf>.

¹¹⁶ “Consolidated Laws of New York, Chapter 15 (COM), Article 17, Section 358: Reporting”, The New York State Senate, April 23, 2021, accessed online at <https://www.nysenate.gov/legislation/laws/COM/358>; “Excelsior Jobs Program Quarterly Report: 9/30/2023”, Empire State Development, September 30, 2023, accessed online at <https://esd.ny.gov/esd-media-center/reports/excelsior-jobs-program-quarterly-report-093023>.



ESD reports that the Program created 134,228 net new full-time equivalent jobs between 2013 and 2022, paying an aggregate of \$9,297.7 million in wages (Table 91). The pace of job creation has steadily increased over the life of the program, with almost 80 percent of the total job creation coming in the second half of the 10-year period.

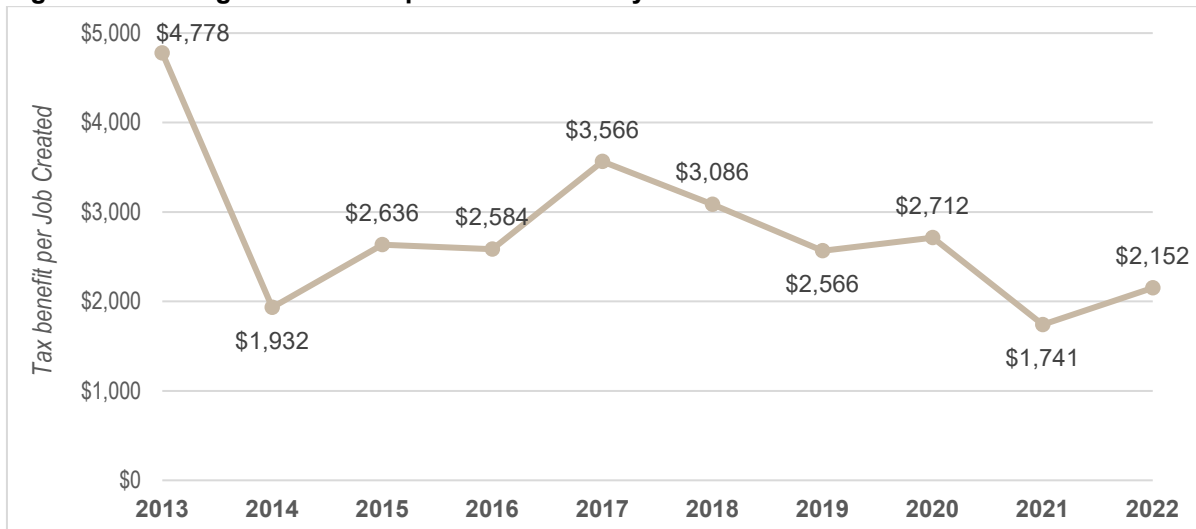
Table 90: Excelsior Jobs Program: New Net Job Creation by Year 2013 to 2022

Year	Jobs Created	Average Wage	Created Jobs Wages
2013	2,173	\$54,481	\$118,386,821
2014	5,903	\$50,706	\$299,314,625
2015	6,054	\$56,520	\$342,174,005
2016	5,883	\$65,053	\$382,709,576
2017	9,452	\$69,199	\$654,072,302
2018	14,863	\$76,087	\$1,130,876,235
2019	13,447	\$73,098	\$982,953,029
2020	23,622	\$67,609	\$1,597,061,033
2021	20,561	\$60,248	\$1,238,765,767
2022	32,270	\$79,063	\$2,551,359,162
Total	134,228	\$69,268	\$9,297,672,555

Source: Data provided by Empire State Development Corporation

Compared against the amount of credit awarded, the total job creation equates to an average of \$2,506 in tax credits awarded (foregone revenue) per net new job, a figure that generally fluctuated around that average over the period (Figure 10).

Figure 10: Average Tax Benefit per Job Created by Year 2013-2022



Source: Data provided by Empire State Development Corporation

Total job creation over the 10-year period was spread across New York State (NYS), as shown by ESD Region in Table 91. New York City was by far the largest in terms of job creation with 48,312 jobs – more



than a third of the total job creation and, because of a higher average wage, over half of the total wages paid to net new jobs.

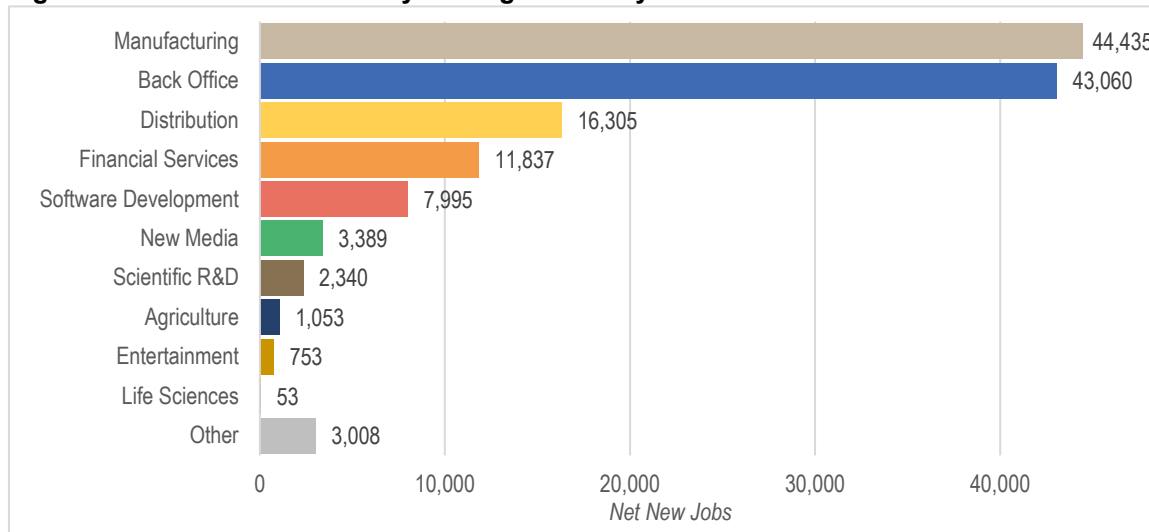
Table 91: Excelsior Jobs Program: Total New Net Job Creation by Region, 2013 to 2022

ESD Region	Jobs Created	Average Wage	Created Job Wages
New York City	48,312	\$100,438	\$4,968,358,826
Mid-Hudson	19,770	\$80,209	\$1,513,112,929
Finger Lakes	15,640	\$40,089	\$623,038,155
Capital Region	12,101	\$57,407	\$677,729,140
Long Island	9,301	\$53,222	\$504,840,592
Western NY	7,919	\$52,977	\$424,174,123
Central NY	7,386	\$47,574	\$353,129,654
Southern Tier	5,260	\$51,696	\$232,138,182
North Country	2,201	\$29,434	\$63,702,898
Mohawk Valley	1,240	\$32,880	\$38,660,299
Multi-Region	5,098	\$85,159	\$414,506,510
New York State	134,228	\$69,098	\$9,297,672,555

Source: Data provided by Empire State Development Corporation

By industry, job creation was heavily concentrated in manufacturing and back office, which together account for more than half of the total jobs over the period.

Figure 11: Total Job Creation by Strategic Industry 2013-2022



Source: Data provided by Empire State Development Corporation

As the name implies, the Excelsior Jobs Program is primarily a job creation incentive; however, the program design also encourages investment and job retention in NYS. Table 92 shows the total actual capital investment, research and development expenditures, and job retention reported between 2013 and 2022. The research and development expenditures may overlap with the amounts listed for capital investments and wages paid to retained jobs. Reported amounts may be understated, as there is no benefit to reporting beyond what is required in the schedule of benefits agreed to by ESD and participants, which is primarily driven by the job creation shown in Table 90.



Table 92: Excelsior Jobs Program: Actual Investments and Job Retention 2013 to 2022

Year	Capital Investment	Research & Development Expenditures	Retained Jobs	Retained Jobs Wages
2013	\$912,027,277	\$3,808,331	11,630	\$633,611,934
2014	\$201,796,876	\$43,154,129	11,983	\$607,604,125
2015	\$222,809,307	\$166,230,856	9,363	\$529,199,737
2016	\$164,860,517	\$241,867,259	11,383	\$740,503,672
2017	\$564,894,459	\$474,462,963	8,319	\$575,669,433
2018	\$590,113,048	\$1,106,298,778	17,039	\$1,296,440,838
2019	\$496,631,109	\$185,919,747	5,298	\$387,274,868
2020	\$1,343,356,295	\$2,119,522,915	29,362	\$1,985,136,993
2021	\$378,791,836	\$311,886,430	13,580	\$818,172,225
2022	\$1,097,243,366	\$4,840,052,974	25,027	\$1,978,706,717
Totals	\$5,972,524,090	\$9,493,204,382	142,984	\$9,552,320,542

Source: Data provided by ESD



Benchmarking

The structure of the Excelsior Jobs Program falls in between its comparatives in terms of complexity and reporting requirements. Its reporting and eligibility requirements are more stringent than that of Georgia's Quality Jobs Tax Credit (QJTC) but less than those of either California's New Employment Credit (NEC) or Vermont's Employment Growth Initiative (VEGI).

To better understand the efficacy of the New York State's Excelsior Jobs Program, this section benchmarks the reach and impact against that of similar employment incentive programs across the U.S. Specifically, the section compares each program's number of claimants, value of credits claimed, jobs created, and eligibility requirements as indicators of reach and impact.

The benchmark programs have been selected based on proximity, size, and eligibility of programs using CREC's State Business Incentive Database, with special focus given to states considered primary competitors with New York for attracting business. Table 94 compares the reach and impact metrics of comparable state incentive programs in the CREC database with that of the Excelsior Jobs Program as reported by ESD. Since the data availability years are different for each program, the metrics were compared on an average annual basis.

Table 93: Excelsior Jobs Program Comparison to Peer State Programs

Program	Start Year	Data Years	Average Annual Claimants	Annual Average Credits Claimed	Annual Average Job Creation
New York: Excelsior Jobs program	2010	2013-2022	96	\$ 33.6 million	13,423
Vermont: Vermont Employment Growth Initiative (VEGI)	2007	2007-2020	31	\$2.4 million	629
California: New Employment Credit (NEC)	2013	2014-2022	67	\$2.4 million	6,358
Georgia: Quality Jobs Tax Credit (QJTC)	2000	N/R	N/R	N/R	N/R

Source: CREC State Business Incentives Database; except for Excelsior, which is based on data provided by Empire State Development

California: New Employment Credit (NEC)

California's New Employment Credit (NEC) is intended to incentivize job growth in high poverty areas, and a few select industries. Under certain conditions, The NEC offers employers a credit of up to 35 percent of wages paid to new hires.

NEC was first enacted in 2013 as an entirely geographically targeted tax credit: employers had to be located in a "Designated Geographical Area" (DGA), a high-poverty region defined by the State. Instead of targeting industries like Excelsior, the NEC excluded temp agencies, retail businesses, theaters, food and drink establishments, and casinos *unless* they were a small business with gross receipts of less than \$2 million. Legislation enacted in 2023 expanded to eligibility to include certain high-tech industries, regardless of their



location. Those targeted industries include semiconductor manufacturing, electric airplane manufacturing, and lithium battery production, collectively referred to by the acronym “SEAL”.¹¹⁷

The employer requirements are similar for business located in a DGA and businesses operating in one of the SEAL industries: they must have a net increase in jobs, hire qualified employees, and pay wages that are at least 150 percent. Employees must be new hires that were either previously unemployed, in the military, formerly convicted on a felony, or a recipient of either the federal Earned Income Credit or state assistance.

Employers must apply for a “Tentative Credit Reservation” for each qualified hire. To receive benefits, participating employers must file annual reports certifying the employer and its employees are still meet requirements. The credit amount is equal to 35 percent of new job wages falling within 150 percent and 350 percent of California’s minimum wage.¹¹⁸

The State Franchise Tax Board is statutorily required to compile an annual report on NEC utilization.¹¹⁹

Program participation for NEC has been consistent from 2014 to 2022 with approximately 67 claimants per year, compared with Excelsior’s average of 96 participants. While the NEC is only about a one-third smaller in terms of participants, the average annual credits claimed are less than a one-tenth that of Excelsior. On average, the NEC creates roughly half as many jobs as Excelsior.

Vermont: Vermont Employment Growth Initiative (VEGI)

The Vermont Employment Growth Initiative (VEGI) is designed to incentivize business attraction and expansion. Businesses meeting qualification and performance requirements can receive a cash payment for creating jobs and making capital investments.

The VEGI credit is available to businesses regardless size or industry. There are no set requirements for job creation other than that the incentivized activity is adding employment beyond the normal growth expected for the industry the in which the company operates.

Admittance to the program depends on citizen-led Vermont Economic Progress Council’s (VEPC) determination that the expected revenues to the state outweigh expected costs (including the credit), that the new development is welcomed by the local government, that the new business will not adversely affect existing business, and that that venture would not occur without the incentive.¹²⁰

The VEGI program includes enhancements for ventures operating in certain environmentally focused technology sectors or located in labor markets designated by the state as having high unemployment and low incomes.

Businesses must be accepted into the program before proceeding with the project for which they are seeking the incentive. The application process establishes the amount of credit and the performance requirements, in

¹¹⁷ “New employment credit for Semiconductor, Electric Airplane, Lithium Production, and Lithium Battery Manufacturing”, State of California Franchise Tax Board, accessed online at <https://www.ftb.ca.gov/file/business/credits/new-employment-credit/nec-seal-credit.html>.

¹¹⁸ “New employment credit”, State of California Franchise Tax Board, accessed online at <https://www.ftb.ca.gov/file/business/credits/new-employment-credit/>.

¹¹⁹ “New Employment Credit Report”, State of California Franchise Tax Board, March, 2023, accessed online at <https://www.ftb.ca.gov/about-ftb/data-reports-plans/New-Employment-Credit-Report-2023.pdf>.

¹²⁰ “Vermont Employment Growth Incentive”, Vermont Economic Progress Council, September, 2018, accessed online at https://outside.vermont.gov/agency/ACCD/ACCD_Web_Docs/ED/VEGI/Programsummary.pdf.



terms of payroll, employment, and/or capital investment, that the business must meet to receive it. Credits can be claimed annually over a period of five years. To receive credits, the participant must demonstrate they have met their performance targets.

The VEPC and State Department must of taxes are required by law to submit an annual report to the State Legislature with details of the VEGI utilization.¹²¹

Between 2007 and 2020, VEGI awarded an average of \$23 million in credits per year –an amount similar to California’s NEC program -- but created far fewer jobs on an annual average basis compared to the NEC program.

Georgia: Quality Jobs Tax Credit (QJTC)

Georgia’s Quality Jobs Tax Credit (QJTC) aims to incentivize the creation of well-paying jobs with a particular focus on rural counties. The value of the credit ranges from \$2,500 to \$5,000 per net new job depending on how favorably the created position’s wage compares with countywide averages. Jobs must be net new to the state, be for at least 30 hours per week, and pay wages of at least 110 percent of the countywide average wage. Qualifying jobs can receive a credit for up to five years.

The program classifies the state’s counties into three tiers by level of ruralness, each with different requirements for number of jobs created (minimum of 10 to 50) and timeline for creating them (either one or two years).¹²²

The credit is claimed on the business’s corporate income tax return. This review could not find any statute requiring the reporting of QJTC.

Benchmarking Summary

The Excelsior Jobs program offers benefits to targeted industries throughout the state and encourages those businesses to expand or relocate to New York. The program has seen robust participation throughout its existence and the largest amount of benefit distributed compared to its contemporaries.

Excelsior’s is primarily targeted to specific industries, which distinguishes it from similar programs like Vermont’s VEGI and Georgia’s QJTC, which are available to job creators in any industry. California’s NEC recently added an industry-focus track for admission, whereas previously it had been entirely entirely-geographically targeted. Business across Georgia are eligible for QJTC credits, but the requirements vary by county. Excelsior and VEGI both have place-based enhancements but are generally not restricted by geography. QJTC and NEC have minimum compensation requirements, while the other two do not.

Like Excelsior, VEGI is a discretionary credit. But in a notable divergence, the entity that decides admission to the Vermont’s program, the VEPC, is staffed by citizens.¹²³

¹²¹ “Vermont Employment Growth Incentive Program Annual Report 2023”, Vermont Economic Progress Council, September 1, 2023, accessed online at https://outside.vermont.gov/agency/ACCD/ACCD_Web_Docs/ED/VEGI/AnnualReports/2023-VEGI-Annual-Report-FINAL.pdf.

¹²² “Business Incentives 2023”, Georgia Department of Economic Development, 2023, accessed online at <https://79590748.flowpaper.com/BusinessIncentivesBrochure/#page=6>.

¹²³ “Vermont Economic Progress Council”, State of Vermont Agency of Commerce and Community Development, accessed online at <https://accd.vermont.gov/economic-development/programs/vepc>.



Return on Investment

All data used in this analysis was provided by Empire State Development Corporation. The figures presented in this report reflect the year in which the tax credit was issued, which may differ from how figures are reported elsewhere.

The project team submitted a request to the Empire State Development (ESD) for the most recent five years of data for the Excelsior program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Value of credits awarded by year.
- Net new job creation by year by sector

The total direct job creation, associated wages, and total tax credits awarded over the most recent five years of data are shown in Table 94 below.

Table 94: Excelsior Jobs Program Reported Direct Job Creation, 2018 to 2022 (Dollars in Millions)

Year	No of Reports	Actual Jobs Created (FTE)	Total Wages (\$M)	Total Tax Credits Awarded (\$M)
2018	137	14,863	\$1,130.9	\$45.9
2019	115	13,447	\$983.0	\$34.5
2020	166	23,622	\$1,597.1	\$64.1
2021	165	20,561	\$1,238.8	\$35.8
2022	223	32,270	\$2,551.4	\$69.4
Total	806	104,763	\$7,501.0	\$249.7

For the impact analysis, the project team used an IMPLAN model for NYS.¹²⁴ The project team aggregated industries into sectors corresponding to the job creation reported by ESD. Because the Excelsior Jobs Program is fundamentally a job creation incentive, the return-on-investment analysis presented in this section is primarily based on the employment growth attributed to the program. Table 95 presents the direct job creation figures that drive the IMPLAN model, grouped by sector and year to account for any inflation effects.

Table 95: Reported Job Creation, 2018 to 2022

Industry	2018	2019	2020	2021	2022	Total
Manufacturing	5,202	4,014	6,348	7,894	11,488	34,946
Back Office	3,482	2,689	7,936	6,982	12,600	33,689
Distribution	2,023	4,030	2,421	2,001	3,071	13,546
Software Development	1,037	656	899	2,361	2,327	7,280
Financial Services	2,485	-	3,888	-	53	6,426
Other	-	1,033	499	530	946	3,008
New Media	-	385	826	430	1,231	2,872
Scientific R&D	483	343	245	149	96	1,316
Agriculture	151	121	174	214	214	874
Entertainment	-	176	377	-	200	753

¹²⁴ Further discussion of the IMPLAN model may be found in Appendix A.



Industry	2018	2019	2020	2021	2022	Total
Life Sciences	-	-	9	-	44	53
Total	14,863	13,447	23,622	20,561	32,270	104,763

Source: Job Creation Reported by ESD.

The project team used the exact job numbers as reported as inputs to the model but rounded the resulting impacts for reporting. Based on the IMPLAN model, the Excelsior Jobs Program supported a total of 205,900 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022 (Table 96). On average, Excelsior supported over 40,000 jobs per year.

Table 96: Total Job Impacts by Year, 2018 to 2022

Year	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
2018	14,900	6,800	7,500	29,100
2019	13,400	6,500	6,200	26,200
2020	23,600	11,500	12,600	47,800
2021	20,600	9,400	9,500	39,500
2022	32,300	15,700	15,300	63,300
Total	104,800	50,000	51,100	205,900
<i>Annual Average</i>	<i>20,960</i>	<i>9,980</i>	<i>10,220</i>	<i>41,180</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest hundred.

Table 97 presents the total labor income of jobs supported by the program. Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy. Consequently, the total direct labor income shown in Table 97 is larger than direct wages shown in Table 98. The labor income of workers directly supported by the film credits totaled \$10.8 billion over the five-year period. Inclusive of the indirect and induced economic activity, total labor income was \$19.8 billion over the period.

Table 97: Labor Income Impacts by Year, 2018 to 2022 (Dollars in Millions)

Year	Direct Jobs Income	Indirect Jobs Income	Induced Jobs Income	Total Labor Income
2018	\$1,641.0	\$672.3	\$597.8	\$2,911.1
2019	\$1,298.9	\$627.2	\$498.1	\$2,424.2
2020	\$2,691.5	\$1,192.3	\$1,003.3	\$4,887.2
2021	\$2,026.5	\$900.0	\$757.9	\$3,684.4
2022	\$3,174.8	\$1,533.8	\$1,218.5	\$5,927.0
Total	\$10,832.6	\$4,925.6	\$4,075.7	\$19,833.9
<i>Annual Average</i>	<i>\$2,166.5</i>	<i>\$985.1</i>	<i>\$815.1</i>	<i>\$3,966.8</i>

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The economic activity associated with the Excelsior Jobs Program generated tax revenues for the State of New York, its county and local governments, and the U.S. Federal Government. Across all levels of government and inclusive of the indirect and induced effects, the total revenue of the period is estimated to total \$5.6 billion.



Table 98: Total Tax Revenue Impacts, 2018 to 2022 (Dollars in Millions)

Tax Revenue (\$ Millions)	Direct	Indirect	Induced	Total
Total in New York State	\$1,738.3	\$791.5	\$831.0	\$3,360.7
Local Governments	\$883.8	\$401.9	\$439.6	\$1,725.3
County	\$164.9	\$75.1	\$84.2	\$324.3
State of New York	\$689.6	\$314.4	\$307.1	\$1,311.1
Federal	\$2,109.4	\$949.4	\$783.3	\$3,842.1
Total to all Governments	\$3,847.7	\$1,740.8	\$1,614.3	\$7,202.9

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.*

Return on Investment to the State of New York

Whether the program yields a net fiscal benefit to the state of New York is a function of the state's investment in the program and its return on that investment. Excelsior Jobs Program tax credits awarded between 2018 and 2022 represent \$249.7 million in foregone revenue to the State of New York (see Table 99).

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself based on that metric alone. Using only state taxes provides the most conservative measure of return to the state itself. For the Excelsior analysis, the project team based this analysis only on the taxes generated by the job creation.

Table 99: Fiscal Return on Investment to New York State, 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State of New York Taxes (\$M)	\$249.7	\$689.6	\$1,311.1
Return on \$1.00 in Foregone Revenue		\$2.76	\$5.25
Breakeven "But for" Percentage		36%	19%

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.*

From the \$249.7 million in credits awarded, the Excelsior jobs program generated \$689.6 million in direct state taxes, and total state taxes (inclusive of indirect and induced effects) of \$1,311.1 million (see Table 99). Each dollar in foregone revenue returned \$2.76 or a net gain of \$1.76 based on direct taxes to the state, or, including indirect and induced effects, a return of \$5.25 on the dollar for a gain of \$4.25. From a purely fiscal perspective, as evaluated by the program's return to the state, the Excelsior jobs program is strongly net positive.

The question of whether those benefits would have occurred "but-for" the state's investment is difficult to answer directly. An alternative is to compare the ROI generated to the initial investment to determine how much of that return would have to be caused but-for the initial investment. In the case of Excelsior, only about one-third (36 percent) of activity would have to be directly attributable to the incentive for the program to be net positive in terms of direct state tax revenue. If the taxes on indirect and induced economic activity are counted with the return to the state, then only about one-fifth (19 percent) of the economic activity would have had to not occur but for the incentive for the fiscal benefit to come out positively.



Other Quantifiable Economic Benefits

The Excelsior Jobs Program is primarily a job creation incentive and so the project team evaluated its economic impact on that basis; however, the program design also encourages capital investment, research and development spending, and job retention. These other quantifiable economic benefits to New York's are presented in Table 100 for the period of 2018 to 2022. These are direct benefits to the state beyond those that are considered in the economic impact analysis. Note the research and development expenditures may overlap with the amounts listed for capital investments and wages paid to retained jobs. Reported amounts may be understated as there is no benefit to reporting beyond what is required in schedule of benefits agreed to by ESD and participants, which is primarily driven by the job creation.

Table 100: Excelsior Jobs Program: Actual Investments and Job Retention 2018 to 2022

Year	Capital Investment	Research & Development Expenditures	Retained Jobs	Retained Jobs Wages
2018	\$590,113,048	\$1,106,298,778	17,039	\$1,296,440,838
2019	\$496,631,109	\$185,919,747	5,298	\$387,274,868
2020	\$1,343,356,295	\$2,119,522,915	29,362	\$1,985,136,993
2021	\$378,791,836	\$311,886,430	13,580	\$818,172,225
2022	\$1,097,243,366	\$4,840,052,974	25,027	\$1,978,706,717
Total	\$3,906,135,654	\$8,563,680,844	90,306	\$6,465,731,640
<i>Annual Average</i>	<i>\$781,227,131</i>	<i>\$1,712,736,169</i>	<i>18,061</i>	<i>\$1,293,146,328</i>

Source: Data provided by ESD

Other Qualitative Economic Benefits

Since its creation in 2010, the Excelsior Jobs Program has targeted the economic development goals of New York State. In doing so, the program offers the state and businesses within the state several benefits. The program offers benefits to targeted industries throughout the state and encourages those businesses to expand or relocate to NY. The program has seen robust participation throughout its existence and the largest amount of benefit distributed compared to its contemporaries.

New York added additional benefit to the structure of its credits to incentivize businesses to invest in technologies and industries that further these goals. Through the Excelsior Jobs Program, New York offers the Green Project Tax Credit and the Green CHIPS Project tax credit. The Green Project Tax credit offers benefits to projects that include the manufacture or development of products or technologies or supply chain components primarily for renewable energy systems as defined in section sixty-six-p of the public service law, vehicles that use non-hydrocarbon fuels and produce zero or near zero emissions, heat pumps, energy efficiency, clean energy storage and other products that significantly reduce greenhouse gas emissions by minimizing the utilization of depletable resources or by improving industrial efficiency. This offers a reduction in the cost of producing green projects and aims to incentivize private involvement in expanding New York's Green Economy. The Green Chips Project tax credit offers incentives to large scale, living wage, projects that development semiconductor manufacturing and related equipment, which employs a production process with sustainability measure to mitigate greenhouse gas emissions over its lifetime.



The industries targeted vary but each offer, on average, a living wage. Average wages ranges from \$24 per hours in the Agricultural sector, to \$154 per hour, in the Financial and Insurance Sector.¹²⁵ This range is well above the living wage estimate for New York State of approximately \$21.50 per hour.¹²⁶ By focusing on these living wage sectors, New York incentivizes job creation of high-quality jobs that offer a living wage.

The wide range of credits available through the program has led to robust use of the program by businesses. Firms in the Excelsior Jobs Program may qualify for five, fully refundable tax credits. The program since 2013 has seen roughly 300 unique participants. As a result, New York boasts the second highest annual average participation relative to the states offering similar programs. This high level of participation displays that the credit is known and utilized within the New York business community and that businesses are receiving benefit from the existence of the credit.

Summary Findings

This analysis used a conservative test of return based only on the **job creation** for state tax revenues:

- The Excelsior program likely provides a positive return to the state in terms of direct state taxes revenues, with an additional \$1.76 in tax revenues after repaying the initial \$1 invested.
- If all of the taxes that flow from that direct activity, included all taxes from indirect and induced activities, then the Excelsior program generates a return of an additional \$4.25 after repaying the initial \$1 investment.
- In addition to its direct tax benefit to the State, the program confers sizeable tax benefits to New York's local and county governments, as well as the US Federal Government.
- Beyond the job creation on which the ROI analysis is based, the job retention, capital investment, and research and development expenditures associated Excelsior Jobs program provides further benefit to the State's economy.
- Based on this analysis the Excelsior program generates a significantly positive Return on Investment as well as highly positive economic impacts.
- Beyond the ROI discussion, the Excelsior program aligns with many tax incentive best practices and is, in the project team's estimation, well-crafted and administered.

¹²⁵ Estimates created from Lightcast Regional Industry Data, assumes 260 working days at an average 8hrs per day.

¹²⁶ "Living Wage Calculation for New York", Massachusetts Institute of Technology Living Wage, 2023, accessed online at <https://livingwage.mit.edu/states/36>.



Employment Incentive and Investment Tax Credits



Executive Summary

Unlike other tax incentives under review, the Investment Tax Credit and the Employment Incentive Credit, while separate tax credits, cannot be disaggregated for impact purposes. Despite having separate forms, the data on utilization of the two separate credits is not disaggregated by program, and credits are reported as a total of ITC and EIC claimed. Needless to say, that makes determining the individual value of either tax credit practically impossible, as there is no way to identify the individual amounts of the two or their impact on economic activity, other than as a pair.

Given that the two credits reward different types of behavior, it is difficult to understand the rationale for combining the two. It creates a suboptimal level of opaqueness to this analysis.

Purpose and History

The Investment Tax Credit (ITC) was established On January 1, 1969. Research and development property and pollution control facilities were added to the ITC effective for tax years beginning on or after January 1, 1987. The Employment Incentive Credit (EIC) for corporate franchise taxpayers was established on January 1, 1987, and the EIC for personal income taxpayers was established on January 1, 1997.

Together, these incentives are meant to encourage capital investments and employment growth by manufacturing businesses in New York State (NYS).

Design and Administration

Qualified property for the ITC is tangible property, including buildings and structural components of buildings, which were acquired, constructed, reconstructed, or erected by the taxpayer after December 31, 1968. The tangible property must also be located in NYS, have a useful life of four years or more, and is principally used in manufacturing, processing, farming, and others of a similar nature.

A taxpayer that is allowed a credit under the ITC, except for the optional rate for applicable to R&D property, is also eligible to receive the EIC for each of the next 2 years after the taxable year that the ITC is allowed for that property. However, to be eligible for the EIC, the average number of employees during the taxable year must be at least 101 percent of the average employment during the employment base year.

These are as-of-right credits, so the administrative involvement by the Department of Taxation and Finance is limited. Businesses are required to keep financial records, and reporting for the EIC requires general employee information.

Benefits

The Investment Tax Credit (ITC) offers tax credits to eligible businesses that create new jobs and make qualified new investments in production property and equipment. New businesses may elect to receive a refund of select credits, and unused credits can be carried forward for 15 years.¹²⁷

For corporate tax filers, the credit is equal to 5 percent of the first \$350 million of the investment credit base and 4 percent of investments more than this amount, except for research and development where the credit in any case is 9 percent.

¹²⁷ "Investment Tax Credit (ITC)", New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/investment_tax_credit.htm.



For a taxpayer that is an eligible farmer, the percentage to be used to compute the allowed credit is 20 percent for eligible property that is principally used in the production of goods by farming, agriculture, horticulture, floriculture, or viticulture.

For personal income tax filers, the credit rate equals 4 percent of the investment credit base. The taxpayer can claim a rate of 7 percent on R&D property, but they are not allowed to also claim the EIC. The same provision for farmers applies as above with the corporate franchise tax filers. In this case, excess credit can be carried forward for 10 years, and new businesses can also claim excess credit as a refund.

If the business's ITC investment creates new jobs, increasing total employment to between 101 and 102 percent of the employment base year, they may be eligible for an additional 1.5 percent EIC on the initial investment for the 2 years following the taxable year of the ITC credit. The same eligibility applies except for research and development, which already receives additional credit from the ITC. If the average total employment of the taxable year in relation to the base year is between 102-103

Use

Combined, the ITC and EIC are among the largest of the NYS tax incentives, in terms of foregone revenue. In the years with actual data from 2015 to 2019, the foregone revenue of the combined credits ranged from a low of \$93.1 million in 2019 to a high of \$151.7 million in 2018. While the amount of the credits claimed by personal income tax filers has remained relatively constant in that time frame (a low of \$28.3 million and a high of \$32.2 million), the corporate franchise credits have been more volatile (a low of \$63.6 million in 2019 and a high that is almost double that amount, \$119.5 million, in 2018). The forecast is for foregone revenue of \$125 million in 2023.

Benchmarking

Employment and investment-based tax credits similar to these in NYS are common throughout the U.S., including most of the state's major competitors. They vary considerably in terms of the nature of the credit and the size of the programs in terms of foregone revenue. In most other instances, the credits can be broken out and compared to others that are employment or investment based, which is not the case for NYS.

Return on Investment

From a pure 'foregone revenue compared to new state revenue' perspective, these credits collectively return very little to the state, at just \$0.02 to \$0.04 per \$1.00 of foregone revenue. The lack of detailed information (or even disaggregated data) for the tax credits makes it even more difficult to weigh them. At the same time, these types of credits are common among the states, and this may be one where it is necessary to offer them from a competitive standpoint. It is also true that investments in key industries can have longer-term positive impacts.

Summary Findings

The tax forms and processes should allow for disaggregation of data associated with each credit. Given the low return on investment and low eligibility requirements versus other state credits, this may also be an area to modify existing requirements.



Background

Incentive Purpose

Together, these incentives are meant to encourage capital investments and employment growth by manufacturing businesses in New York State (NYS).

Legislative History

The Investment Tax Credit (ITC) was established On January 1, 1969. Research and development property and pollution control facilities were added to the ITC effective for tax years beginning on or after January 1, 1987. The ITC was enhanced to 20 percent of the investment credit base for eligible farmers using the property for eligible uses. This enhancement applies to property placed in service on or after April 1, 2022.

The Employment Incentive Credit (EIC) for corporate franchise taxpayers was established on January 1, 1987, and the EIC for personal income taxpayers was established on January 1, 1997.

Incentive Design¹²⁸

Qualified property for the ITC is tangible property, including buildings and structural components of buildings, which were acquired, constructed, reconstructed, or erected by the taxpayer after December 31, 1968. The tangible property must also be located in NYS, have a useful life of four years or more, and is principally used in certain industries. These include manufacturing, processing, farming, and others of a similar nature. Any credit amount allowed for years beginning on or after January 1, 1987, and not deductible in that year can be carried forward for 15 years. In lieu of the carry forward, a new business or eligible farmer can treat it as an overpayment of tax to be credited or refunded. If property is disposed of or not in use during a tax year, the amount of the credit would be calculated based on the ratio of months of qualified use.

A taxpayer that is allowed a credit under the ITC, except for the optional rate for applicable to R&D property, is also eligible to receive the EIC for each of the next 2 years after the taxable year that the ITC is allowed for that property. However, to be eligible for the EIC, the average number of employees during the taxable year must be at least 101 percent of the average employment during the employment base year. The employment base year is the taxable year immediately preceding the taxable year that the ITC is allowed. If the taxpayer was not subject to tax and did not have a taxable year immediately preceding the year that the ITC was allowed, the employment base year is the taxable year when the ITC is allowed.

The EIC cannot be allowed in an amount that reduces the tax payable less than a prescribed fixed dollar amount (which is explained described in Table 101), but if the amount of credit allowed for the EIC reduces the tax to such amount or the taxpayer otherwise pays tax based on the fixed dollar minimum, any credit amount not deductible in that year can be carried over to the 15 taxable years following that year and may be deducted from the tax for that year or years.

¹²⁸ "Consolidated Laws of New York, Chapter 60, Article 9-A, Section 210-B," The New York State Senate, August 18, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/210-B>.



Incentive Benefits

The Investment Tax Credit (ITC) offers tax credits to eligible businesses that create new jobs and make qualified new investments in production property and equipment. New businesses may elect to receive a refund of select credits, and unused credits can be carried forward for 15 years.¹²⁹

For corporate tax filers, the credit is equal to 5 percent of the first \$350 million of the investment credit base and 4 percent of investments more than this amount, except for research and development where the credit in any case is 9 percent.

For a taxpayer that is an eligible farmer, the percentage to be used to compute the allowed credit is 20 percent for eligible property that is principally used in the production of goods by farming, agriculture, horticulture, floriculture, or viticulture.

The ITC cannot reduce the tax due for a given year to less than the fixed dollar minimum prescribed, but if the credit reduces the tax to that amount or the taxpayer otherwise pays tax based on the fixed dollar minimum amount, any amount of credit allowed for a taxable year beginning prior to January 1, 1987 and not deductible in that year can be carried over to the following year or years to be deducted.

For personal income tax filers, the credit rate equals 4 percent of the investment credit base. The taxpayer can claim a rate of 7 percent on R&D property, but they are not allowed to also claim the EIC. The same provision for farmers applies as above with the corporate franchise tax filers. In this case, excess credit can be carried forward for 10 years, and new businesses can also claim excess credit as a refund.

If the business's ITC investment creates new jobs, increasing total employment to between 101 and 102 percent of the employment base year, they may be eligible for an additional 1.5 percent EIC on the initial investment for the 2 years following the taxable year of the ITC credit. The same eligibility applies except for research and development, which already receives additional credit from the ITC. If the average total employment of the taxable year in relation to the base year is between 102-103 percent, the credit is 2 percent, and if it is greater than 103 percent, the credit is 2.5 percent. The credit for the ITC can be recaptured if the equipment is no longer qualified for use. An employment test, ensuring thresholds are met, was required for financial services industries claiming the credit, prior to the expiration of this program feature. A minimum tax applied is required, with the dollar amounts in the following table.

Table 101: New York Employment Incentive Credit Minimum Tax Requirements

New York receipts that are...	...then, the fixed dollar minimum tax is*
not more than \$100,000	\$25
more than \$100,000 but not over \$250,000	\$75
more than \$250,000 but not over \$500,000	\$175
more than \$500,000 but not over \$1,000,000	\$500
more than \$1,000,000 but not over \$5,000,000	\$1,500
more than \$5,000,000 but not over \$25,000,000	\$3,500
more than \$25,000,000 but not over \$50,000,000	\$5,000
more than \$50,000,000 but not over \$100,000,000	\$10,000
more than \$100,000,000 but not over \$250,000,000	\$20,000
more than \$250,000,000 but not over \$500,000,000	\$50,000
more than \$500,000,000 but not over \$1,000,000,000	\$100,000
over \$1,000,000,000	\$200,000

*The minimum tax can vary based on year, business filing type, and industry

¹²⁹ "Investment Tax Credit", New York State Department of Taxation and Finance, 2023, accessed online at https://www.tax.ny.gov/pit/credits/investment_tax_credit.htm.



Incentive Administration

While the ITC and EIC are directly connected, two separate forms are required. The EIC is claimed on the business’s yearly income tax return, whereas ITC requires Form-CT-46 for corporations and Form IT-212 for all other organizations. Despite having separate forms, the data on utilization is not disaggregated by program, and credits are reported as a total of ITC and EIC claimed.

After application and approval for ITC, businesses are required to keep records describing the property and how the property will be used. If the property is used for research and development, then they must describe how the property is used for R&D and detail the square footage and ratio between manufacturing and R&D use. Additionally, they must provide depreciation reports and charts detailing the entity names, identification numbers, and percentage of ownership.¹³⁰ On top of reporting elements for the ITC, reporting for the EIC requires general employee information.

Incentive Use

For the analysis of both programs, the PFM project team relied on a combination of Open Data NY and the FY2024 Tax Expenditure Report. The ITC and EIC program data are comingled, with no ability to disaggregate utilization. Overall, utilization across both programs has been uneven in the years available for analysis. For the combined ITC and EIC, the highest award year was 2018, \$151 million. The forecast for 2023 is \$125 million.¹³¹

Table 102: EIC & ITC Expenditures by Personal Income Tax and Corporate Franchise Tax (Dollars in Millions)

	2015	2016	2017	2018	2019
PIT	\$29.3	\$29.3	\$28.3	\$32.2	\$29.5
CFT	\$118.5	\$90.1	\$95.4	\$119.5	\$63.6
Total (Millions)	\$147.8	\$119.4	\$123.7	\$151.7	\$93.1

Source: FY2024 Annual Report on New York State Tax Expenditures

While the ITC and EIC for the financial services industry expired as of 2015, the carry forward of the credit allows for claims to continue as they have through 2019. The high for claims was in 2015, the final year of the credit, which can be expected when an incentive is approaching expiration. No additional claims are forecast for 2023.

Table 103: EIC and ITC for the Financial Services Industry (Dollars in Millions)

	2015	2016	2017	2018	2019
Total	\$58.9	\$35.3	\$4.3	\$5.2	\$1.8

Source: FY2024 Annual Report on New York State Tax Expenditures

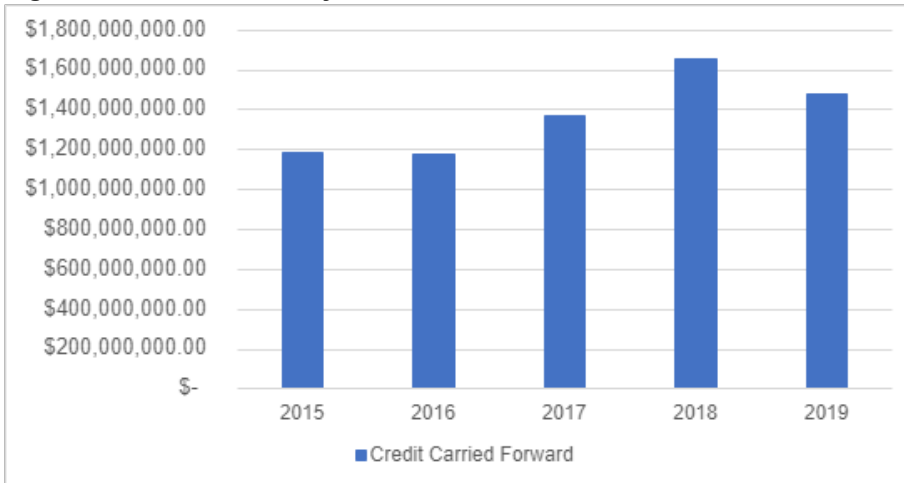
¹³⁰ “Recordkeeping: Investment Tax Credit”, New York State Department of Taxation and Finance, September 17, 2017, accessed online at <https://www.tax.ny.gov/bus/recordkeeping/investment.htm>.

¹³¹ “Fiscal Year 2024 Annual Report on New York State Tax Expenditures”, New York State Division of the Budget, 2023, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.



The ITC and EIC combined credit earned or used in a given year represents 14 percent of the true cost of the credit in an average year. The following chart shows the value of the credit carried forward each year – over \$1 billion in credits are carried over with a high of \$1.65 billion carried forward in 2018. The balance of this credit may eventually be refunded after the 15-year carry forward period, if the business qualifies as a “new business” under the statute.¹³²

Figure 12: EIC & ITC Carry Forward Amount



The Open Data NY portal offers more recent data, though it is incomplete due to the timeline of potential corporate tax filings under New York law. Through this data, the project team summarized credit award data by industry group. The table below shows the total credit awarded by year by industry. More than 51 percent of awards were to firms in the information industry, which includes media, communications, information technology, and telecommunications subcategories among others.¹³³ The next largest share was manufacturing firms (more than 17 percent) and professional, scientific, and technical services (more than 10 percent). With three industries accounting for more than 75 percent of the awards, the program is heavily concentrated among firms that have significant capital investments and associated employment growth.

¹³² This includes firms not taxed under Section 183, 184, former Section 185 and 189, as well as firms that have paid fewer than five years of taxes under Section 210-B. In effect, companies that are five years old or less and/or eligible farmers are eligible for this refundability.

¹³³ “NAICS Code Drill-Down Tool”, North American Industry Classification System, accessed online at <https://www.naics.com/six-digit-naics/?code=51>.



Table 104: EIC & ITC Credit Awards by Industry

Industry	2018	2019	2020	2021	2022	Total
Administrative and Support and Waste Management and Remediation Services	\$417,131	\$255,998	\$390,459	\$357,463	\$371,211	\$1,792,262
Agriculture, Forestry, Fishing and Hunting	\$315,285	\$193,494	\$295,125	\$270,185	\$280,577	\$1,354,667
Arts, Entertainment, and Recreation	\$11,925,384	\$7,318,743	\$11,162,851	\$10,219,512	\$10,612,570	\$51,239,061
Construction	\$711,978	\$436,949	\$666,453	\$610,133	\$633,599	\$3,059,112
Health Care and Social Assistance	\$349,781	\$214,665	\$327,416	\$299,747	\$311,275	\$1,502,884
Information	\$78,011,245	\$47,876,380	\$73,023,051	\$66,852,089	\$69,423,323	\$335,186,088
Management of Companies and Enterprises	\$13,180,776	\$8,089,191	\$12,337,971	\$11,295,326	\$11,729,761	\$56,633,025
Manufacturing	\$26,891,488	\$16,503,609	\$25,171,992	\$23,044,782	\$23,931,119	\$115,542,990
Mining, Quarrying, and Oil and Gas Extraction	\$265,963	\$163,225	\$248,957	\$227,918	\$236,684	\$1,142,747
Professional, Scientific, and Technical Services	\$16,283,231	\$9,993,203	\$15,242,049	\$13,953,989	\$14,490,680	\$69,963,152
Real Estate and Rental and Leasing	\$25,294	\$15,523	\$23,677	\$21,676	\$22,510	\$108,681
Retail Trade	\$1,881,848	\$1,154,911	\$1,761,519	\$1,612,658	\$1,674,683	\$8,085,619
Transportation and Warehousing	\$245,135	\$150,442	\$229,461	\$210,070	\$218,149	\$1,053,257
Wholesale Trade	\$1,300,465	\$798,110	\$1,217,310	\$1,114,439	\$1,157,302	\$5,587,626
Grand Total	\$151,805,006	\$93,164,443	\$142,098,291	\$130,089,985	\$135,093,446	\$652,251,171



Benchmarking

Investment Tax Credits are commonly used by states throughout the U.S., this section benchmarks the reach and impact data of the Investment Tax Credit against that of similar state programs. Specifically, the section compares each program's value of credits claimed, funding caps, and eligibility requirements as indicators of reach and impact. The benchmark programs have been selected based on proximity, size, and eligibility of programs, with special focus given to states considered primary competitors with New York for attracting business.

Investment Tax Credit Comparable Programs

Most State programs reviewed have similarly longstanding tax credits on qualified investments. Alabama is the most recent starting in 2015, and the oldest credit is the Rhode Island Manufacturing Credit. New York, New Jersey, Massachusetts, and Georgia all passed legislation in the 1990s to provide these credits. None of the programs reviewed have a sunset provision.

*Massachusetts: Investment Tax Credit*¹³⁴

Corporations primarily engaged in manufacturing, research and development, agriculture, or commercial fishing are eligible for the Investment Tax Credit. The Credit applies for the purchase or lease of tangible personal property and other tangible property such as buildings. The minimum corporate excise tax under the program is \$456, and corporations may not take more than 50 percent of the total excise tax as a credit. Unused credits may be carried forward for three tax years.¹³⁵

Georgia: Investment Tax Credit

Companies in manufacturing or telecommunications support that have operated in Georgia for at least three years are eligible to earn investment tax credits for upgrades or expansions. Companies that invest in recycling equipment, pollution control or in converting a defense plant manufacturing facility to a new product earn tax credits of 3 percent to 8 percent of their capital outlay. Investment in general equipment for manufacturing or telecommunications services earns tax credits of 1 percent to 5 percent.

- To qualify a company must: Have operated either a manufacturing or telecommunications facility in Georgia for at least three years and make a minimum \$100,000 investment.
- Excess credits may be carried forward for 10 years.
- The program targets and benefits companies in manufacturing and telecommunication, with additional benefits targeted at specific production equipment and facilities.

New Jersey: New Jobs Investment Tax Credit

The tax credit is available for investments in new or expanded real and tangible personal property that creates new jobs in New Jersey. The investment must create at least five new jobs for small businesses or 50 for large businesses and meet annual compensation requirements for the current tax year. New employees hired must be New Jersey residents, as well.

The annual credit cannot exceed 50 percent of the portion of tax liability which is associated with the qualified investment and cannot reduce the tax liability below the statutory minimum, which varies by entity type and

¹³⁴ "Investment Tax Credit Overview", Massachusetts Department of Revenue, accessed online at <https://www.mass.gov/info-details/investment-tax-credit>.

¹³⁵ "Section 31A: Investment credit for certain corporations; limitations", General Court of the Commonwealth of Massachusetts, accessed online at <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleIX/Chapter63/Section31A>.



gross receipts, but in no case would be less than \$500¹³⁶. There is no carryover available for the credit, and the credit must be taken in five equal annual installments. Any credit that remains may be refunded to the taxpayer, but it cannot exceed 50 percent of the sum of property taxes paid in the tax year.

Rhode Island: Manufacturing Investment Tax Credit

A manufacturer is allowed a 4.0 percent tax credit against the Rhode Island corporate income tax on buildings and structural components, as well as machinery and equipment, which are owned or leased and are principally used in the production process (including storage). Property principally used for administration and distribution purposes is not eligible.

Between 2016 and 2018, over 36 manufacturing companies were awarded the manufacturing investment tax credit (MITC). The average value awarded was \$608,951 per manufacturer, and manufacturing companies totaled 13 percent of all MITC tax credits awarded during that period.

Alabama: Investment Credit

The program provides credit to qualifying businesses for approved projects that create new jobs in Alabama. Recipients receive up to 1.5 percent of qualified capital investments annually, for 10 years, and up to 15 years for projects in target geographies. The projects are approved by the Department of Commerce in consultation with the Governor, though the State provides a capital investment threshold: for a Targeted or Jump Start County, there must be at least \$2 million of direct or indirect investment. The credit may be taken against a variety of taxes, such as income tax or utility tax, and can be used against multiple taxes, if relevant. The credit may be carried forward for 5 years, and, at the Governor’s discretion, may be transferred to another taxpayer for at least 85 percent of its face value.¹³⁷

Employment Incentive Credit Comparable Programs

Tax Credits to incent new or maintaining existing employees are also common. Specifically, the section compares each program’s value of credits claimed, number of claimants, jobs created, and eligibility requirements as indicators of reach and impact. The benchmark programs have been selected based on geographic relevance, size, and eligibility of programs, with special focus given to states considered primary competitors with New York for attracting business.

Table 105: Average Annual Credits Claimed for Employment Incentive Programs (Dollars in Millions)

Program	Start Year	Data Years	AA Number of claimants	AA Value of Credits Claimed	AA Jobs Created	Jobs Created Per Million Dollars Spent
New York: ITC and EIC	1987	2012-2021	N/R	\$ 136.2	N/R	N/R
California: New Employment Credit (NEC)	2013	2014-2022	67	\$24.0	6,358	265

¹³⁶ “Corporation Business Tax Overview”, New Jersey Treasury Division of Taxation, August 28, 2023, accessed online at https://www.nj.gov/treasury/taxation/corp_over.shtml.

¹³⁷ Targeted County is defined as an Alabama County with 60,000 population or fewer; Jumpstart County is defined as an Alabama County that 1) does not qualify as a Targeted County, 2) has experienced negative population growth over the last five years, and 3) contains no more than two Opportunity Zones – no County qualified in 2023. Accessed via: <https://www.madeinalabama.com/download/assets/2023/06/Jobs-Act-summary.pdf>.



Program	Start Year	Data Years	AA Number of claimants	AA Value of Credits Claimed	AA Jobs Created	Jobs Created Per Million Dollars Spent
Missouri: Missouri Works	2013	2020-2022	108	\$154.9	37,240	241
Georgia: Jobs Tax Credit (JTC)	1990	2017-2022**; 2020-2022	475	\$239.8	24,495	103
Vermont: Vermont Employment Growth Initiative (VEGI)	2007	2007-2020	31	\$23.2	629	28
Alabama: Jobs Credit	2015	N/R	N/R	N/R	N/R	N/R
Connecticut: JobsCT Tax Rebate Program	2023	N/R	N/R	N/R	N/R	N/R
Georgia: Quality Jobs Tax Credit (QJTC)	2009	N/R	N/R	N/R	N/R	N/R

*AA = Average Annual

** = AA Value of credits claimed were in this period

California: New Employment Credit (NEC)

Through NEC, qualified employers that hire full-time employees in designated geographic areas (high unemployment, high poverty) or economic development areas (enterprise zones and local agency military base recovery area) can receive credit based on 35 percent of qualified wages paid to their employees.¹³⁸ Legislation enacted in 2023 expanded to eligibility to include certain high-tech industries, regardless of their location. Those targeted industries include semiconductor manufacturing, electric airplane manufacturing, and lithium battery production, collective referred to by the acronym “SEAL”.¹³⁹

- For wages that exceed 150 percent, but not 350 percent of minimum wage, qualified wages are then multiplied by 35 percent to calculate the credit.¹⁴⁰ This credit can carry forward for 5 taxable years.
- The employee must have a 60-month period of qualified wages. If they are terminated within 36 months, then the credit can be recaptured. An annual certification of employment is required.

¹³⁸ “New Employment Credit”, State of California Franchise Tax Board, September 26, 2023, accessed online at <https://www.ftb.ca.gov/file/business/credits/new-employment-credit/index.html#Credit-usage-and-carryover>.

¹³⁹ “New employment credit for Semiconductor, Electric Airplane, Lithium Production, and Lithium Battery Manufacturing (SEAL)”, State of California Franchise Tax Board, September 28, 2023, accessed online at <https://www.ftb.ca.gov/file/business/credits/new-employment-credit/nec-seal-credit.html>.

¹⁴⁰ California Personal Income Tax. Revenue and Tax Law § 2.10. Stats. 2022.



Vermont: Vermont Employment Growth Initiatives (VEGI)

This was enacted in 1997 to offer a cash-based, non-tax credit, incentive for business recruitment, growth, and expansion. As a smaller state, Vermont's VEGI program creates the least number of jobs per million dollars of credit.

- A company must apply to the Vermont Economic Progress Council (VEPC), a citizen board which determines whether the incentive would result in the desired economic activity, if it would occur in a significantly different/unwanted form, or not at all. The board additionally considers if the activity will generate more incremental tax revenue for the state than what is given up because of the incentive. Lastly, the interest of the municipality, compatibility with local and regional plans, and market accessibility (I.E., is the project operating in a limited market?) are accounted for.
- Jobs must be net new to the company, meaning vacant jobs being filled does not count. Capital investments can also increase the size of awards. There is no recapture of dollars.¹⁴¹
- Reporting is required annually including a claim form for the credit, an employee benefits form, detailed employment data, payroll data, and capital investment data.
- Incentives can be earned without meeting performance requirements, but they don't receive the incentive until requirements for the applicable year are met. The company has a grace period of 2 years in the first 3 years of earning the incentive; in year 4 there is a one-year grace period; and in year 5 there is no grace period. Once performance requirements are not met and the grace period has ended then residual incentives are eliminated.¹⁴²

Connecticut: JobsCT Tax Rebate Program

A relatively new program, participants creating a minimum of 25 new FTEs in Connecticut are eligible for this tax rebate. In addition to the number of FTEs, 2 minimum wage elements apply: must be 85 percent of the median household income of the municipality where the jobs are created, and it must be at least \$37,500. The tax rebate is equal to 25 percent of the withholding taxes from net new employees and can go up to 50 percent if located in target geographies. Recipients earn the rebate in years 3 through 7 with an additional 2 years being discretionary. The Commissioner, who approves applicants to the program, can determine the additional years and can also make allowances for the median household income rule, as well.

Georgia: Quality Jobs Tax Credit

Georgia's Quality Jobs Tax Credit (QJTC) started in 2009 to incentivize the creation and hiring of well-paying jobs with a particular focus on rural counties. The program does not have a statutory reporting requirement and metrics on the reach and impact of QJTC are not available at the time of this report.

- Companies can receive the tax credit if, during a 24-month period, they create and maintain at least 50 net new jobs that pay at least 110 percent of the county's average wage.
- The QJTC value ranges from \$2,500 to \$5,000 per job, per year, for up to 5 years. Credits have a carryforward of 10 years.
- A new quality job is one where the employee makes over 110 percent of the county's average wage working 30 hours or more weekly at a job that is or was not already located in Georgia.
- Qualified projects that create the jobs must involve the lease or construction of one or more new facilities in this state or the expansion of one or more existing facilities in Georgia. Qualified investment property is any real and personal property purchased or acquired by a taxpayer for at least \$2.5 million for use in a qualified project. The property must be placed in service by the end of a

¹⁴¹ "Vermont Employment Growth Incentive: Quick Program Facts", Vermont Economic Progress Council, 2017, accessed online at https://outside.vermont.gov/agency/ACCD/ACCD_Web_Docs/ED/VEGI/QuickProgramFacts.pdf.

¹⁴² "Vermont Employment Growth Incentive: Annual Performance Requirements", Vermont Economic Progress Council, 2017, accessed online at https://outside.vermont.gov/agency/ACCD/ACCD_Web_Docs/ED/VEGI/AnnualPerformanceRequirements.pdf.



two-year period. Any three year or longer lease which would otherwise be qualified is considered as a purchase by the lessee. The full value of the leased property is counted as qualified investment property in the year when the lease becomes binding.

Georgia: Job Tax Credit Program

The Job Tax Credit Program (JTC) removes a company’s corporate income tax liability and may also reduce the company’s payroll withholding. This credit cannot be claimed in tandem with the QJTC.

- Counties are placed in four tiers based on unemployment, per capita income, and poverty rates. The higher the tier level, the less credits companies located there are eligible for. Military Zones, Opportunity Zones, and Less Developed Census Tracts override the county tiers.
- Manufacturing, data centers, warehousing, distribution, and logistics, contact centers, software development, telecommunications, FinTech, and research and development facilities are eligible industries for the credit.
- Eligible employees must have a minimum 35-hour work week, provide health insurance benefits consistent with current employees, and pay more than the average wage of the county.
- Like QJTC, once a project qualifies it opens a five-year window when each job created can earn a JTC. If the project surpasses the minimum job threshold a new five-year period begins for JTC.

Tier	Job Tax Credit \$ (For 5 Years)	Min. New Jobs	Credit Allowance	Carry Forward
1	\$4,000	2	100% of tax liability – excess to withholding up to \$3,500 per job	10 years
2	\$3,000	10	100% of tax liability	10 years
3	\$1,750	15	50% of tax liability	10 years
4	\$1,250	25	50% of tax liability	10 years

Missouri: Missouri Works

As the state’s flagship program for business retention and expansion, this program helps businesses access capital through either with holdings or tax credits to expand facilities, including purchasing equipment, and creating/retaining jobs.¹⁴³

- Non delinquent, non-bankrupt for-profit or non-profit businesses are eligible for the program. Unlike Kansas’s PEAK program, ineligible entities include gambling establishments, food and drinking places, public utilities, educational services, religious organizations, public administration, ethanol distillation or production, biodiesel production, healthcare, and social services, or store front consumer-based retail trade establishments not located in a third- or fourth-class county.
- Businesses that are relocating jobs from Johnson, Miami, or Wyandotte counties in Kansas to Jackson, Platte, Clay or Cass counties in Missouri are also eligible. Net new jobs created above a qualified company’s base employment may also be eligible for benefits. Headquarters, administrative, and research and development offices of otherwise excluded businesses may be eligible if the primary function is to serve a multistate territory.
- Missouri Works requires minimum jobs, investment, and wage performance measures as eligibility criteria across different subprograms.
 - If EIC is one of the simpler programs as far as reporting is concerned, Missouri Works is the most detailed.

¹⁴⁴ “Alabama JOBS Act: Jobs Credit and Investment Credit”, Alabama Department of Commerce, June 2023, accessed online at <https://www.madeinalabama.com/download/assets/2023/06/Jobs-Act-summary.pdf>.



- There doesn't seem to be any direct connection between the complexity of eligibility criteria and the program's performance. Missouri Works, the most complex program, falls in the middle of the pack of jobs created.

Alabama: Jobs Credit

This credit is calculated as a cash rebate on up to 3 percent annually of the prior year's gross payroll. This only applies to eligible employees who are Alabama residents. The credit is available for 10 years, and is not refundable, not transferrable, and cannot be carried forward. The job threshold required to be eligible is listed in Table 106.¹⁴⁴

Table 106: Job Thresholds for Alabama Jobs Credit

Type of County / Project	Job Threshold Requirement
Non-Targeted / Non-Jumpstart County	50 net new full-time jobs
Targeted or Jumpstart County*	10 net new full-time jobs
Technology Company*	10 net new full-time jobs
Underrepresented Company*	10 net new full-time jobs
Chemical Manufacturing, Data Center, Renewable Energy Generation, Engineering, Design, or Research, Metal/Machining Technology or Toolmaking*	Net new full-time job(s)

*Enhanced benefits available for jobs created in these categories; up to 4 percent of gross payroll

Alabama's use of a tiered system based on industry that utilizes new employee requirements makes it a comparison program that mixes the design of New Jersey and Georgia's programs. The resulting mix allows Alabama's program to have a targeted design without limiting the availability of the program to wider industry.

Benchmark Comparisons

Employment Incentive Credit:

- New York has the fewest requirements of any of the benchmark states to qualify for their tax credit.
- Most other programs like New York's are also delivered in the form of a tax credit, besides VEGI which is a cash-based incentive.
- There is variation between the benchmark States about whether the tax credit is earned as a percentage of the wages paid to workers, or a flat rate per worker. New York offers a percentage of wages.
- Some benchmark States require the wages for the jobs to be above a certain amount. California requires that they be above 150 percent of minimum wage, while Georgia requires that the new jobs be paid over 110 percent of the county's average. New York does not have any such requirements.
- Some states distribute credits based on need which is determined by poverty designations established at both the state and federal level. New York does not prescribe distribution of credits based on any similar factors.
- Almost every comparison state contains reported performance metrics, whereas New York does not. A lack of data makes benchmarking for the program more challenging. Nonetheless, we do

¹⁴⁴ "Alabama JOBS Act: Jobs Credit and Investment Credit", Alabama Department of Commerce, June 2023, accessed online at <https://www.madeinalabama.com/download/assets/2023/06/Jobs-Act-summary.pdf>.



know that, among peer states, New York is the third largest by credits claimed, behind Missouri and Georgia.

The Fiscal Research Center of Georgia State University (GSU) conducted an evaluation on the Georgia Job Tax Credit Program in 2022. Job Creation-based credits, like many others, are increasingly utilized with some also expanding geographical and industrial coverage. While job creation has increased, coinciding with the life of many programs, the assumption that those jobs were created because of the credit remains disputed. The evaluation cites a 2018 study done by Timothy Bartik from the Upjohn Institute. Bartik reviewed 34 studies on programs, 7 of which were deemed unbiased. Of those unbiased incentive reports, the range of jobs created from the program themselves is at most 11.4 percent with a median of 3.4 percent.

While there are no identifiable reports indicating jobs created by the EIC in New York, Missouri Works has dedicated an annual average amount on credits close to that of the EIC. The credit claimed for each job is roughly \$4,150 for Missouri's program. Overall, the range of the credit for each created job is anywhere from \$2,500 to \$37,000 across other state's comparison programs. Whether or not this is an acceptable amount for a JTC program to credit per job is up to interpretation. GSU's Fiscal Research Center seems to think not, concluding that based on multiple economic reach effects that the Georgia JTC "generates substantially less state and local tax revenue than the cost of the [program]."¹⁴⁵

If the EIC tells a similar story to what the GSU analysis says, it is possible that refocusing targets to different programs that produce more reliable outcomes will help maximize New York State's resources.

Investment Tax Credit

The ITC is a prerequisite credit to the EIC, making it a uniquely structured program compared to other similar programs. Many others contain certain levels of capital investment requirements, but those are typically required in tandem with job creation. Focusing the effort on business investment in the state and acknowledging that jobs will come with that makes the program more streamlined.

Reporting is relatively comprehensive for the ITC, so it acts as a filter for EIC. If GSU is correct, then treating the EIC almost as a supplement to the ITC rather than as the focus could make it a more efficiently run program.

¹⁴⁵ David L. Sjoquist, and Peter S. Bluestone. "The Economic and Fiscal Impacts of Georgia's Job Tax Credit Program", Georgia State University's Fiscal Research Center for the Georgia Department of Audits, 2022. Accessed online at www.audits.ga.gov/ReportSearch/download/28855



Return on Investment

Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for New York State.¹⁴⁶ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

The project team submitted a request to the Department of Taxation and Finance for the most recent five years of data for the Employment Incentive Credit & Investment Tax Credit program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.

The only available data on the ITC and ETC came from the Tax Expenditure Reports, which provided the actual and forecast credits for 2018 to 2022, and an Open Data New York report, [New York State Corporate Tax Credits by Major Industry Group: Beginning Tax Year 2001](#). The tax credits by major industry provided the amount of tax credits by industry for 2015 to 2019. The project team used the average distribution by industry to allocate the credits to sectors for 2018 to 2022. Table 107 presents the actual and forecast credit amounts modeled in IMPLAN and grouped by year to account for any inflation effects.

Table 107: Investment Tax Credit & Employment Incentive Credit, 2018 to 2022

Actuals	Forecast		2021	2022	Total	
	2018	2019				2020
	\$151.7	\$93.1	\$142.0	\$130.0	\$135.0	\$651.8

Source: Credits Reported on the Tax Expenditure Report.

¹⁴⁶ Additional information on the IMPLAN model may be found in Appendix A.



Table 108: Estimated Distribution of Credits by Sector

Industry	Average Share of Credits, 2015-2019	Estimated Credits 2018-2022 (\$M)
Administrative and Support and Waste Management and Remediation Services	0.3%	\$1.8
Agriculture, Forestry, Fishing and Hunting	0.2%	\$1.4
Arts, Entertainment, and Recreation	7.9%	\$51.2
Construction	0.5%	\$3.1
Health Care and Social Assistance	0.2%	\$1.5
Information	51.4%	\$335.2
Management of Companies and Enterprises	8.7%	\$56.6
Manufacturing	17.7%	\$115.5
Mining, Quarrying, and Oil and Gas Extraction	0.2%	\$1.1
Professional, Scientific, and Technical Services	10.7%	\$70.0
Real Estate and Rental and Leasing	0.0%	\$0.1
Retail Trade	1.2%	\$8.1
Transportation and Warehousing	0.2%	\$1.1
Wholesale Trade	0.9%	\$5.6
Total	100%	\$651.8

Source: Credits Reported on the Tax Expenditure Report (2018-2022). Allocated using the [New York State Corporate Tax Credits by Major Industry Group: Beginning Tax Year 2001](#) (2015-2019).

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Employment Incentive Credit & Investment Tax Credit program supported a total of 3,750 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022.

Table 109: Total Job Impacts in New York State, 2018 to 2022

Year	Direct	Indirect	Induced	Total
2018	390	220	270	880
2019	240	140	160	540
2020	360	210	250	820
2021	330	190	230	750
2022	340	200	230	770
Total	1,660	950	1,130	3,750
Annual Average	332	192	228	752

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports. The estimates have been rounded to the nearest ten.

Impact on Revenues for New York State and its Municipalities

Table 110: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$14.8	\$7.7	\$9.0	\$31.4
County	\$2.5	\$1.4	\$1.7	\$5.6



Taxes in New York State	Direct	Indirect	Induced	Total
State	\$13.0	\$6.3	\$6.4	\$25.6
Total State, County, Local	\$30.2	\$15.4	\$17.0	\$62.7

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Taxation and Finance.

Table 111: Total Taxes, Total for 2018 to 2022 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$30.2	\$15.4	\$17.0	\$62.7
Federal	\$45.4	\$45.4	\$45.4	\$45.4
Total Taxes	\$75.7	\$60.8	\$62.5	\$108.1

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Taxation and Finance.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 112: Labor Income, 2018 to 2022 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2018	\$52.0	\$23.7	\$20.4	\$96.0
2019	\$31.8	\$14.5	\$12.5	\$58.8
2020	\$48.4	\$22.2	\$19.0	\$89.6
2021	\$44.1	\$20.2	\$17.3	\$81.7
2022	\$45.7	\$20.9	\$17.9	\$84.5
Annual Average	\$44.4	\$20.3	\$17.4	\$82.1

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports.

Table 113: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$134,000	\$106,000	\$77,000	\$110,000

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports.

The But-For Test

It is not possible to assert with complete certainty the relative importance of a given incentive on individual business decisions. Firm characteristics, the type of business activity being incentivized, the availability of comparable alternatives, the incentive amount, incurred costs associated with compliance with incentive program rules and requirements, and other intangible factors all play a role in determining the influence of an incentive on a business decision.



Since the “true” level of the Investment and Employment tax credits’ influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

In the case of the Investment Tax Credit and Employment Incentive Credit programs, the state does not break even on its investment even in the unlikely event this incentive is 100 percent responsible for the tax revenue generated by program participants.

Other Qualitative Economic Benefits

Investment Tax Credit:

The job opportunities in industries targeted by this incentive, on average, provide living wage jobs of at least \$21.46 an hour,¹⁴⁷ providing occupations to New Yorkers that allow them to better support themselves. In 2022, the average hourly wage for industries covered was \$33 an hour, well above the living wage for New York State.¹⁴⁸ Between 2001 and 2022, occupational growth was demonstrated within these industries. The occupation with the largest level of growth over this period was producers and directors, which grew by approximately 11,000 employees. The four additional occupations with the largest job growth were general and operations managers, production, planning, and expedition clerks, software developers, and market research analysts.¹⁴⁹ The technical skills required for these occupations range from general Microsoft suite capability to more advanced enterprise resource planning software, accounting software, and data base tools.¹⁵⁰ These factors show that through the Investment tax credit, New York contributed to the creation of jobs that require technical skill competencies and offered a living wage.

Employment Incentive Credit:

In 1996, the NYS Department of Taxation and Finance Office of Tax Policy Analysis produced a report on “the Effectiveness of the ITC.” Due to factors such as high energy and high labor costs in the State, New York provides credits for both investment and employment. In cases where businesses must choose a State in which to locate, these types of incentives can prove effective in eliminating a portion of this burden. For example, a survey for major site location consultants indicated that they ranked ITC and EIC as moderately or very important, but nonetheless, they still opted to expand in other states because the tax burden was less than in New York.¹⁵¹

Since this report was published, not a lot has changed about the program. However, one recommendation in the report did come to fruition. The EIC can now be used against personal income taxes, which increases the inclusiveness of the program for other types of companies (LLCs, S Corporations, Partnerships, etc.). Another recommendation from the report that has not yet been implemented is expanding the ITC to include leased property. Many states, including New York, have experienced an increase in vacancies for office space. Stemming from the effects of the pandemic, the commercial real estate spiral downward reflects similar

¹⁴⁷ “Living Wage Calculation for New York”, Massachusetts Institute of Technology Living Wage, 2023, accessed online at <https://livingwage.mit.edu/states/36>.

¹⁴⁸ Estimates created from Lightcast Regional Industry Data, assumes 260 working days at an average 8hrs per day.

¹⁴⁹ Occupational growth information was pulled from Lightcast Industry Staffing Patterns Data.

¹⁵⁰ Skills data derived from O*Net Occupational Profiles.

¹⁵¹ “The effectiveness of the ITC: An evaluation of New York’s Investment Tax Credit”, Office of Tax Policy Analysis, February 1996, accessed online at https://www.tax.ny.gov/pdf/stats/policy_special/effectiveness_of_the_itc.pdf.



characteristics to that of the decline in the early 1990s and 2008.¹⁵² However, lower demand for office spaces may be more permanent than before. Rent is lower for a lot of buildings, especially older ones, but rent is also exceptionally high for newer modern office buildings.¹⁵³ If leased property were eligible for credits, then companies could be encouraged to take advantage of spaces more bringing in once lost tax revenue.

Summary Findings

ROI Summary

Whether the program yields a net benefit to the state of New York is a function of the state's investment in the program and its return on that investment. NYS invested \$652.3 million in foregone revenue for the Employment Incentive Credit & Investment Tax Credit program between 2018 and 2022. The start of the analysis on ROI is the amount of the investment and taxes associated with the economic activity from that investment.

Table 114: Estimated ETC and ITC Credits by Industry, 2018 to 2022 (Dollars in Millions)

Industry	Total 2018 to 2022
Administrative and Support and Waste Management and Remediation Services	\$1.8
Agriculture, Forestry, Fishing and Hunting	\$1.4
Arts, Entertainment, and Recreation	\$51.2
Construction	\$3.1
Health Care and Social Assistance	\$1.5
Information	\$335.2
Management of Companies and Enterprises	\$56.6
Manufacturing	\$115.5
Mining, Quarrying, and Oil and Gas Extraction	\$1.1
Professional, Scientific, and Technical Services	\$70.0
Real Estate and Rental and Leasing	\$0.1
Retail Trade	\$8.1
Transportation and Warehousing	\$1.1
Wholesale Trade	\$5.6
Total	\$651.8

Source: Credits Reported on the Tax Expenditure Report (2018-2022). Allocated using the [New York State Corporate Tax Credits by Major Industry Group: Beginning Tax Year 2001](#) (2015-2019).

¹⁵² Matthew Haag, "What Record Office Vacancies Mean for New York City's Economy", The New York Times, May 5, 2023, accessed online at <https://www.nytimes.com/2023/05/05/nyregion/nyc-office-space-vacancy-rates.html>.

¹⁵³ Greg David, "The Economy Is Recovering. New York City's Office Market Is Not", The City, May 10, 2023, accessed online at <https://www.thecity.nyc/economy/2023/5/10/23718575/office-market-credit-remote-work>.



Using only state taxes provides the most conservative measure of return to the state itself. For the Employment Incentive Credit & Investment Tax Credit analysis, the project team also based this analysis only on the value of the estimated credits to each sector between 2018 and 2022.

Table 115: Fiscal Return to the State of New York (2018 to 2022)

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes	Total Taxes Returned
State of New York Taxes (\$M)	\$651.8	\$13.0	\$25.6
Return on \$1.00 in Foregone Revenue		\$0.02	\$0.04

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports.

From the investment of \$651.8 million, the Employment Incentive Credit & Investment Tax Credit program generated \$13 million in direct state taxes and total state taxes of \$25.6 million. The state's investment provided an overall return of \$0.02 based on direct taxes to the state, or \$0.04 per dollar invested based on total state taxes.

Overall, the return-on-investment question for these two programs is difficult to answer. Specifically, without detailed data the ability to understand if participants are meeting their claimed employment targets is limited and thereby opens the potential for mischaracterizing the program's impact. Additionally, the program includes no reporting requirements for the size of the impact of the investment claimed on the tax credit. There is no guarantee or oversight that guarantees the impact of the credit and therefore limits the potential benefit the credit can provide for the state. This aspect of programmatic design is what led a 2013 report, *New York State Business Tax Credits: Analysis and Evaluation*, to recommend that the ITC moving forward should target job creating portion of credit and add in these job creation requirements.¹⁵⁴

In practical terms, the ITC and EIC return less in tax revenues than is foregone. There is limited data available to analyze the program's success, and the data that is available is not able to be disaggregated between the two programs. While there is sufficient data and utilization to answer certain questions, there is room for improvement in this area that would enable a more comprehensive accounting of how exactly the programs are benefitting the state.

Viewed from another perspective, it is clear from the number of states offering similar credits that the business community may come to expect an offer when considering where to locate its facilities and employees. Almost all of the regional States offer some form of the credit, as well as many national competitors. If having these credits in place is "table stakes" for any significant recruitment or retention conversation, it may be a necessary component of the proposed incentive package. If that is the case, it is at least designed in accordance with several best practices for design that limit the State's exposure in many cases.

The ITC program can extend and ensure its impact on the New York State economy by including job creation requirements. These requirements are offered by some of New York's comparative programs. The inclusion of this requirement would allow for New York to ensure investments receiving the credit create tangible job growth for the state. Comparable programs in other states offer a more tiered approach relative to New York. While New York's flat rate does make understanding the benefit easier for applicants, it lacks the benefits of directing additional benefits and growth to specific target industries.

¹⁵⁴ Marilyn M. Rubin and Donald J. Boyd, "New York State Business Tax Credits: Analysis and Evaluation", New York State Tax Reform and Fairness Commission, November, 2013, accessed online at <https://reinventalbany.org/wp-content/uploads/2014/09/2013-Business-Tax-Credit-Report-McCall-Solomon.pdf>.



WORKER-SPECIFIC TAX CREDITS



Employee Training Incentive Program (E-TIP) Tax Credit



Executive Summary

Introduction

The Employee Training Incentive Program (E-TIP) is intended to encourage New York State (NYS) employers to provide skills training to upgrade or improve the productivity of their employees by providing a tax credit for 50 percent of eligible training costs, with a cap of \$10,000 per employee. Businesses offering approved internship programs in advanced technology, life sciences, software development, or clean energy are also eligible for a tax credit for 50 percent of intern stipends, with a cap of \$3,000 per intern. This tax credit is administered by Empire State Development (ESD).

The tax credit is refundable. It may also be carried forward for three years. The credit is available to employers statewide.

Benchmarking

Few states offer tax credits for incumbent worker training or internships. States are more likely to offer grant assistance or program services for these purposes. One prior state evaluation found that a similar retraining tax credit in Virginia was not effective in encouraging worker retraining and had negligible economic benefit and return to the state.

Use

Between 2018 and 2023, the E-TIP tax credit was used by 23 companies with 63 total reported jobs (internships or training), and an average wage of approximately \$6,000. The total value of the tax credits taken was just over \$136,000, indicating a cost per job of \$2,159. Program data suggest that most of the jobs associated with E-TIP are with internship programs.

Return on Investment

The estimated quantifiable return to the state depends on the number of jobs, company capital investments, estimates of labor income, and assumptions about the indirect and induced activity associated with each job. Data provided by ESD indicate that most of the jobs associated with E-TIP are full-time internships, but some are part-time internships, and some represent incumbent workers receiving training. To estimate the ROI given the variety of job situations, the project team prepared three different revenue models based on the following three scenarios.

If E-TIP jobs are treated as full-time employment with associated earnings levels for their industries, the state's investment provided an overall return of \$2.35 or an additional \$1.35 based on direct taxes to the state and an additional \$3.53 based on total state taxes. In the scenario where interns are considered to be working as full-time employees who are exempt from income taxes given that their actual reported wages are too low, the state's investment provided an overall return of \$0.70 based on direct taxes for each \$1.00 spent but a return of \$2.89 based on total state taxes.

In the scenario where interns are considered to be part-time employees based only on the direct wages and investment reported for the program, the state's investment provided an overall return of \$0.12 based on direct taxes for each \$1.00 spent and a return of \$0.22 based on total state taxes. This is, from the project team's perspective, the most likely scenario.



There are additional economic impacts associated with training programs. Skills training can increase employee productivity and may also improve earnings and career path potential. Paid internships can provide several economic benefits, including helping businesses address talent needs, exposing young workers to career options, providing interns an opportunity to engage with and learn about specific industries, and gaining valuable work experience.

This is an example of the type of program where direct economic impact through generated tax revenue is not a useful measure of the program's overall benefit. Numerous studies find that skills accumulation will increase a worker's lifetime earnings, which will benefit both the state and the worker and, in the long run, generate additional tax revenue for the state.

Background

Incentive Purpose

The Employee Training Incentive Program (E-TIP) Tax Credit is intended to encourage New York State (NYS) employers to provide skills training to upgrade or improve the productivity of their employees by providing a tax credit for 50 percent of eligible training costs. Businesses offering approved internship programs in advanced technology, life sciences, software development, or clean energy are also eligible for a tax credit for 50 percent of intern stipends.

Legislative History

The E-TIP Tax Credit started in 2015. The program was modified in 2019 to allow businesses that conduct their own training to receive the credit. Previously, only training from an approved provider was eligible.¹⁵⁵

Incentive Design

This tax credit is administered by Empire State Development (ESD). Funds for the program are allotted under the Excelsior Jobs Program Act. The total value of tax credits may not exceed \$5.0 million in any tax year. The amount allocated to the internship program must be between \$250,000 and \$1,000,000.

To be eligible for the credit for skills training, businesses must, 1) operate in NYS in a strategic industry, 2) demonstrate that they are conducting or obtaining eligible training, and 3) make a significant capital investment in connection with the training. Businesses must also be in compliance with worker protection and environmental laws and regulations and may not owe past due state taxes or local property taxes.

- The criteria for a strategic industry is based on the potential to create jobs in an economically distressed area, shortages of workers trained to work in that industry, ability and need to relocate to another state to find qualified workers, potential to recruit minorities and women to be trained to work in an industry where they are traditionally underrepresented, and whether recent technological

¹⁵⁵ "Consolidated Laws of New Yorker, Chapter 60, Article 9-A, Section 210-B: Credits", The New York State Senate, August 18, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/210-B>.



advances have created disruption in the industry and significant capital investment is needed to remain competitive.

- Eligible training is training provided by a business entity or approved third-party provider that upgrades, retrain, or improves the productivity of employees; is provided in NYS and is related to a significant capital investment; is determined by the Commissioner of Economic Development to satisfy a business need; is not designed to train or upgrade skills as required by a Federal or State entity; is not resulting in the award of a license or certificate required by law; and is not culturally focused training.
- The required “significant capital investment” must result in a benefit-cost ratio of at least 10:1 in relation to the eligible training project.

Several types of businesses are prohibited from participating in the program, including many professional services, finance, retail, hospitality, utility, medical or dental, and real estate firms, as well as restaurants.

To be eligible for the credit for an internship program, businesses must provide training in advanced technology, life sciences, software development, or clean energy; must have less than 100 employees statewide; and offer an intern program 12 months or less in duration. Interns may be current students, recent graduates, or recent members of the armed forces, cannot be recent employees, and cannot displace regular employees.

This tax credit is refundable. It may also be carried forward for three years. The credit is available to employers statewide.

Incentive Benefits

The credit is equal to 50 percent of eligible training costs, with a cap of \$10,000 per employee, or 50 percent of the stipend paid to an intern, up to \$3,000 per intern. The credit is allowed in the tax year in which the training or internship is completed.

Incentive Requirements

Companies applying for the E-TIP tax credit must submit a Consolidated Funding Application to ESD. This form must be submitted before commencing the eligible training or retaining interns. This is the *initial application*.

Companies seeking a credit for a **training program** must demonstrate eligibility, provide a written curriculum to indicate that the training is eligible, estimate total training costs, attest the business is in compliance with state laws and does not owe past due taxes, allow the Department of Taxation and Finance and Department of Labor to share information about the business with ESD, and allow ESD to monitor compliance including whether at least three bids were solicited to provide the training or there is an attestation that three bids could not be obtained.

Upon review, ESD notifies a business of its eligibility and may issue a certificate of conditional eligibility to the business. Within 24 months of the issuance of the certificate of conditional eligibility, businesses must submit a *final application*, or performance report.



Companies must demonstrate that the eligible training program is complete and that the company made a significant capital investment related to the eligible training. Documentation for training expenses incurred and to verify the capital investment must be provided.

Companies seeking a credit for an **internship program** must identify employees or a third party provider who will be responsible for managing and training the interns, provide a written curriculum to indicate the internship is eligible under program rules, estimate total stipend costs, certify the business is in compliance with state laws and does not owe past due taxes, allow the Department of Taxation and Finance and Department of Labor to share information about the business with ESD, and allow ESD to monitor compliance, certify that the internship program will not displace any employees, and identify the number of full-time equivalent employees at the business.

Upon review, ESD notifies a business of its eligibility and may issue a certificate of conditional eligibility to the business. Within 24 months of the issuance of the certificate of conditional eligibility, businesses must submit a *final application*, or performance report.

Companies must demonstrate that the eligible internship program is complete, that interns were current students or recent graduates or recent members of the Armed Forces, and that no employees were displaced as a result of the program. Documentation for expenses incurred and to verify total employment must be provided.

In both cases, if ESD approves the final application, a certificate of tax credit is issued to the business. ESD provides a copy of the certificate to the Department of Taxation and Finance.

Businesses are required to maintain relevant records for the duration of its program participation plus three years. Businesses must make records available to ESD upon seven days' notice. ESD may also issue a post project survey to businesses, which is required to be returned by the business within a reasonable timeframe.

Incentive Use

Between 2018 and 2023, the E-TIP tax credit was used by 23 companies with 63 total reported jobs (internships or training) and an average wage of approximately \$6,000 (Table 116). The total value of the tax credits taken was just over \$136,000, indicating a cost per job of \$2,159.

Table 116: Credit Use, 2018 – 2023

Year	Number of Reports	Total Jobs (Internships or Training)	Total Tax Credits	Average Wage Per Job or Internship
2018	1	2	\$4,852	\$12,872
2019	3	20	\$15,145	0
2020	0	0	0	0
2021	11	30	\$83,039	\$7,793
2022	0	0	0	0
2023	8	11	\$33,000	\$10,515
TOTAL	23	63	\$136,036	\$5,956

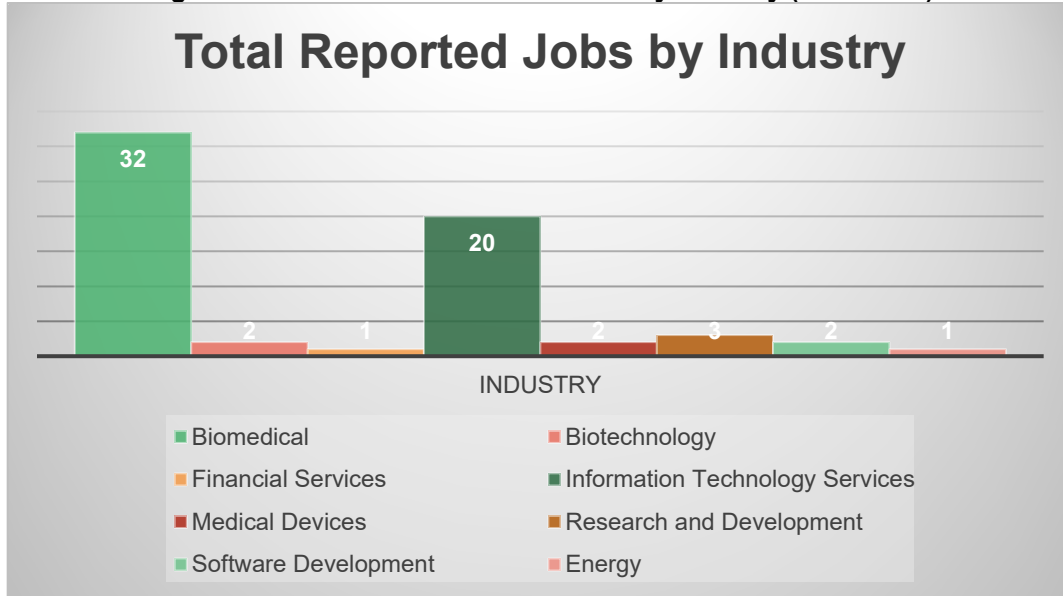
Source: ESD

The low average wage per job or internship indicates that most, if not all, of the jobs associated with the E-TIP program are internships. ESD provided data confirming this finding, noting that from 2018-2023, all but



three of the tax credit certificates issued were for internships. Most jobs were in either the biomedical or information technology services industries (Figure 13).

Figure 13: Total Number of E-TIP Jobs by Industry (2018-2023)



Source: ESD



Benchmarking

This section benchmarks the reach and impact of the E-TIP Tax Credit against that of similar incentive programs in other states. While the value of the New York training credit is greater than in other states, it remains lightly used. Georgia’s retraining tax credit is different from the others because it is administered by the Technical College System of Georgia and has broader eligibility. Georgia does not limit participation by industry or capital investment. By contrast, New York’s program is administered by ESD and is restricted to companies in strategic industries that make a significant capital investment. Several industries are excluded.

Table 117: E-TIP Tax Credit – Select Comparable Retraining Programs

State/ Program	Operational Years	Spending Caps	Value of Benefit Claimed in FY2022
New York: E-TIP Tax Credit	2016-*	\$10,000 per employee. \$3,000 per intern	\$0
Georgia: Retraining Tax Credit	1998-*	\$1,250 per employee	\$58 million
Kentucky: Skills Training Tax Credit	2006-*	\$500 per employee	\$0.9 million
South Carolina: Retraining Tax Credit	2014-*	\$1,000 per employee, per year	\$1.5 million
Virginia: Worker Training Tax Credit	2019-*	\$1,000 per employee; \$2,000 per student	\$7,738

* Currently running with no current scheduled sunset date. Source: Center for Regional Economic Competitiveness

Georgia: Retraining Tax Credit¹⁵⁶

Georgia offers the Retraining Tax Credit to offset up to 50 percent of a company’s direct training expenses with a \$500 credit per full-time employee per training program and a cap of \$1,250 for employees taking multiple training programs. Training programs must enhance quality and productivity or teach certain software technologies. The Technical College System of Georgia must approve eligible expenses, which include the cost of instructors and teaching materials, employee wages during retraining, and reasonable travel expenses. The tax credit can be used to offset up to 50 percent of a company’s Georgia tax liability. Any unused credit can be carried forward for up to 10 years. The FY 2022 cost of this program was \$58 million.¹⁵⁷

Kentucky: Skills Training Investment Credit¹⁵⁸

Kentucky offers state income tax credits to qualified companies to offset the costs of approved skills upgrades or occupational upgrade training programs for employees. This program is administered by Kentucky’s Bluegrass State Skills Corporation (BSSC), which also offers a Grant-in-Aid program that provides a cash reimbursement for eligible training. The maximum annual BSSC incentive for companies (for both programs) is the lesser of 50 percent of approved training costs, \$75,000, or \$2,000 per eligible trainee. The state’s tax expenditure report indicates the maximum value of the tax credit alone is \$500 per employee. Eligible training costs include in-house training, educational institution and consultant training, instructional materials and

¹⁵⁶ “Retraining Tax Credit”, Georgia Department of Economic Development, accessed online at <https://www.georgia.org/retraining-tax-credit>

¹⁵⁷ “Georgia Tax Expenditure Report for FY2024”, Georgia Department of Audits and Accounts, December 16, 2022, accessed online at <https://opb.georgia.gov/fy-2024-tax-expenditure-report>.

¹⁵⁸ “Bluegrass State Skills Corporation”, Team Kentucky Cabinet for Economic Development, accessed online at <https://ced.ky.gov/Workforce/BSSC>.



supplies, and employee/trainee wages. The Skills Training Investment Credit has an annual cap of \$2.5 million.¹⁵⁹ The FY 2022 cost of this program was \$0.9 million.¹⁶⁰

*South Carolina: Enterprise Zone Retraining Program*¹⁶¹

For businesses located in an Enterprise Zone and engaged in manufacturing, processing, or technology intensive activities, they may claim a credit against withholding of \$1,000 per year for retraining of a production or technology first line employee or immediate supervisor who is a full-time employee and has been continuously employed for two years. The training must be necessary for the business to remain competitive or introduce new technologies. There is also a limit of \$5,000 over 5 years for the employee. The training must be approved by a state technical college.

*Virginia: Worker Training Tax Credit*¹⁶²

Virginia offers a tax credit to employers of 35 percent of the costs of providing eligible training to qualified workers, with a cap of \$500 per employee or \$1,000 for a non-highly compensated worker with income below the Virginia median wage. Eligible training refers to courses from providers on the Commonwealth's Eligible Training Provider list, courses provided by any Virginia college, community college, or other public institution of higher learning, and instruction or training that is part of an approved apprenticeship agreement.

This program also allows for a credit of 35 percent of the direct costs, up to \$2,000, of providing manufacturing training or instruction to middle and high school students. Qualifying programs are certified by the Virginia Department of Education and provide orientation or instruction in the type of manufacturing the business is engaged into students in grades 6-12. The programs must be coordinated with the local school district and held at the business's plant or facility or in a public middle or high school.

Credits may be carried forward for three years. The FY22 cost of this program was \$7,738 across six tax returns.

At least ten states offer 19 different internship incentive programs, but the project team identified only one other state that offers a tax credit to incentivize internships. The remaining programs are structured as grants.¹⁶³

North Dakota: Internship Employment Tax Credit

North Dakota offers a tax credit to employers of 10 percent of compensation paid to an intern. Companies may take the credit for up to five interns employed at the same time. Interns must be enrolled in a college or

¹⁵⁹ "Just the Facts: Bluegrass State Skills Corporation BSSC), Grants-in-Aid (GIA) and Skills Training Investment Credit (STIC) Programs, FY 2023-2024", Team Kentucky Cabinet for Economic Development, accessed online at https://cedky.com/cdn/142_GIA_STIC_Fact_Sheet.pdf.

¹⁶⁰ "Tax Expenditure Analysis, Fiscal Years 2022-2024", Kentucky Office of the State Budget Director, November 30, 2021, accessed online at <https://osbd.ky.gov/Publications/Documents/Special%20Reports/Tax%20Expenditure%20Report%202022-24.pdf>.

¹⁶¹ "South Carolina Code of Laws, Title 12, Chapter 10: Enterprise Zone Act of 1995", South Carolina Legislature, May 22, 2019, accessed online at <https://www.scstatehouse.gov/code/t12c010.php>.

¹⁶² "Worker Training Tax Credit", Virginia Department of Taxation, accessed online at <https://www.tax.virginia.gov/business-development-credits#worker-training-credit>.

¹⁶³ "State Business Incentives Database", The Council for Community and Economic Research, accessed online at <https://www.c2er.org/state-business-incentives-database/>.



vocational technical education program related to the work to be performed, but there does not appear to be any limitation by industry. There is a program cap of \$3,000 per employer for all tax years.

Other State Evaluations

In 2018, Virginia’s Joint Legislative Audit and Review Commission (JLARC) assessed the Worker Retraining Tax Credit. This tax credit was created in 1997 to incentivize businesses to invest in training for their workers. The program generally provided a 30 percent credit for training expenditures paid or incurred. The evaluation found it “does not appear to be effective in encouraging worker retraining.” The total value of the credits taken was \$1.3 million for FY 2010-2017 with an average of seven users per year. Most of the tax credit usage was associated with trainees for apprenticeship programs. JLARC reported the credit had negligible economic benefit and return in revenue to the state.

Reasons suggested for the program’s low use included a lack of awareness, the relatively small amount of the credit, and the paperwork required to claim the credit. JLARC found that other state retraining tax credits also experienced low participation for similar reasons, also noting that more states offer grant assistance for training.

The Worker Retraining Tax Credit was eliminated in 2018. The Worker Training Tax Credit appears to be its replacement.

Return on Investment

Data Sources

The data available from ESD for this tax credit enables analysis and evaluation of the program. However, since the program serves two different categories -- existing workers receiving skills training and interns – the calculation of the economic impact of the program and return on investment to the state is more difficult to determine than if the categories were separate.

Economic Impact: Model Methodology and Definitions

For the economic impact analysis, the project team used the IMPLAN model for NYS.¹⁶⁴ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

¹⁶⁴ Additional information on IMPLAN may be found in Appendix A.



- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment.
- Location (city, county) of companies claiming exemptions.

The project team aggregated industries into sectors that correspond to the reported job creation by sector. Table 118 presents the job impacts imported to IMPLAN for the analysis.

Table 118: Reported Job Creation Impacts, 2018 to 2023

Year	No. of Reports	Actual Jobs Created (FTE)
2018	1	2
2019	3	20
2020	0	0
2021	11	30
2022	0	0
2023	8	11
Total 2018-2023	23	63

Source: Job Creation Reported by ESD. There was no activity in 2020 and 2022.

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the tax credit supported a total of 109 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2023. The job impact estimates assume that most of the direct jobs are full-time equivalents. ESD confirmed with the project team that most of the interns worked 40 hours per week (Table 119).

Table 119: Total Job Impacts in New York State, 2018 to 2023

Year	Direct	Indirect	Induced	Total
2018	2	-	1	3
2019	20	3	12	35
2021	30	7	13	51
2023	11	4	6	20
Total	63	14	32	109
Annual Average	13	3	6	22

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.



Impact on Revenues for New York State and its Municipalities

The revenue impact depends on the number of jobs, company capital investments, estimates of labor income, and assumptions about the indirect and induced activity associated with each job. Data provided by ESD indicate that most of the jobs associated with ETIP are full-time internships, but some are part-time internships, and some represent incumbent workers receiving training. To estimate the revenue impact given the variety of job situations, the project team has prepared three different revenue models.

Tables 120 and 121 assume that the value that the interns provide is commensurate to full-time employment and earnings levels for a full-time worker in technology industries and is not discounted based on the reduced wage of the internship. Treating the interns as equivalent to full-time employees has a corresponding increase on the associated effect on indirect and induced employment.

Table 120: Estimated Taxes in New York State, Total for 2018 to 2023 (Dollars in Thousands)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$241	\$145	\$275	\$660
County	\$44	\$27	\$53	\$124
State	\$319	\$108	\$189	\$617
Total State, County, Local	\$604	\$280	\$517	\$1,401

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 121: Total Taxes, Total for 2018 to 2023 (Dollars in Thousands)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$604.0	\$280.4	\$516.6	\$1,401.0
Federal	\$1,653.6	\$304.6	\$470.1	\$2,428.3
Total Taxes	\$2,257.6	\$585.0	\$986.7	\$3,829.3

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Tables 122 and 123 make most of the same assumptions but take out direct income tax payments since intern earnings associated with this program may not generate a need to pay income tax in New York state. This assumption is consistent with the average wage data provided by ESD of \$6,000.

Table 122: Estimated Taxes in New York State, Total for 2018 to 2023, No Income Tax (Dollars in Thousands),

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$173	\$145	\$275	\$592
County	\$44	\$27	\$53	\$124
State	\$95	\$108	\$189	\$393
Total State, County, Local	\$312	\$280	\$517	\$1,109

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.



Table 123: Total Taxes, Total for 2018 to 2023 (Dollars in Thousands), No Income Tax

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$312	\$280	\$517	\$1,109
Federal	\$1,654	\$304.6	\$470.1	\$2,428
Total Taxes	\$1,966	\$585.0	\$986.7	\$3,537

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Tables 124 and 125 model the revenue impact based only on E-TIP program associated wages and investment in technology sectors, regardless of job count or hours worked. This assumption equates the value of the interns work only with what they are paid, which is far less than a full-time employee in a technology industry. In this scenario, labor income and estimated taxes are substantially lower than in the previous two scenarios.

Table 124: Estimated Taxes in New York State, Total for 2018 to 2023, Wage and Investment Inputs Only (Dollars in Thousands)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$25	\$11	\$9	\$45
County	\$5	\$2	\$2	\$9
State	\$17	\$7	\$6	\$30
Total State, County, Local	\$47	\$20	\$17	\$84

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 125: Total Taxes, Total for 2018 to 2023 Wage and Investment Inputs Only (Dollars in Thousands)

Total Taxes (\$ Thousands)	Direct	Indirect	Induced	Total
State, County, Local	\$47	\$20	\$17	\$84
Federal	\$44	\$13	\$15	\$72
Total Taxes	\$91	\$34	\$32	\$156

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy. Table 126 treats ETIP participants as full-time employees with the expected indirect and induced effect associated with full-time employment generating indirect effects throughout the supply chain and induced effects throughout the state economy, based on direct average labor income of \$126,000 (Table 127).

Table 126: Labor Income, 2018 to 2023 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2018	\$317.3	\$24.7	\$89.4	\$431.4
2019	\$3,234.6	\$282.1	\$918.4	\$4,435.1
2021	\$3,099.1	\$882.6	\$1,022.2	\$5,003.8
2023	\$1,269.1	\$414.1	\$432.4	\$2,115.6



Year	Direct	Indirect	Induced	Total
Annual Average	\$1,980.0	\$400.9	\$615.6	\$2,996.5

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 127: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$126,000	\$112,000	\$78,000	\$110,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Tables 128 and 129 model the labor income impact based only on program associated wages and investment provided by ESD. This substantially lowers the direct labor income effect and reduces the indirect and induced labor income effects to zero.

Table 128: Labor Income, 2018 to 2023 (Dollars in Millions), Wage and Investment Inputs Only

Year	Direct	Indirect	Induced	Total
2018	\$26	\$0	\$0	\$26
2019	\$0	\$0	\$0	\$0
2021	\$234	\$0	\$0	\$234
2023	\$116	\$0	\$0	\$116
Annual Average	\$94	\$0	\$0	\$94

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 129: Average Labor Income, Wage and Investment Inputs Only

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$6,000	\$0	\$0	\$6,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The But-For Test

Since the “true” level of the E-TIP tax credit’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

The break-even points for the first two scenarios presented below are 22 percent and 35 percent, respectively, indicating that the incentive would have to be responsible for 22 percent or 35 percent of the total state tax impact for the state to break even on its investment. In the third scenario, the state does not break even on its investment even in the unlikely event this incentive is 100 percent responsible for the tax revenue generated by program participants.

Other Qualitative Economic Benefits

The Center for Regional Economic Competitiveness has identified supporting paid work experience, such as internships, as a promising practice for state economic development organizations striving to help address



business talent needs.¹⁶⁵ Structured programs such as internships and apprenticeships help companies attract, retain, and upskill their workforce, while learners and workers are exposed to new career paths, have greater opportunities to engage with industry, and are more likely to stay in state to work and learn. Paid internships specifically have value because they provide experiential learning opportunities over a relatively short term at low cost and low risk for employers.¹⁶⁶

Skills training can increase employee productivity and may also improve earnings and career path potential. Paid internships can provide several economic benefits, including helping businesses address talent needs, exposing young workers to career options, providing interns an opportunity to engage with and learn about specific industries, and gaining valuable work experience.

ROI Discussion

As it relates to this tax incentive, NYS had \$136,000 in foregone revenue that resulted from E-TIP between 2018 and 2023. A starting point for determining whether the program provided a positive net benefit should be to determine whether it returned more than that investment through the taxes associated with the economic activity from that investment.

Table 130: Reported Direct Impacts, 2018 to 2023 (Dollars in Thousands)

Year	No. of Reports	Reported Jobs (Internships or Training)	Total Wages	Private Investments	NY State Investment
2018	1	2	\$25.7	\$0.0	\$5
2019	3	20	\$0.0	\$295.5	\$15
2021	11	30	\$233.8	\$0.0	\$83
2023	8	11	\$115.7	\$0.0	\$33
Total 2018-2023	23	63	\$375.2	\$295.5	\$136.0

Source: Impacts Reported by ESD.

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the Employee Training Incentive Program analysis, the project team also based this analysis on the taxes generated in three different scenarios by job creation and job retention and the value of the tax credits between 2018 and 2023. Of course, this is just the beginning point of an ROI analysis.

ROI as Full-Time Employees

In this scenario, the value that the interns provide is commensurate to full-time employment and earnings

¹⁶⁵ “Repositioning Economic Development Incentives Post-Pandemic”, Center for Regional Economic Competitiveness, April 2021, accessed online at [https://www.cdfa.net/cdfa/cdfaweb.nsf/ord/EconDevIncentivesPostPandemic_Mar2021/\\$file/Repositioning-Economic-Development-6-Final.pdf](https://www.cdfa.net/cdfa/cdfaweb.nsf/ord/EconDevIncentivesPostPandemic_Mar2021/$file/Repositioning-Economic-Development-6-Final.pdf).

¹⁶⁶ “Beyond Training: How State Economic Development Agencies Are Helping Companies Develop Talent”, Center for Regional Economic Competitiveness, July 2019.



levels for a full-time worker in technology industries and is not discounted based on the reduced wage of the internship.

Table 131: Fiscal Return on Investment to New York State, 2018 to 2023

Total State Costs and Return (2018-2023)	Total Credits Awarded	Direct Taxes	Total Taxes
State of New York Taxes (\$ thousands)	\$136.0	\$319.3	\$616.9
Return on \$1 in Foregone Revenue		\$2.35	\$4.53
"But For" ROI Required for Breakeven		42%	22%

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.*

From the investment of \$136,000, the Employee Training Incentive Program generated \$319,300 in direct state taxes and total state taxes of \$616,900. The state's investment provided an overall return of \$2.35 or an additional \$1.35 based on direct taxes to the state and an additional \$3.53 based on total state taxes. In this scenario, the breakeven level is either 42 percent (in terms of direct taxes) or 22 percent (inclusive of direct, indirect, and induced taxes).

ROI as Full-Time Employees Exempt from Income Tax

In this scenario, most of the same assumptions hold, but direct income tax payments are taken out since intern earnings associated with this program may not generate a need to pay income tax in New York state.

Table 132: Assessment of the "But-For" ROI Requirement (Jobs Created and Retained), No Income Tax

State of New York Taxes (2018-2023)	Total Credits Awarded	Direct Taxes	Total Taxes
Return on \$1 in Foregone Revenue	\$136.0	\$95.3	\$393
"But For" ROI Required for Breakeven		\$0.70	\$2.89
"But For" ROI Required for Breakeven		n/a	35%

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.*

In the scenario in which interns do not pay income taxes, the state's investment generated \$95,300 in direct state taxes and total state taxes of \$393,000. The state's investment provided an overall return of \$0.70 based on direct taxes for each \$1 spent but a return of \$2.89 based on total state taxes.

ROI as Part-Time Employees

In this scenario the revenue impact is based only on E-TIP program associated wages and investment in technology sectors, regardless of job count or hours worked. This assumption equates the value of the interns work only with what they are paid, which is far less than a full-time employee in a technology industry.



Table 133: Assessment of the "But-For" ROI Requirement (Jobs Created and Retained), Wage and Investment Inputs Only

Total State Costs and Return (2018-2023)	Total Credits Awarded	Direct Taxes	Total Taxes
State of New York Taxes (\$ thousands)	\$136.0	\$17	\$30
Return on \$1 in Foregone Revenue		\$0.12	\$0.22
"But For" ROI Required for Breakeven		n/a	n/a

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

In the scenario in which only direct wages to interns and other investments associated with the program are included in the model, the state's investment generated \$17,000 in direct state taxes and total state taxes of \$30,000. The state's investment provided an overall return of \$0.12 based on direct taxes for each \$1.00 spent and a return of \$0.22 based on total state taxes.



Summary Findings

The estimated return to the state depends on the number of jobs, company capital investments, estimates of labor income, and assumptions about the indirect and induced activity associated with each job. Data provided by ESD indicate that most of the jobs associated with E-TIP are full-time internships, but some are part-time internships, and some represent incumbent workers receiving training. To estimate the ROI given the variety of job situations, the project team prepared three different revenue models based on the following three scenarios.

- If E-TIP jobs are treated as full-time employment with associated earnings levels for their industries, the state's investment provided an overall return of \$2.35 or an additional \$1.35 based on direct taxes to the state and an additional \$3.53 based on total state taxes.
- In the scenario in which interns are considered to be working as full-time employees who are exempt from income taxes given their actual reported wages are too low, the state's investment provided an overall return of \$0.70 based on direct taxes for each \$1.00 spent but a return of \$2.89 based on total state taxes.
- In the scenario in which interns are considered to be part-time employees based only on the direct wages and investment reported for the program, the state's investment provided an overall return of \$0.12 based on direct taxes for each \$1.00 spent and a return of \$0.22 based on total state taxes.

Skills training can generate additional economic benefits, such as increasing employee productivity and improving earnings and career path potential. Paid internships also provide several economic benefits, including helping businesses address talent needs, exposing young workers to career options, providing interns an opportunity to engage with and learn about specific industries and gain valuable work experience.



Empire State Apprenticeship Tax Credit



Executive Summary

Purpose and History

The Empire State Apprenticeship Tax Credit was launched in 2018 to encourage the expansion of apprenticeships in New York State by providing certified employers with a tax credit for each qualified apprentice employed. The credit is available for taxable years beginning on or after January 1, 2018, and before January 1, 2028. This tax credit is administered by the Department of Labor (DOL).

Design

The total value of the credit varies based on the number of years the apprenticeship lasts and whether the apprentice is considered a disadvantaged youth. The base credit starts at \$2,000 for each first-year apprentice and grows by \$1,000 increments each year of the apprenticeship to reach \$6,000 for each fifth-year apprentice. The credit for each apprentice considered a disadvantaged youth is \$5,000 for each first-year apprentice up to a maximum of \$7,000 for years three through five. An additional \$500 credit is available if an apprentice has been trained by their mentor for the entirety of the calendar year.

Use

Between 2018 and 2022, 406 tax credit awards were made by DOL to 281 businesses for total tax credits valued at \$3.4 million. Over this time, 257 jobs (apprenticeships) were supported by the awards. Most of the apprenticeships (205) were in the manufacturing sector, followed by 32 in transportation and warehousing. The average award per business from 2018-2022 was \$8,480. The average award per job is calculated to be \$13,397. The apprenticeships take place with employers all around the state, but there has only been one employer in the New York City area. Interviews conducted with DOL indicated that 7 percent of apprenticeships are held by disadvantaged youth.

Awards are not always taken by the qualified employers on their tax forms. Between 2018 and 2020 (the latest year for which information on tax credit use is available), 72 taxpayers used the tax credit compared to 150 business awards certified by DOL. The total value of the credit taken over this time was \$668,757 compared to awards of \$1.9 million.

Return On Investment

The Empire State Apprenticeship Tax Credit program does not provide a positive return to the state in terms of direct state taxes revenues, providing \$0.52 for the initial \$1.00 invested. When all taxes from indirect and induced activities are included, the Empire State Apprenticeship Tax Credit program generates a return of \$1.02 per dollar invested.

There are qualitative impacts that are probably more important than the quantitative impacts. The apprenticeship tax credit program encourages training for trades and careers to augment the development of occupational and technical skills for New Yorkers. Structured, on-the-job training, such as apprenticeships, help companies attract, retain, and upskill their workforce. Besides the benefit to the companies, there is also a qualitative benefit to the employee, as there is an expectation that they will benefit from the training and mentorship provided from the apprenticeship.

Paid work experience, including apprenticeships, has been identified as promising practice for states striving to help address business talent needs. Structured programs, such as apprenticeships, help companies attract, retain and upskill their workforce.



Based on this analysis the Empire State Apprenticeship Tax Credit program generates a slight positive return on investment to the state as well as highly positive economic impacts.

Background

Incentive Purpose

The Empire State Apprenticeship Tax Credit is intended to encourage the expansion of apprenticeships by providing certified employers with a tax credit for each qualified apprentice employed.

Legislative History

The Empire State Apprenticeship Tax Credit was launched in 2018. The program sunset date has since been extended from 2023 to January 1, 2028.¹⁶⁷

Incentive Design

This tax credit is administered by the Department of Labor (DOL). The credit is available for tax years beginning on or after January 1, 2018, and before January 1, 2028. It may be taken by corporations to offset state corporate franchise tax liability or by other employers (such as sole proprietors and partnerships) to offset state personal income tax liability. Unused credits are refundable or can be treated as an overpayment of tax to be credited to the next year's tax liability. The program has an annual cap of \$10.0 million. Unused allocations may be made available to the program in subsequent years, meaning that if \$9.0 million in credits were claimed in a year, the cap would be raised to \$11.0 million in the subsequent year. Employers taking this credit may not use other credits for the same apprentice. This tax credit is available to taxpayers throughout New York State (NYS).

Incentive Benefits

The total value of the credit varies based on the number of years of the apprenticeship and whether the apprentice is considered a disadvantaged youth (which is defined in the section on Incentive Requirements).

The base credit is computed as follows:

- \$2,000 for each first year apprentice.
- \$3,000 for each second year apprentice.
- \$4,000 for each third year apprentice.
- \$5,000 for each fourth year apprentice.
- \$6,000 for each fifth-year apprentice.

The credit for each apprentice considered a disadvantaged youth for each tax year is:

- \$5,000 for each first year.
- \$6,000 for each second year.
- \$7,000 for each third, fourth, or fifth-year apprentice.

¹⁶⁷ "Consolidated Laws of New York, Chapter 60 (TAX), Article 9-A, Section 210-B: Credits", The New York State Senate, August 18, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/210-B>; "Consolidated Laws of New York, Chapter 31 (LAB), Article 2, Section 25-C: Power to administer the empire state apprenticeship tax credit program", The New York State Senate, April 29, 2022, accessed online at <https://www.nysenate.gov/legislation/laws/LAB/25-C>.



An additional \$500 credit is available if an apprentice has been trained by their mentor for the entirety of the calendar year.

Incentive Administration

Employers must submit an application to the DOL, which determines if the employer is eligible to apply for the tax credit. Employers are eligible if they sponsor an active or probationary New York State Registered Apprenticeship (RA) program, or are an approved signatory employer to an active or probationary RA program. Construction trades apprenticeships are generally not eligible for the program, though there is an exception if the trade is for upkeep and maintenance of a facility owned by the employer. Preference may be given to apprenticeships for in-demand industries and occupations.

The tax credit is only available for qualified apprentices. Qualified apprentices must be registered in an eligible New York State Registered Apprenticeship program with an enrollment date on or after January 1, 2018, and must be employed for a minimum of 35 hours per week for at least six months during the calendar year under a qualified apprenticeship agreement with a qualified employer.

Qualified apprentices who are considered disadvantaged youth are individuals between the ages of 16-24 when the apprenticeship starts who are determined to be low-income or at-risk by fitting one of the following categories: over 18 and no longer in school and without a high school diploma or equivalent; a veteran; a member of a family that receives Temporary Assistance for Needy Families (TANF), Supplemental Nutritional Assistance Program (SNAP), Supplemental Security Income (SSI) or free or reduced lunch benefits; have been referred by a rehabilitation agency under the Ticket to Work Program; served time in jail or are on probation or parole; pregnant; homeless; in foster care or the custody of the NYS Office of Children and Family Services; the child of a parent recently in jail or collecting unemployment insurance; lives in public housing or receives housing assistance; or other factors approved by the Commissioner of Labor.

After applying, qualified employers receive a Preliminary Certificate of Tax Credit Eligibility from the DOL. Employers must then submit an Employer Final Report by December 31 of each year. At that time the DOL verifies that all eligibility requirements have been met for each apprentice being claimed, computes the allowable credit, and issues a Final Certificate of Tax Credit. This Certificate must be attached to the Empire State Apprenticeship Tax Credit form submitted to the Department of Taxation and Finance as part of the employer’s tax filing.

Employers must agree to allow the Department of Taxation and Finance to share information with DOL and allow DOL to access books and records required to monitor compliance with the program.

Incentive Use

Between 2018 and 2022, 406 tax credit awards were made by DOL to 281 businesses for total tax credits valued at \$3.4 million. The average award per business over this period was \$8,480 (Table 134).

Table 134. Empire State Apprenticeship Tax Credit – Awards and Applications, 2018-2022

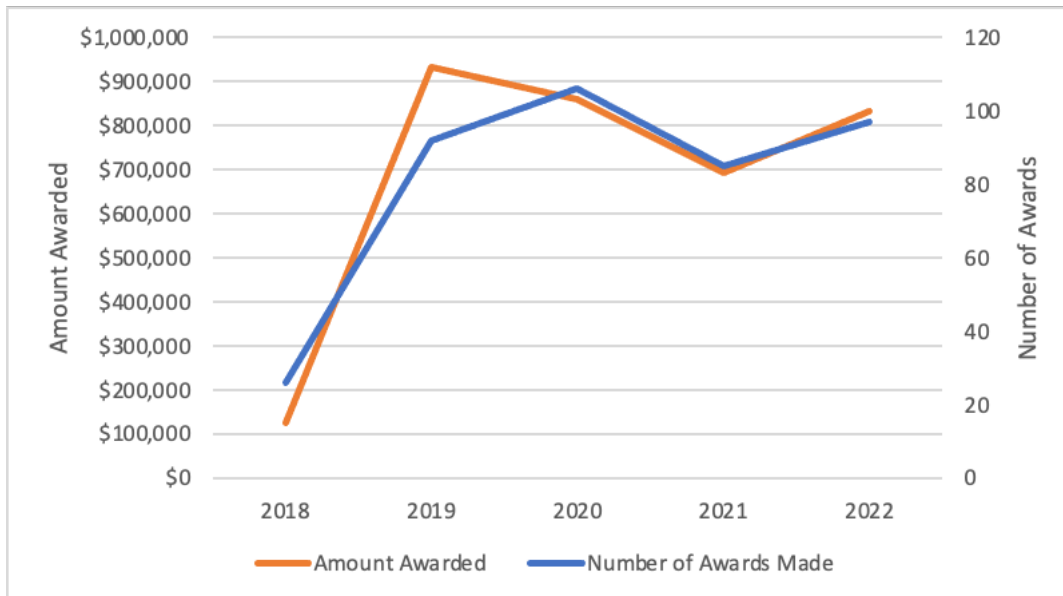
Year	Number of Awards Made	Number of Businesses	Applications Received	Amount Awarded	Average Award
2018	26	18	76	\$127,000	\$4,885
2019	92	60	120	\$932,000	\$10,130
2020	106	72	128	\$859,000	\$8,105
2021	85	65	98	\$692,000	\$8,141



Year	Number of Awards Made	Number of Businesses	Applications Received	Amount Awarded	Average Award
2022	97	66	112	\$833,000	\$8,588
TOTAL	406	281	534	\$3,443,000	\$8,480

Source: NYS Department of Labor

Figure 14: Number of ESATC Awards Made and Amounts Awarded, 2018-2022



Source: NYS Department of Labor and MFR Consultants

Over this time, 257 jobs (apprenticeships) were supported by the tax credit (Table 135). Interviews conducted with the DOL indicated that 7 percent of apprenticeships are held by disadvantaged youth. It is not clear why businesses received more tax credits (281) than the number of apprenticeships that were created (257); there was no response to a follow-up inquiry to DOL related to this question.

In Table 135, each apprentice that was claimed as a first-year apprentice is counted as a job created. Most of the apprenticeships (205) were in the manufacturing sector, followed by transportation and warehousing. Using the total jobs figure from Table 135 and the total amount awarded from Table 134, the average award per job for this period was \$13,397.

Table 135. Empire State Apprenticeship Tax Credit – Jobs Created by Industry Sector, 2018-2022

Industry Sector	2018	2019	2020	2021	2022	Total
Accommodation-Food Services	0	0	0	0	1	1
Educational Services	0	0	2	0	0	2
Finance and Insurance	0	1	0	0	0	1
Manufacturing	32	41	29	25	78	205
Other Services	0	0	2	1	0	3

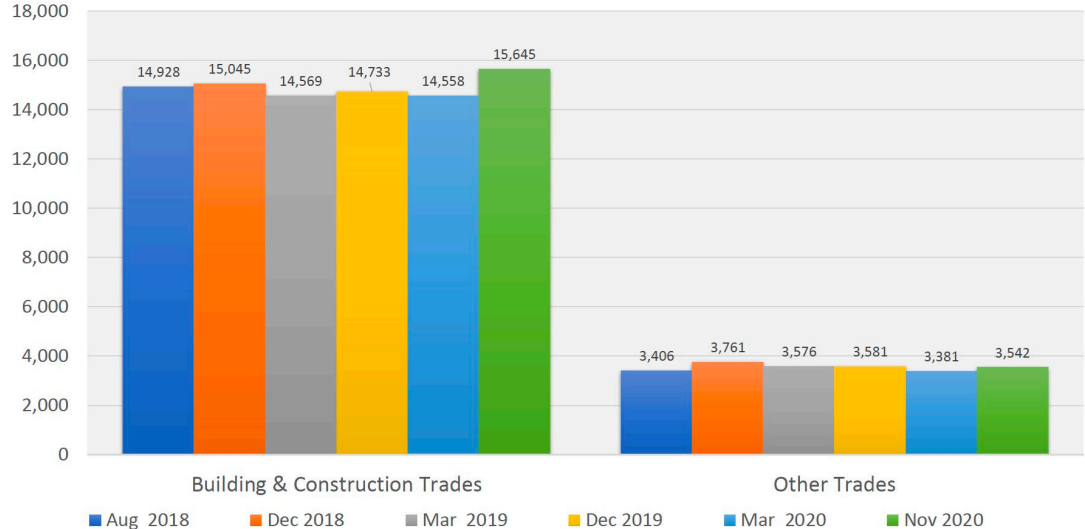


Industry Sector	2018	2019	2020	2021	2022	Total
Plant Maintenance Trades	3	0	0	2	0	5
Professional, Scientific, and Technical Services	0	1	0	4	1	6
Transportation and Warehousing	0	0	1	12	19	32
Utilities	0	0	1	0	0	1
Wholesale Trade	0	0	1	0	0	1
TOTAL	35	43	36	44	99	257

Source: NYS Department of Labor

The apprenticeships with companies using this tax credit represent about 25 percent of the total number of registered apprenticeship programs in NYS. For example, the DOL reported that there were 946 apprenticeship programs and 627 sponsors as of November 30, 2020. From 2018-2020, 224 tax credit awards were made to 150 businesses. In 2019, 3,358 certificates of completion were issued, but there were only 43 apprentices associated with the tax credit program in this year. One reason for this discrepancy may be that many new apprentice programs are in the building & construction trades, which are generally ineligible for the tax credit (Figure 15).¹⁶⁸

Figure 15: Comparison of Active Apprentices – Construction and Other Trades



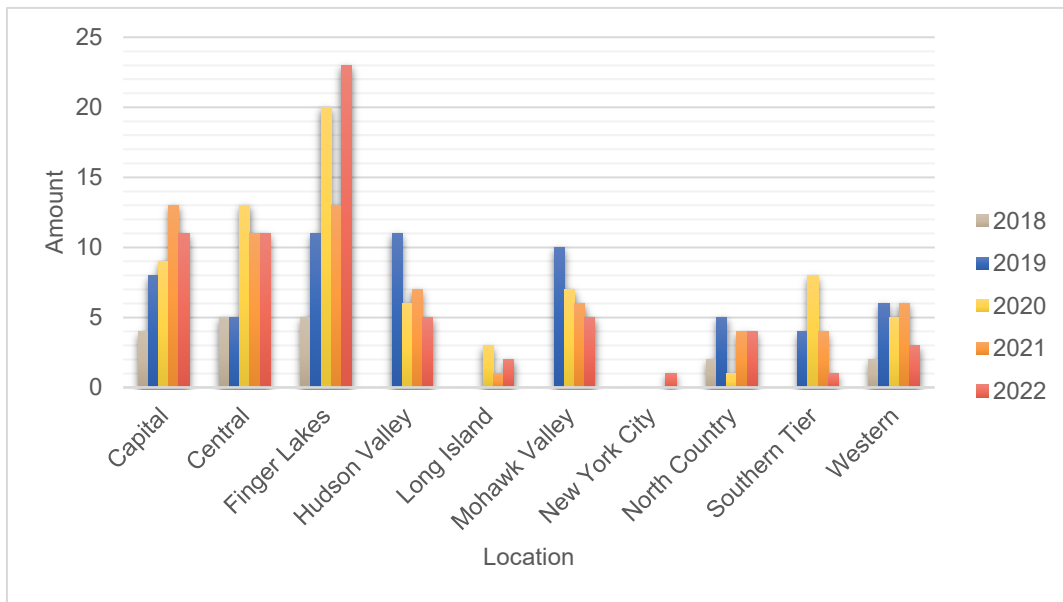
Source: NYSDOL Apprenticeship Update, New York Department of Labor, December 2020

The apprenticeships take place with employers throughout NYS, but from 2018 to 2022, only one employer was located in the NYC area (Figure 16).

¹⁶⁸ “NYSDOL Apprenticeship Update”, New York Department of Labor, December 8, 2020, accessed online at https://dol.ny.gov/system/files/documents/2021/02/nysdol_apprenticeship_update_12-8-20.pdf.



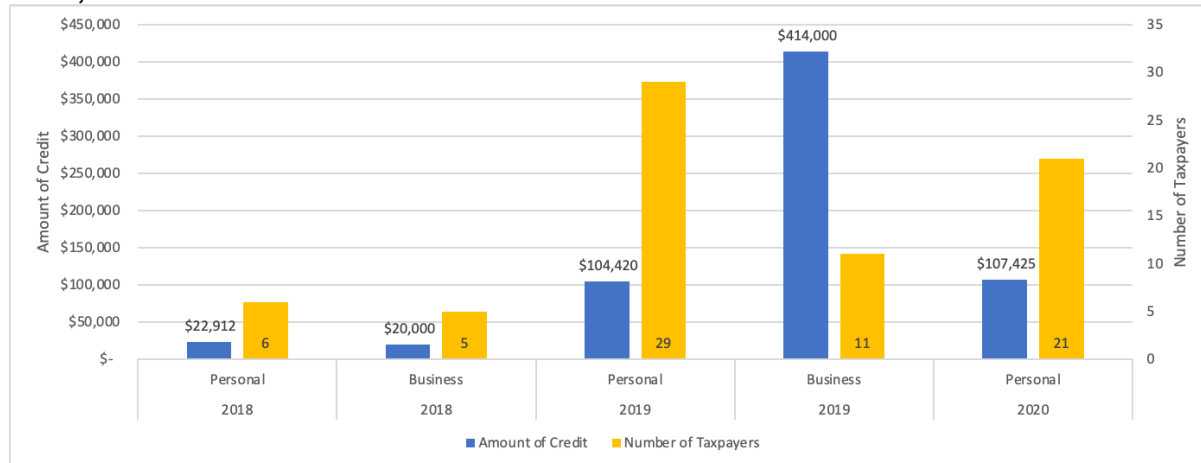
Figure 16: Empire State Apprenticeship Tax Credit – Region of Businesses Awarded Tax Credits by Year



Source: NYS Department of Labor and MFR Consultants

Between 2018 and 2020, 72 taxpayers used the tax credit compared to 150 businesses certified by DOL. The total value of the credit taken over this time was \$668,757 (Figure 17).

Figure 17: Number of Taxpayers and Value of Credits (dollars), Empire State Apprenticeship Tax Credit, 2018-2020



Source: NY Open Data and MFR Consultants

The Fiscal Year 2024 Annual Report on New York State Tax Expenditures reports that the combined foregone revenue (personal income tax and corporate franchise tax) from this credit was \$0.5 million in 2020. It forecasts combined foregone revenue of \$10.0 million in 2023.



Benchmarking

This section benchmarks the reach and impact of the Empire State Apprenticeship Tax Credit against that of similar incentive programs in other states. Specifically, the section compares each program’s value of credits claimed, eligibility requirements, and maximum credit available.

Table 136: Empire State Apprenticeship Tax Credit – Select Comparable Programs

State/ Program	Operational Years	2019 Value of Credits Claimed	Annual Maximum Tax Credit per Apprentice
New York: Empire State Apprenticeship Tax Credit	2018-2028	\$518,000	\$7,000
Connecticut: Manufacturing Apprenticeship Tax Credit	1979-*	\$250,000 ¹⁶⁹	\$7,500
Louisiana: Registered Apprenticeship Tax Credit	2021-*	N/A	\$1,000
Maryland: Registered Apprenticeship Tax Credit	2014-*	N/A	\$3,000
Pennsylvania Foundations in Industry Training Grant Program		N/A (\$3 million budget allocation)	\$3,000

* Currently running with no scheduled sunset date. Source: Center for Regional Economic Competitiveness

Connecticut: Manufacturing Apprenticeship Tax Credit

The Connecticut Manufacturing Apprenticeship Tax Credit provides a tax credit against the corporate business tax to encourage development of skilled workers through apprentice training programs. The value of the credit is \$7,500 or 50 percent of actual wages, whichever is less, for apprentices in qualified manufacturing programs working between 4,000 (2 years) and 8,000 (4 years) hours on a full-time basis. The credit applies only to the first half of the apprenticeship period or first three-fourths for four-year programs. Businesses must obtain a letter from the Department of Labor to take the tax credit.¹⁷⁰ Businesses must be a qualified registered apprenticeship program sponsor and be classified as a manufacturing establishment.¹⁷¹

¹⁶⁹ “Connecticut Tax Expenditure Report”, Connecticut General Assembly Office of Fiscal Analysis, February 2018, accessed online at https://cga.ct.gov/ofa/Documents/year/TER/2018TER-20180201_Tax%20Expenditure%20Report%20FY%2018.pdf.

¹⁷⁰ “Manufacturing Apprenticeship Tax Credit”, Connecticut Department of Labor, accessed online at <https://www.ctdol.state.ct.us/progsupt/appren/taxcr1.htm>.

¹⁷¹ “Corporate Tax Credit in Manufacturing Apprenticeship and Worksheet”, Connecticut Department of Labor, accessed online at <https://www.ctdol.state.ct.us/progsupt/appren/taxcr-worksheet.htm>.



The state's 2022 tax expenditure report indicates that fewer than 15 taxpayers used the credit with a total cost to the state of \$100,000 in FY22 and FY23.¹⁷²

Louisiana Registered Apprenticeship Tax Credit

Apprenticeship program sponsors that pay wages to apprentices are eligible for a tax credit equal to \$1.25/hour worked per calendar year with a maximum credit of \$1,000 per year. The apprentice must be “registered and indentured” with the Louisiana Workforce Commission – Apprenticeship Division. There is no limit on the number of apprentices that can be claimed. Unused credits may be carried forward for up to ten years. Apprentices must be employed at least 250 hours during the tax year and have enrolled in or received specified training. Employers must submit a Registered Apprenticeship Tax Credit form to the Apprenticeship Division. The form is then sent to both the employer and the Department of Revenue to document the credit.¹⁷³

Maryland: Registered Apprenticeship Tax Credit OR Maryland Tax Credit for Eligible Apprentices

The Maryland Registered Apprenticeship Tax Credit provides a state income tax credit to Registered Apprenticeship Sponsors or participating employers that hire an eligible Registered Apprentice(s). To be eligible to apply for this tax credit program, the following two conditions must be in place: A) Employer must be a Registered Apprenticeship Sponsor and/or participating employer in a Registered Apprenticeship Program and B) Registered Apprentice(s) must be enrolled in an apprenticeship training program registered with the Maryland Apprenticeship and Training Council and have been employed by the taxpayer for at least seven full months of the taxable year.

Apprentices who are eligible to be claimed for the tax credit must be in the first year of their employment with the taxpayers. For the first five eligible Apprentices claimed, taxpayers may receive \$3,000 per Registered Apprentice and \$1,000 per Youth Apprentice. Taxpayers may receive \$1,000 per eligible Registered Apprentice for all others claimed in excess of the first five. A maximum of \$15,000 in credits can be claimed per year per taxpayer. The credit is not refundable, however, any credit amount in excess of a taxpayer's tax liability can be carried forward to succeeding taxable years until the full amount of the credit is used.¹⁷⁴ Cost data for this program is not provided in the state's tax expenditure reports.

Pennsylvania: Foundations in Industry Training Grant Program

The Foundations in Industry Training (FIT) Grant Program provides grants to employers and a variety of other eligible applicants (such as workforce development boards and labor organizations, among others) for expenses related to registered apprenticeship programs. Grants are available up to \$3,000 per apprentice per year for up to three years. Eligible uses of funds are specified in program guidelines, and funds are disbursed on a reimbursement basis. Apprenticeship programs must be registered with the Pennsylvania Department of

¹⁷² “Connecticut Tax Expenditure Report”, Connecticut General Assembly Office of Fiscal Analysis, February 2022, accessed online at https://www.cga.ct.gov/ofa/Documents/year/TER/2022TER-20220201_Tax%20Expenditure%20Report%20FY%202022.pdf.

¹⁷³ “Registered Apprenticeship Tax Credit Quick Reference Guide”, Louisiana Workforce Commission, accessed online at <https://www.laworks.net/Downloads/App/RegisteredApprenticeshipTaxCreditGuide.pdf>; “Apprenticeship Tax Credit Program”, Louisiana Department of Revenue, February 2, 2023, accessed online at <https://revenue.louisiana.gov/LawsPolicies/RIB%2023-008%20Apprenticeship%20Tax%20Credit%20Program.pdf>.

¹⁷⁴ “Maryland Tax Credit for Eligible Apprentices – Maryland Apprenticeship and Training Program (MATP)”, Maryland Department of Labor, accessed online at <https://www.dlir.state.md.us/employment/appr/apprtaxcreditinfo.shtml>.



Labor. Applications are submitted through Pennsylvania’s Department of Community and Economic Development.¹⁷⁵ In 2023, the state appropriated \$3.0 million for this program.¹⁷⁶

Other state tax credit programs are similar to New York’s program in that they are used by employers that have registered apprentice programs and hire qualified apprentices. New York’s tax credit is more generous compared to most of the benchmark states, with a higher maximum credit value and a longer time period over which the tax credit may be used. Among the benchmark states, Connecticut’s is the most restrictive because it is limited to manufacturing businesses. New York excludes construction trades but otherwise the tax credit is available to all employers with registered apprentice programs. Other states, represented here by Pennsylvania, provide grants to employers rather than tax credits.

Return on Investment

Data Used for the ROI Analysis

For this particular program, the data provided by the DOL does not indicate the number of disadvantaged youths hired (the figure cited in this report was obtained via an interview with DOL subject matter experts), apprenticeship wages, or the number of years each apprenticeship lasted. This information is collected through the tax forms CT-650 and IT-650, but it was not provided to the project team. The number of apprenticeships receiving the boost for mentorship is not available. Carryover and refundability data are also not available.

According to statute, the DOL commissioner shall publish an annual report with the names and addresses of employers issued a Final Certificate. The report must also include the work location of each apprentice generating a tax credit, the amount of the credit, the number of apprentices by year of their apprenticeship (first through fifth), and the number that are disadvantaged, and the employer’s industry.¹⁷⁷ While DOL shared much (but not all) of this information with the PFM team, DOL did not indicate that this annual report is available.

These data limitations impact on the confidence level of the following analysis.

Model Methodology and Definitions

The project team used an IMPLAN model to estimate economic impact.¹⁷⁸ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better

¹⁷⁵ “Foundations in Industry Training (FIT) Grant Program”, Pennsylvania Department of Community and Economic Development, accessed online at <https://dced.pa.gov/programs/foundations-in-industry-training-fit-grant-program/#>.

¹⁷⁶ “Pennsylvania General Appropriations Act of 2023”, The General Assembly of Pennsylvania, May 2, 2023, accessed online at <https://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck.cfm?txtType=HTM&sessYr=2023&sessInd=0&billBody=H&billTyp=B&billNbr=0611&pn=1811>.

¹⁷⁷ “Consolidated Laws of New York, Chapter 31 (LAB), Article 2, Section 25-C: Power to administer the empire state apprenticeship tax credit program”, The New York State Senate, April 29, 2022, accessed online at <https://www.nysenate.gov/legislation/laws/LAB/25-C>.

¹⁷⁸ More information on the IMPLAN model may be found in Appendix A.



measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

For the analysis of the economic impact of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment.

For the impact analysis, using the IMPLAN model for NYS, the project team aggregated industries into sectors that correspond to the reported apprentice jobs created by sector. The DOL reported that each apprentice that was claimed as a first-year apprentice was counted as a job created. Table 137 represents the job impacts imported to IMPLAN for the analysis with the annual impacts by sector grouped by year to account for any inflation effects.

Table 137: Reported Job Creation Impacts by sector, 2018 to 2022

Industry Sector	2018	2019	2020	2021	2022	Total
Accommodation and Food Services	0	0	0	0	1	1
Educational Services	0	0	2	0	0	2
Finance and Insurance	0	1	0	0	0	1
Manufacturing	32	41	29	25	78	205
Other Services	0	0	2	1	0	3
Plant Maintenance Trades	3	0	0	2	0	5
Professional, Scientific, and Technical Services	0	1	0	4	1	6
Transportation and Warehousing	0	0	1	12	19	32
Utilities	0	0	1	0	0	1
Wholesale Trade	0	0	1	0	0	1
Total	35	43	36	44	99	257

Source: Job Creation Reported by Department of Labor

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the ESATC program supported a total of 513 total (direct, indirect, and induced) jobs in NYS between 2018 and 2022 (Table 138).



Table 138: Total Job Impacts in New York State, 2018 to 2022

Year	Direct	Indirect	Induced	Total
2018	35	19	17	71
2019	43	25	23	91
2020	36	20	19	75
2021	44	18	19	81
2022	99	50	46	195
Total	257	132	124	513
Annual Average	51	26	25	103

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

Impact on Revenues for New York State and its Municipalities

Table 139: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$2.7	\$1.5	\$1.0	\$5.1
County	\$0.5	\$0.3	\$0.2	\$1.0
State	\$1.8	\$1.0	\$0.7	\$3.5
Total State, County, Local	\$5.0	\$2.8	\$1.9	\$9.7

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

Table 140: Total Taxes, Total for 2018 to 2022 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$5.0	\$2.8	\$1.9	\$9.7
Federal	\$4.2	\$2.4	\$1.8	\$8.5
Total Taxes	\$9.2	\$5.2	\$3.7	\$18.1

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy (Tables 141 and 142).

Table 141: Labor Income, 2018 to 2022 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2018	\$3.1	\$1.9	\$1.3	\$6.4
2019	\$4.1	\$2.5	\$1.8	\$8.4
2020	\$3.4	\$2.0	\$1.4	\$6.9
2021	\$3.7	\$1.8	\$1.5	\$7.0
2022	\$8.4	\$4.9	\$3.5	\$16.9



Year	Direct	Indirect	Induced	Total
Annual Average	\$4.6	\$2.6	\$1.9	\$9.1

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

Table 142: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$89,000	\$99,000	\$77,000	\$89,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

The But-For Test

Since the “true” level of the Empire State Apprenticeship Tax Credit’s influence cannot be known for certain, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

The break-even point presented in the following is 97 percent, indicating that the incentive would have to be almost entirely responsible for the total state tax impact for the state to break even on its investment. Please note that this estimate and the ROI analysis are based on awards made rather than tax credits taken.

Based on the information provided to the project team, relatively few of the employers who are certified to use the credit actually claim the credit on their tax forms. The low claim rates may imply that the tax credit itself is not effective in driving the decision to hire apprentices. On the other hand, employers put in the effort to obtain the tax credit certification even if they do not ultimately claim the credit. It is possible that the availability of the tax credit influences business behavior even if the value of the credit does not.

Other Qualitative Economic Benefits

The apprenticeship tax credit program encourages training for trades and careers to augment the development of occupational and technical skills for New Yorkers. Structured, on-the-job training, such as apprenticeships, help companies attract, retain and upskill their workforce.

Besides the benefit to the companies, there is also a qualitative benefit to the employee, as there is an expectation that they will benefit from the training and mentorship provided from the apprenticeship. This program rationale has been supported by several studies.

The Center for Regional Economic Competitiveness has identified supporting paid work experience, including apprenticeships, as a promising practice for states striving to help address business talent needs.¹⁷⁹ Structured programs, such as apprenticeships, help companies attract, retain, and upskill their workforce. Several states offer incentives to increase apprenticeship availability among employers. Some states, such as

¹⁷⁹ “Repositioning Economic Development Incentives Post-Pandemic”, Center for Regional Economic Competitiveness, April 2021, accessed online at [https://www.cdfa.net/cdfa/cdfaweb.nsf/ord/EconDevIncentivesPostPandemic_Mar2021/\\$file/Repositioning-Economic-Development-6-Final.pdf](https://www.cdfa.net/cdfa/cdfaweb.nsf/ord/EconDevIncentivesPostPandemic_Mar2021/$file/Repositioning-Economic-Development-6-Final.pdf).



Pennsylvania and Iowa, offer grants to employers, while others, such as New York, Connecticut, and South Carolina, offer tax credits for the same purpose.¹⁸⁰

One research study found that state apprenticeship tax credits are associated with an increase in the share of apprentices in a state's labor force and "therefore appear to be an effective policy option to expand use of a program with proven benefits for workers without a bachelor's degree that could help reduce income inequality."¹⁸¹ A 2023 review by the Urban Institute of eight state apprenticeship incentive programs found that financial incentives can help offset the costs of operating a registered apprenticeship program for employers and that perceived state benefits include greater collaboration between states and recipients, increasing the number of apprentices, attracting underrepresented populations to apprenticeships, and expanding apprenticeships to nontraditional industries. Challenges are lack of awareness of the incentives, insufficient funds for marketing, difficulties attracting small business participation, and ensuring program completion among participants.¹⁸²

In 2015, the U.S. Department of Labor launched the American Apprenticeship Initiative (AAI). A subsequent performance evaluation of the program found that apprentices initially earn less than comparable workers, but catch up early in the apprenticeship, and ultimately earn more. The study found that AAI apprentices' quarterly earnings increased 43 percent from quarter 4 before the start of the apprenticeship to quarter 10 after starting the apprenticeship. This contrasts with comparable worker quarterly earnings, which only increased by 16 percent. The study also estimated that over a lifetime, apprentices' earnings are \$98,718 higher than workers in the comparison group and that apprenticeship program completers earn \$240,037 more than workers in the comparison group.¹⁸³

ROI Discussion

As it relates to this tax incentive, NYS had \$3.4 million in foregone revenue that resulted from the program between 2018 and 2022. A starting point for determining whether the program provided a positive net benefit should be to determine whether it returned more than that investment through the taxes associated with the economic activity from that investment.

¹⁸⁰ "Beyond Training: How State Economic Development Agencies Are Helping Companies Develop Talent", Center for Regional Economic Competitiveness, July 2019.

¹⁸¹ Colin John Becht, "Apprenticing America: The Effects of Tax Credits for Registered Apprenticeship Programs" A Thesis submitted to the Faculty of the Graduate School of Arts and Sciences of Georgetown University, April 2019, accessed online at https://repository.library.georgetown.edu/bitstream/handle/10822/1055057/Becht_georgetown_0076M_14207.pdf?sequence=1.

¹⁸² Shayne Spaulding and Stephanie Petrov, "State Incentives to Promote and Support Apprenticeship: Takeaways from Eight States", Urban Institute and Mathematica, August 2023, accessed online at https://www.dol.gov/sites/dolgov/files/ETA/publications/ETAOP_2023_19_STATES_INCENTIVES_TO_PROMOTE_APPRENTICESHIPS.pdf.

¹⁸³ Barbara Katz et al., "Did Apprentices Achieve Faster Earnings Growth Than Comparable Workers? Findings from the American Apprenticeship Initiative Evaluation", Urban Institute, August 2022, accessed online at https://www.dol.gov/sites/dolgov/files/ETA/publications/ETAOP2022-41_AAI_Brief-Earnings_Growth_Final_508_9-2022.pdf.



Table 143: Reported Applications, Awards and State Investment, 2018 to 2022

Year	Number of Awards Made	Number of Businesses	Number of Applications Received	New York State Investment
2018	26	18	76	\$127,000
2019	92	60	120	\$932,000
2020	106	72	128	\$859,000
2021	85	65	98	\$692,000
2022	97	66	112	\$833,000
Total	406	281	534	\$3,443,000

Source: Impacts Reported by Department of Labor

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the analysis, the project team based this analysis only on the taxes generated by the job creation from the apprentice program.

Table 144: Fiscal Return on Investment to New York State, 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State of New York Taxes (\$M)	\$3.4	\$1.8	\$3.5
Return on \$1 in Foregone Revenue		\$0.52	\$1.02
"But For" ROI Required for Breakeven		n/a	97%

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

From the awards of \$3.4 million, the program generated \$1.8 million in direct state taxes and total state taxes of \$3.5 million. The state's investment provided an overall return of \$0.52 based on direct taxes to New York per dollar of state investment. Based on the total tax revenue, including that generated from indirect and induced economic activity, the apprentice program provided \$1.02 in total state tax revenues, \$0.02 more than the \$1.00 invested.



Summary Findings

- The Empire program does not provide a positive return to the state in terms of **direct** state taxes revenues, providing \$0.48 less than the initial \$1 invested.
- However, when including all the taxes that flow from that direct activity for job creation and retention, including all taxes from indirect and induced activities, the program generates a return of \$1.02 for every \$1.00 invested.
- The positive ROI is mitigated by the fact that it is small and does not take into consideration apprenticeships that would have occurred without the incentive. Factors related to its use suggest that it is not driving many of the decisions on granting apprenticeships.
- However, the qualitative impacts are significant and have been demonstrated in program evaluation and research. The apprenticeship tax credit program encourages training for trades and careers to augment the development of occupational and technical skills for New Yorkers. Structured, on-the-job training, such as apprenticeships, help companies attract, retain and upskill their workforce. Besides the benefit to the companies, there is also a qualitative benefit to the employee, as there is an expectation that they will benefit from the training and mentorship provided from the apprenticeship.
- Given the significant, and long-term benefits, the project team believes it likely that the program generates a positive ROI in the long-term.



New York Youth Jobs Program Tax Credit



Executive Summary

Purpose and History

The New York Youth Jobs Program (NYYJP) Tax Credit was created in 2011 and is intended to encourage employers to employ at-risk youth (ages 16-24) in either part-time or full-time positions by offering a tax credit per qualified employee. According to the Department of Labor (DOL), the program's goal is "to help young people entering the world of work have a successful start."¹⁸⁴

Design

This is a refundable tax credit available statewide to qualified employers who hire qualified employees. The program is administered in annual pools by the DOL based on the amounts authorized for allocation to the program. Since 2018, the annual allocation of credits for each pool has been capped at \$40.0 million. The program runs through 2027.

The amount of the tax credit is tied to the number of qualified employees, the number of hours they work (full-time or part-time), and the duration of their employment. There is no wage requirement associated with this program beyond compliance with minimum wage laws. The maximum allowable credit per full-time employee is \$7,500, and the maximum per part-time employee is \$3,750.

Administration

To participate, both employees and employers must be certified by the DOL. The DOL commissioner issues a preliminary certificate of eligibility to qualified employers for a program year. Employers must also receive an Annual Final Certificate of Tax Credit from DOL. Employers must attach this form to their tax submittal in order to claim the credit.

Use

Nearly 6,600 certified businesses hired over 254,000 qualified employees through the Department of Labor's NYYJP from 2018-2022. The count of certified businesses is unique for each program year, but some businesses participate in multiple program years. Through the end of 2022, 5,786 unique businesses had been certified since 2012, and 4,117 of those businesses had hired qualified employees.

Program job counts do not specify if the employee was full-time or part-time, however the DOL reported that approximately 12 percent of the jobs in 2021 and 2022 were full-time (meaning that 88 percent were part-time). Most jobs are in the retail, accommodation and food services, and healthcare and social services sectors. Approximately 50 percent are in the New York City area.

Not all certified businesses that make qualified hires use the tax credit. In 2019, the last year where full data on tax credit expenditures is available, the Department of Taxation and Finance indicates a total of 646 taxpayers claimed the credit, compared to 1,076 certified hiring businesses reported by the DOL. Between

¹⁸⁴ "Youth Jobs Program for Young New Yorkers", New York Department of Labor, accessed online at <https://dol.ny.gov/youthjobs>.



2016 and 2019, the number of businesses claiming the credit accounted for approximately 50-60 percent of the DOL-certified hiring businesses.¹⁸⁵

Between 2016-2020, the claimed tax credits totaled \$126.6 million. In 2019, the last year when full data was available, the total tax credit amount claimed was \$45.9 million, for an average credit of \$71,115 per taxpayer. 2019 represented the first year that the total credits claimed have been above the program cap established for that year (\$40.0 million). Annual tax credit claims have been growing, from \$10.6 million in 2016 to \$45.9 million in 2019.

Benchmarking

There are few state tax credit programs designed to support youth employment, though states may encourage youth employment through other initiatives.

Return On Investment

The New York Youth Jobs Program Tax Credit (NYYJP) program does not provide a positive return to the state in terms of direct state tax revenues, with \$0.27 - \$0.42 returned of the initial \$1.00 invested. This estimate is a function of the relatively low estimated average wage of \$3,500. Based on this analysis the New York Youth Jobs Program Tax Credit (NYYJP) program has provided employment opportunities for nearly 255,000 young people, but it does not generate a positive tax return on investment to the state.

There are other positive benefits from youth employment programs, including reduced violence and incarceration among participants, greater career confidence, and improvements in soft skills. In general, youth employment programs help provide access to early work experience for low-income and at-risk youth and young adults who otherwise may have difficulty accessing such work opportunities.

Summary Findings

While the tax incentive does not create a positive return for the state in terms of economic activity that spurs tax revenue, the project team believes that is not the most useful measure for determining the program's value. Job skills – and even just job experience for this program's target population – is a more useful measure of program performance. In the long run, a longitudinal study of work outcomes for program participants would be a far more useful measure of the program's performance. That, of course, is outside the scope of this study.

¹⁸⁵ The 2019 Comptroller study found that the tax credits allowed by DOL were 22% of the total amount available for 2014-2016.



Background

Incentive Purpose

The New York Youth Jobs Program Tax Credit is intended to encourage employers to employ at-risk youth (ages 16-24) in either part-time or full-time positions by offering a tax credit per qualified employee. According to the Department of Labor (DOL), the program's goal is "to help young people entering the world of work have a successful start."¹⁸⁶

Legislative History

The New York Youth Jobs Program Tax Credit was created in 2011 as the New York Youth Works Tax Credit Program. It was renamed the New York Youth Jobs Program Tax Credit in 2017. Legislative changes since the program's inception have increased the value of the credit that may be taken per employee and raised the overall program spending cap. The original program focused on 13 cities and towns but is now available statewide. The program has been regularly extended and now runs through 2027.¹⁸⁷

New requirements have been created for employers to allow the Department of Taxation and Finance to access records. Employers must also submit an annual report to the DOL to demonstrate they have met all eligibility requirements, which enables the DOL to issue a final certificate with the actual maximum tax credit that may be claimed.¹⁸⁸

The *New York State Business Tax Credits: Analysis and Evaluation* conducted in 2013 recommended repealing rarely used credits, including the New York Youth Works Tax Credit, which at that time had an estimated annual cost to the state of \$5.0 million, representing 0.3% of total business tax credits.¹⁸⁹

A 2019 report from the New York State Office of the State Comptroller on the New York Youth Jobs Program found that the DOL could improve its methods for verifying youth eligibility and that the Department of Taxation and Finance could do better to ensure tax credits granted were accurate and only for program-eligible youth. A 2020 follow-up review found that the report's recommendations had been implemented by both departments.¹⁹⁰

¹⁸⁶ "Youth Jobs Program for Young New Yorkers", New York Department of Labor, accessed online at <https://dol.ny.gov/youthjobs>.

¹⁸⁷ "Consolidated Laws of New York, Chapter 60 (TAX), Article 9-A, Section 210-B: Credits", The New York State Senate, August 18, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/210-B>; "Legislation Section 25-A: Power to administer the New York youth jobs program tax credit", The New York State Senate, May 13, 2022, accessed online at <https://www.nysenate.gov/legislation/laws/LAB/25-A>.

¹⁸⁸ "New York Youth Jobs Program", New York State Office of the State Comptroller, January 2019, accessed online at <https://www.osc.ny.gov/files/state-agencies/audits/pdf/sga-2019-17s69.pdf>.

¹⁸⁹ Marilyn M. Rubin and Donald J. Boyd, "New York State Business Tax Credits: Analysis and Evaluation", New York State Tax Reform and Fairness Commission, November 2013, accessed online at <https://reinventalbany.org/wp-content/uploads/2014/09/2013-Business-Tax-Credit-Report-McCall-Solomon.pdf>.

¹⁹⁰ Letter from the Office of the State Comptroller to DOL and DTF, 9/15/20.



Incentive Design

The Credit is refundable and available statewide to qualified employers who hire qualified employees. It may be taken by corporations against the franchise tax or by other employers (such as sole proprietors and partnerships) against their income tax. Unused credits may be carried forward. Unused credits are treated as a refund or overpayment to be credited to the next year's tax.

The program is administered in annual pools by the DOL based on the amounts authorized for allocation to the program. There are 15 pools covering the years 2012 - 2027. The allocations per pool have ranged from \$10.0 million to \$50.0 million. Since 2018, the annual allocation of credits for each pool has been capped at \$40.0 million. Of that total, \$20.0 million is available for businesses hiring youth who live in 13 target areas,¹⁹¹ and \$20.0 million is available for businesses hiring youth living in the remainder of New York State.

Incentive Benefits

The employer's tax credit is tied to the number of qualified employees, the number of hours they work (full-time or part-time), and the duration of their employment. There is no wage requirement associated with this program beyond compliance with minimum wage laws.

The value of the tax credit per qualified employee working full-time is \$750 per month for up to six months. There is an additional \$1,500 credit if the employee continues to work full-time for an additional six months, and another \$1,500 if the employee works another year after that. The maximum allowable credit per employee is \$7,500.

The value of the tax credit for part-time qualified employees is \$375 per month for up to six months. Part-time is defined as at least 20 hour per week or 10 hours per week for workers enrolled in high school full-time. There is an additional \$750 credit if the employee continues to work part-time for an additional six months, and another \$750 if the employee works another year after that.

Incentive Requirements

Both employees and employers must be certified by the DOL.

Employers must complete the New York Youth Jobs Program – Business Certification form on the DOL program website to qualify for the program. The form requires information on industry sector, worksite location, and contact information. The business must agree to post job openings on the New York State Job Bank “to the maximum extent feasible,” confirm hires of certified youth with DOL, agree to allow the Department of Tax and Finance to share wage records with DOL, and offer pay comparable to wages offered for similar jobs (but allowing for adjustments for experience and training). Businesses must assert they will not intentionally reduce the existing workforce to hire workers under this program and agree not to ask qualifying youth for the reasons they qualify for the program.

The DOL commissioner then issues a preliminary certificate of eligibility to the employer for a program year.

¹⁹¹ The 13 target areas are Albany, Buffalo, Mount Vernon, New Rochelle, New York City (5 boroughs), Rochester, Schenectady, Syracuse, Utica, White Plains, Yonkers, Brookhaven, and Hempstead.
<https://webapps.labor.ny.gov/dews/youth-works/youth-form.shtm>



Employees must complete the New York Youth Jobs Program – Youth Certification form on the DOL program website to be considered a qualified employee. To qualify, they must be ages 16-24, reside in a city with population greater than 35,000 or a town with a population greater than 480,000, be considered low-income or at-risk, be unemployed (or underemployed) prior to being hired by the qualified employer, and will work full-time or part-time for a qualified employer. The form requires information on name, age, whether enrolled in high school, address, whether the applicant lives in a target area or an “additional area,” and if the applicant is unemployed or does not have enough paid work adequate with respect to their skills and training. The applicant must also indicate that they meet at least one of the 15 listed categories to indicate whether they are low-income or at-risk.

Once certified, DOL counselors can help connect youth with certified businesses. Individuals can also seek employment on their own and inform businesses that the individual qualifies for the program, or they can check the NYS Job Bank for openings.

Employers must receive an Annual Final Certificate of Tax Credit from DOL, which must be attached to employer’s tax form to claim the credit. Employers complete a Confirmation of Hire form on the DOL program website. This form collects the business name and FEIN, employee name, age and SSN, employee start date, starting wage, whether part-time (10-34 hours) or full-time (35+ hours), and contact information for the person submitting the form.¹⁹² The Final Certificate specifies the name and employer identification number, program year for the credit, actual amount of credit to which the employer is entitled, and a unique certificate number for the credit certificate.

Both employers and employees must agree to allow the NYS Department of Tax and Finance to share wage records with the NYS DOL. The Department of Taxation and Finance recordkeeping requirements for this program also include the DOL certificates, an organizational chart for the employer, payroll records for employees claimed, and some documentation for employees claimed as full-time high school students.

Incentive Use

Table 145 provides the number of certified and hiring businesses by program year. For example, in 2022, 2,451 businesses applied to DOL for certification, 2,070 were certified, and 1,751 of those businesses hired qualified employees.

Table 145: Certified and Hiring Businesses, 2012-2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Business Applications	2,154	N/A	891	957	1,484	2,116	2,002	2,241	1,858	2,104	2,451
Businesses Certified	1,901	N/A	772	834	1,303	1,754	1,553	2,081	1,772	1,958	2,070
Hiring Businesses	1,270	N/A	363	535	850	1,064	1,035	1,076	1,273	1,463	1,751

Source: New York Department of Labor. The program was not re-authorized in 2013.

The number of participating businesses has grown incrementally since 2012, which is a compound annual growth rate (CAGR) of 3 percent. The number of jobs filled has grown at a higher rate (CAGR of 16 percent).

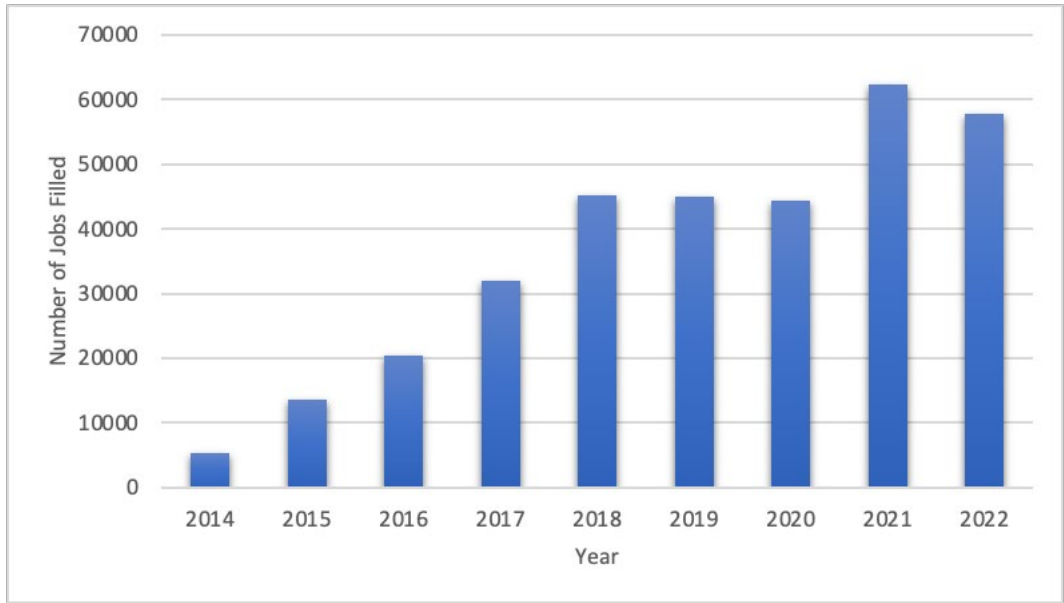
¹⁹² Interviews with DOL indicated that tax consultants drive use of this program rather than employers themselves, though some businesses do apply on their own. The 2019 Comptroller report also described business use of consultants to apply for the program.



The count of certified businesses is unique for each year, but some businesses participate in multiple program years. According to the DOL, from 2012 through 2022, 5,786 unique businesses had been certified, and 4,117 of those businesses had hired qualified employees.

Figure 18 indicates the number of hires, or jobs filled, each program year, along with the number of hiring businesses. In 2022, 57,805 qualified employees were hired through this program by 1,751 businesses. DOL provided data to the project team indicating that nearly 90 percent of the 2021 and 2022 jobs were part-time.

Figure 18: Number of Jobs Filled 2014-2022



Source: New York Department of Labor and MFR Consultants

Not all certified businesses that make qualified hires use the tax credit. Table 146 indicates the number of taxpayers claiming the credit between 2016 and 2020, and the amount of credit claimed. In 2019, the last year when full data was available, the Department of Taxation and Finance indicates a total of 646 taxpayers claimed the credit, compared to 1,076 certified hiring businesses reported by the DOL. Between 2016 and 2019, the number of businesses claiming the credit accounted for approximately 50-60 percent of the DOL-certified hiring businesses.¹⁹³

Table 146: New York Youth Jobs Program Tax Credits Claimed, (2016-2019)

Credit Claimed	2016	2017	2018	2019	2020*	Total
Amount of Credit (in millions)	\$10.6	\$14.9	\$35.7	\$45.9	\$19.5	\$126.6
Number of Taxpayers	402	500	599	646	584	6,235
Average Credit	\$26,262	\$29,804	\$59,579	\$71,115	\$33,440	\$20,307

¹⁹³ The 2019 Comptroller study found that the tax credits allowed by DOL were 22% of the total amount available for 2014-2016.



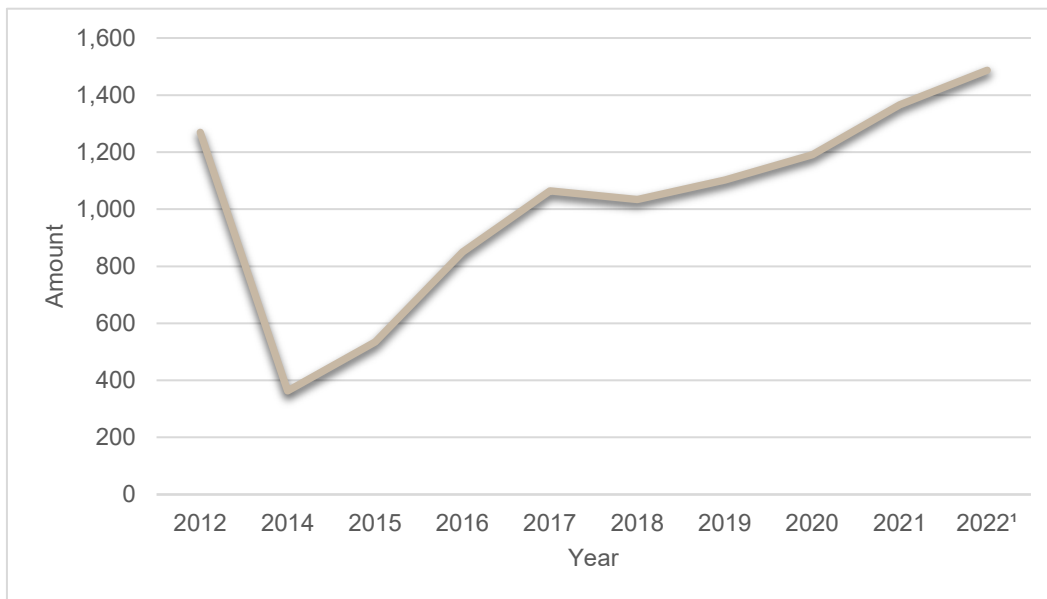
* 2020 is based on personal income tax only; does not include corporate franchise tax use. Source: Open Data-New York State Incentive Tax Credit Report; MFR Consultants

Table 146 also indicates that between 2016-2020, the tax credits claimed totaled \$126.7 million. In 2019, the last year with available full data, the total tax credit amount claimed was \$45.9 million, for an average credit of \$71,115 per taxpayer. 2019 represents the first year that the total credits claimed have been above the program cap established for that year (currently \$40 million).

The information from the Open Data portal does not indicate how many jobs were associated these credit claims.

Figures 19-21 demonstrate that tax credit use has grown significantly since 2016. This appears to correspond with legislative changes in 2016 to expand the allocation to businesses statewide.

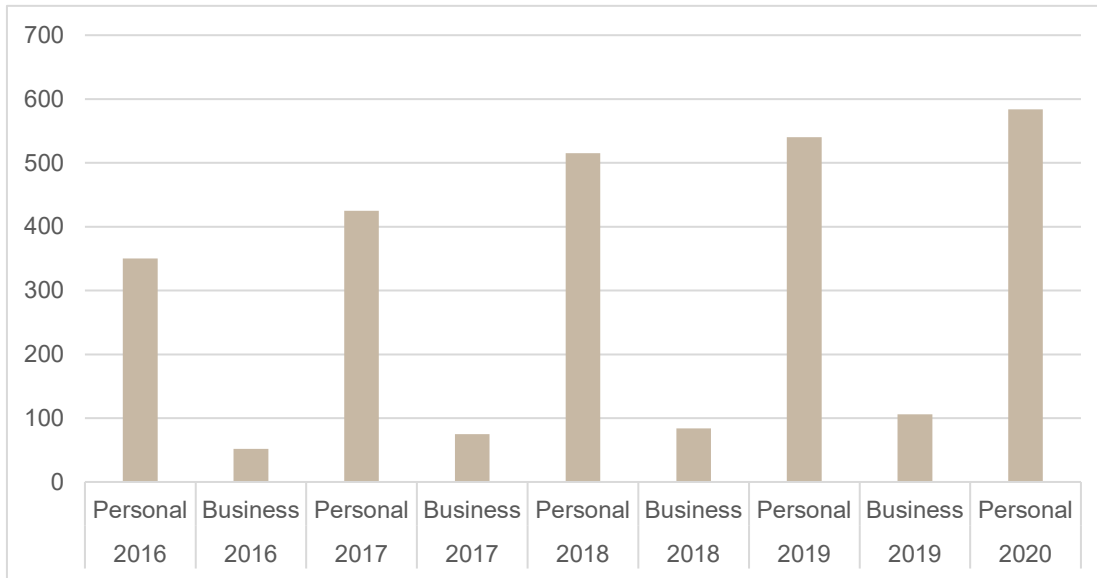
Figure 19: Number of NYYJP Awards Granted by DOL per Year, 2012-2022



Source: New York Department of Labor and MFR Consultants

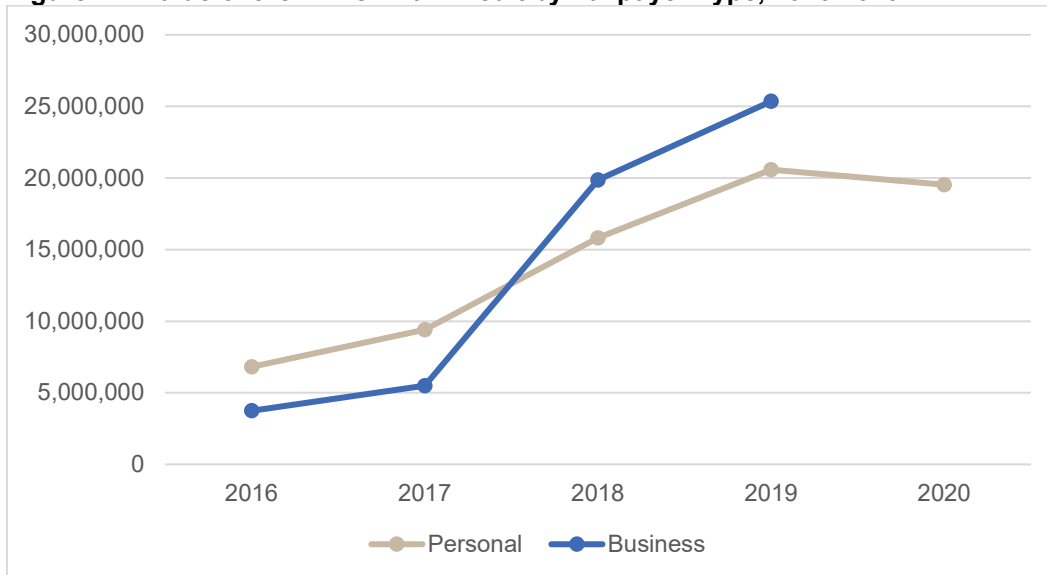


Figure 20: Number of Taxpayers Using the NYYJP Tax Credit, 2016-2020



Source: Open Data-New York State Incentive Tax Credit Report; MFR Consultants

Figure 21: Value of the NYYJP Tax Credit by Taxpayer Type, 2016-2020

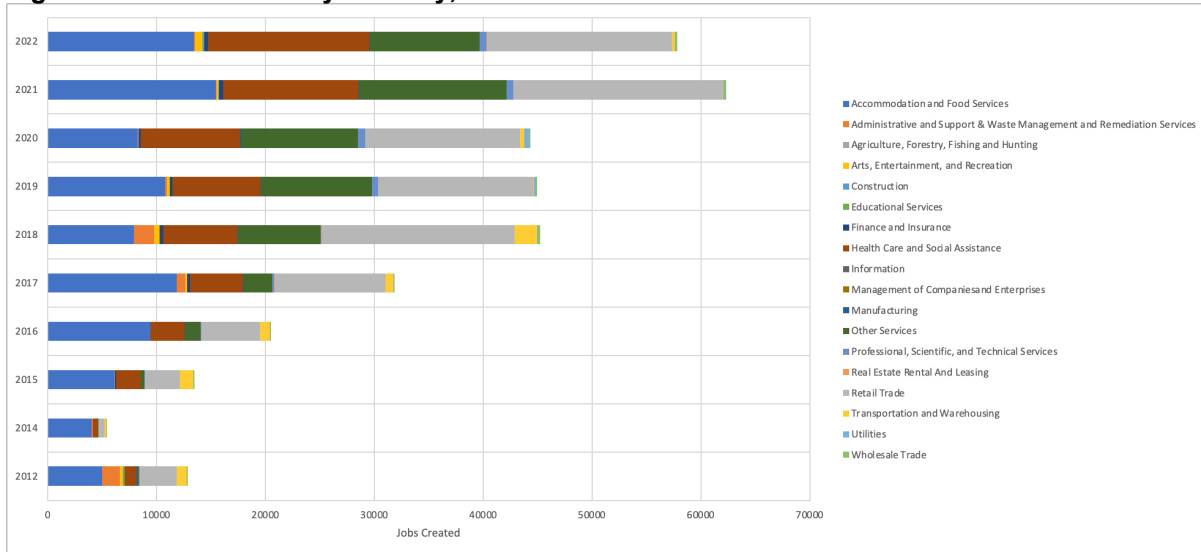


Source: Open Data-New York State Incentive Tax Credit Report; MFR Consultants

As previously noted, most of the job hires associated with the credit are part-time positions. Figures 22 and 23 indicate the number of hires by industry and the geographic distribution of the hires. Most jobs have been in the accommodation and food services, health care and social assistance, retail trade, and other services sectors (Figure 22). Job hires have occurred around the state, but nearly 50 percent have been in the New York City area (Figure 23).

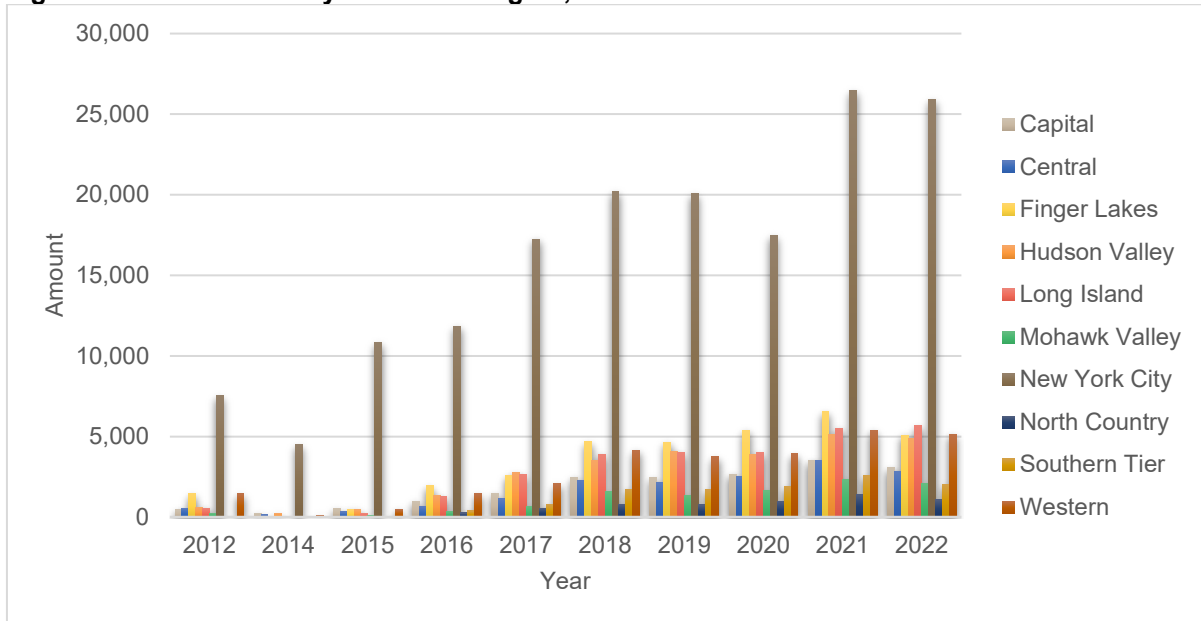


Figure 22: NYYJP Jobs by Industry, 2012-2022



Source: New York Department of Labor and MFR Consultants

Figure 23: NYYJP Jobs by New York Region, 2012-2022



Source: New York Department of Labor and MFR Consultants



Benchmarking

State-led youth jobs tax credits are rare. One example is the **Missouri Youth Opportunity Program (YOP) Tax Credit**. However, this tax credit is for entities assisting youth with activities such as degree completion, counseling, employment, and other life enrichment activities. Tax credits are allocated to approved organizations administering youth projects, and these organizations then seek contributions that are eligible for a tax credit. Monetary contributions and wages paid to youth in an approved internship, apprenticeship, or employment project are eligible for a 50 percent tax credit. This program may award up to \$6.0 million credits annually.¹⁹⁴ In 2022, YOP distributed \$5.7 million of \$6.0 million in available funds as credits, for a utilization rate of 95.1 percent.

A second example, although on a smaller scale than NYS, is the **Louisiana Youth Jobs Tax Credit Program**, created in 2021. This tax credit is for businesses hiring individuals between the ages of 16-24 meeting specified criteria similar to that of the New York Youth Jobs Program Tax Credit. Jobs may be part-time or full-time, and the eligible youth must work at least three consecutive months. The value of the credit is \$1,250 per eligible full-time hire and \$750 per eligible part-time hire. The program is capped at \$5.0 million per year. The program is scheduled to sunset December 31, 2025.¹⁹⁵ Zero credits were claimed in FY2022.¹⁹⁶

Return on Investment

Economic Impact Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for NYS.¹⁹⁷ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.

¹⁹⁴ “Youth Opportunities Program (YOP)”, Missouri Department of Economic Development, accessed online at <https://ded.mo.gov/programs/community/youth-opportunities-program-yop>.

¹⁹⁵ “Louisiana Youth Jobs Tax Credit Program”, Louisiana Department of Revenue, accessed online at <https://www.revenue.louisiana.gov/YouthJobsCredit>.

¹⁹⁶ “2021|2022 Annual Tax Collection Report”, Louisiana Department of Revenue, accessed online at <https://revenue.louisiana.gov/Publications/LDR%20Annual%20Report%202021-2022%20-%20Tax%20Collection.pdf>.

¹⁹⁷ Further discussion of the IMPLAN model can be found in Appendix A.



- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Data for Impact Analysis

The data available for this tax credit enables analysis and evaluation of the program. DOL provided requested program data through 2022, but data on tax credit usage from the Department of Taxation and Finance is only available through 2020 (partial data) and was only accessible from the state’s tax expenditure report and open data portal.

It is the project team’s understanding that the DOL Commissioner is required to publish a report annually containing the names and addresses of employers issued a preliminary certificate, the amount of credit allowed to the employer as specified on the final certificate, and any other information as determined by the commissioner. While this report was not provided to the project team, sufficient data for analysis and assessment was provided by DOL upon request.

Job Creation, Temporary Hires, Number of Jobs Retained

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment.
- Location (city, county) of companies claiming exemptions.

The project team aggregated industries into sectors that correspond to the reported job creation sector. The DOL reported annual data, but Table 147 presents only the totals here. The inputs for the IMPLAN analysis grouped the annual impacts by sector for each year to account for any inflation effects.

Table 147: Reported Job Creation Impacts, 2018 to 2022

Industry Sector	Reported Jobs 2018 to 2022	Estimated Wages 2018 to 2022 (\$M)
Accommodation and Food Services	55,816	\$161.00
Administrative and Support & Waste Management and Remediation Services	2,268	\$10.33
Agriculture, Forestry, Fishing and Hunting	11	\$0.04
Arts, Entertainment, and Recreation	1,572	\$4.86
Construction	211	\$1.38
Educational Services	142	\$0.34
Finance and Insurance	1,399	\$16.35
Health Care and Social Assistance	51,296	\$220.52
Information	8	\$0.07
Management of Companies and Enterprises	2	\$0.01
Manufacturing	267	\$1.57
Other Services	52,180	\$174.01



Industry Sector	Reported Jobs 2018 to 2022	Estimated Wages 2018 to 2022 (\$M)
Professional, Scientific, and Technical Services	2,519	\$19.91
Real Estate Rental and Leasing	65	\$0.36
Retail Trade	82,407	\$256.85
Transportation and Warehousing	2,843	\$12.25
Utilities	907	\$9.70
Wholesale Trade	758	\$4.50
Total	254,671	\$894.05

Source: Job Creation Reported by Department of Labor

The job counts do not specify if the program was full time or part-time, however the DOL reported that approximately 12 percent of the jobs in 2021 and 2022 were full-time, so the project team assumed that for the period from 2018 to 2022. Since the program is targeted to youth employment, the project team used quarterly wage data from the Census Quarterly Workforce Indicators for workers aged 14 to 24. The project team calculated the wages for the part-time workers by multiplying the wages for the second and third quarters of each year by the number of workers by sector and year. The wages for the full-time workers were calculated using the annual wages for the workers aged 14 to 24 by year and sector. These calculations provided a more accurate input for the IMPLAN analysis than the reported job counts.

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the program supported a total of 25,510 total (direct, indirect, and induced) jobs in NYS between 2018 and 2022.

Table 148: Total Job Impacts in New York State, 2018 to 2022

Year	Direct	Indirect	Induced	Total
2018	3,040	540	780	4,360
2019	3,040	500	780	4,330
2020	2,920	510	800	4,230
2021	4,640	760	1,190	6,580
2022	4,200	700	1,110	6,010
Total	17,840	3,010	4,660	25,510
Annual Average	3,568	602	932	5,102

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor. The estimates have been rounded to the nearest ten.

Impact on Revenues for New York State and its Municipalities

The revenue impact depends on the number of jobs, employer industry, estimates of labor income, and assumptions about the indirect and induced activity associated with each job. As previously noted, data provided by DOL indicate that most of the jobs (88 percent) associated with the credit are part-time. To estimate the revenue impact, the project team has prepared two different revenue models.

Tables 149 and 150 assume each worker pays the regular complement of NYS taxes, including income taxes to the state.



Table 149: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$131.0	\$26.2	\$36.9	\$193.8
County	\$26.8	\$4.9	\$7.0	\$38.5
State	\$84.8	\$19.9	\$26.2	\$131.0
Total State, County, Local	\$242.6	\$51.0	\$70.1	\$363.2

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

Table 150: Total Taxes, Total for 2018 to 2022 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$242.6	\$51.0	\$70.1	\$363.2
Federal	\$177.3	\$58.2	\$68.8	\$304.3
Total Taxes	\$419.9	\$109.2	\$138.9	\$667.5

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

Tables 151 and 152 consider that these young part-time workers may not meet the threshold to pay NYS income taxes with an average estimated income of \$3,500, so income taxes have been removed from the revenue calculations.

Table 151: Estimated Taxes in New York State, Total for 2018 to 2022, without income tax (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$25.2	\$26.2	\$36.9	\$193.8
County	\$17.3	\$4.9	\$7.0	\$38.5
State	\$54.6	\$19.9	\$26.2	\$131.0
Total State, County, Local	\$97.0	\$51.0	\$70.1	\$363.2

Table 152: Total Taxes, Total for 2018 to 2022 (Dollars in Millions), without income tax

Total Taxes (\$ Millions)	Direct	Indirect	Induced	Total
State, County, Local	\$97.0	\$51.0	\$70.1	\$363.2
Federal	\$68.8	\$58.2	\$68.8	\$304.3
Total Taxes	\$165.8	\$109.2	\$138.9	\$667.5

Other Quantifiable Economic Benefits

The purpose of the program is to encourage employers to employ at-risk youth and “to help young people entering the world of work have a successful start.” In addition to the number of individuals gaining work experience, labor income (pay per youth hired) is another quantifiable benefit for participants (Table 155). Information on actual wages paid is not available. Accordingly, average pay per job has been estimated as described above based on the proportion of part-time employment and quarterly wages for part-time workers by sector.



Given the large share (88 percent) of youth who worked part-time, the actual direct earnings are closer to an average of \$3,500 for the nearly 255,000 participants in the program (Table 153).

Table 153: Average Pay per Youth Hired (2018-2022)

Industry Sector	Average Pay per Job
Accommodation and Food Services	\$2,884
Administrative and Support & Waste Management and Remediation Services	\$4,555
Agriculture, Forestry, Fishing and Hunting	\$4,002
Arts, Entertainment, and Recreation	\$3,091
Construction	\$6,520
Educational Services	\$2,385
Finance and Insurance	\$11,690
Health Care and Social Assistance	\$4,299
Information	\$8,940
Management of Companies and Enterprises	\$5,658
Manufacturing	\$5,868
Other Services	\$3,335
Professional, Scientific, and Technical Services	\$7,906
Real Estate Rental and Leasing	\$5,562
Retail Trade	\$3,117
Transportation and Warehousing	\$4,309
Utilities	\$10,698
Wholesale Trade	\$5,931
Total	\$3,511

The But-For Test

As noted in the introduction, the ‘but for’ test is an important step in the process of determining the benefit of an incentive, but it is practically impossible to quantify with any degree of certainty. Since the “true” level of the New York Youth Jobs Program Tax Credit’s influence cannot be known, in the following section the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.



Since the estimated tax revenues generated by the youth participating in the program are less than the cost of the program, the state does not break even on its investment. If DOL were able to track participant work experience and longer-term earnings beyond the program, the ROI findings may be different.

Based on the information provided to the project team, the number of businesses claiming the credit accounted for approximately 50-60 percent of the DOL-certified hiring businesses. The claim rates may imply that the tax credit itself is not effective in driving the decision to hire qualified youths and young adults. If, as indicated to the project team, tax consultants drive participation in the program, then it also seems unlikely that the tax credit itself is influencing individual hiring decisions. On the other hand, as part of the program, job counselors can help eligible youth connect with opportunities at participating businesses, which may mean the individual now has access to a job that might not have been available or accessible to them but for the program.

Other Qualitative Economic Benefits

While helping “young people entering the world of work have a successful start,” is the DOL’s stated goal, there is no data tracking the continued work experience of program participants to assess the impact on their ongoing work or career prospects and how it compares to peers who did not participate in this program. Given the program’s stated purpose, its success cannot be assessed without longer-term data collection and reporting.

Similarly, there is no information tracking the experience of employers in hiring program participants for sustained, full-time employment. However, the program may help employers in the retail, accommodation and food services, and health care and social assistance meet their workforce needs, particularly during a period of high demand for workers.

As the best practices research indicates, there are other positive benefits from youth employment programs, including reduced violence and incarceration among participants, greater career confidence, and improvements in soft skills. In general, early employment (though not necessarily youth employment programs) has been associated with better labor and wage outcomes, and youth employment programs help provide access to that experience for youth and young adults from low-income households who otherwise have difficulty accessing such work opportunities.¹⁹⁸

ROI Discussion

As it relates to this tax incentive, NYS had an estimated \$201.7 million in foregone revenue that resulted from the NYYJP between 2018 and 2022 (Table 154). A starting point for determining whether the program provided a positive net benefit, should be to determine whether it returned more than that investment through the taxes associated with the economic activity from that investment.

¹⁹⁸ Yiping Li and Kalila Jackson-Spieker, “The Promises of Summer Youth Employment Programs: Lessons from Randomized Evaluations”, Abdul Latif Jameel Poverty Action Lab, September 22, 2022, accessed online at https://www.povertyactionlab.org/sites/default/files/publication/SYEP_Evidence_Review-9.22.22.pdf.



Table 154: Actual and Forecast Credits, 2018 to 2022

		New York Youth Jobs Program Tax Credit (\$ Millions)
Fiscal Year		
Actuals	2018	\$35.7
	2019	\$46
Forecast	2020	\$40
	2021	\$40
	2022	\$40
Total		\$201.7

Source: New York Open Data Portal and MFR Consultants

Using taxes is a more conservative metric than value added or output, and it reflects whether the program directly pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the NYYJP analysis, the project team also based this analysis only on the taxes generated by the estimated wages for the youth hired by the program between 2018 and 2022.

Table 155: Fiscal Return on Investment to New York State, 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State of New York Taxes (\$M)	\$201.7	\$84.8	\$131.0
Return on \$1.00 in Foregone Revenue		\$0.42	\$0.65

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

From the investment of nearly \$202 million, in this scenario the NYYJP tax credit generated \$84.8 million in direct state taxes and total state taxes of \$131 million. The state's investment provided an overall return of \$0.42 on direct taxes to the state and \$0.65 based on total state taxes when indirect and induced effects are included (Table 156).

Table 156: Fiscal Return on Investment to New York State without income tax, 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State of New York Taxes (\$M)	\$201.7	\$54.6	\$100.7
Return on \$1.00 in Foregone Revenue		\$0.27	\$0.50

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by Department of Labor.

When income tax is excluded from the calculation, the ROI decreases (Table 156). In this scenario, from the investment of nearly \$202 million, the New York Youth Jobs Program Tax Credit (NYYJP) program generated \$54.6 million in direct state taxes and total state taxes of \$101 million. The state's investment provided an overall return of \$0.27 based on direct taxes to the state and a return of \$0.50 based on total state taxes when indirect and induced effects are included (Table 156).



Summary Findings

- The program does not provide a positive return to the state in terms of direct state taxes revenues, with \$0.27 - \$0.50 returned of the initial \$1.00 invested.
- If all the taxes that flow from that direct activity for job creation and retention, included all taxes from indirect and induced activities, then the program generated only \$0.50 - \$0.65 in return for the initial \$1.00 investment.
- The discussion of the 'but for' test is interesting, because the fact that tax planners are encouraging companies to take advantage of the program would seem to suggest that the incentive is effective in getting them to use the program, but the effect on hiring decisions is not clear.
- At the same time, the tight labor market suggests that the employers likely would have found some way, in many industries, to employ the workers even without the credit. So, while the program has provided employment opportunities for nearly 255,000 young people, it likely does not generate a positive return on investment.
- There are other positive benefits from youth employment programs, including reduced violence and incarceration among participants, greater career confidence, and improvements in soft skills. In general, youth employment programs help provide access to early work experience for low-income and at-risk youth and young adults who otherwise may have difficulty accessing such work opportunities. It is also likely that other youth employment programs not simply tied to a tax incentive are more likely to achieve the desired outcomes, including the stated program goal "to help young people entering the world of work have a successful start."
- If DOL were able to track participant work experience and longer-term earnings beyond the program, the ROI findings may be different.



Hire a Veteran Credit



Executive Summary

Purpose and History

The Hire a Veteran Credit was enacted in 2013 to encourage state taxpayers to hire qualified veterans who were previously unemployed. Since 2013, the program has been updated by extending eligibility dates, slightly modifying eligibility criteria, and increasing the maximum allowable credit.

Design and Administration

The incentive provides employers with a tax credit based on the total amount of wages paid to the veteran during their first 12-month period of employment. This tax credit is administered by the Department of Taxation and Finance.

Benchmarking

Several other states offer a similar hiring tax credit. As in New York State (NYS), these tax credits are used by a very small number of employers each year, or they are not used at all. These incentives have had a negligible impact on employment. Some states, including Delaware, New Mexico, Maryland, and Washington, have allowed their tax credits to lapse. In Maryland, the Department of Commerce now refers employers to the Job Creation Tax Credit, which provides an enhanced credit for positions filled by a qualified veteran employee.

Use

A total of 42 taxpayers earned and used the credit between 2016 and 2020. The total value of the credit taken over this time was \$110,476, for an average credit per taxpayer of approximately \$2,630.

Return on Investment

There is insufficient data to perform an economic impact and tax revenue analysis of this program. The return on investment to the state cannot be calculated because data is not available on the wages, hours worked or industry of employment for each certified employee.

As with other employment or skills-based tax credits, economic activity is likely not the primary rationale for the credit. Because it is targeted at veterans who were previously unemployed, non-economic development purposes, including providing work skills and experience, is a better measure of program performance. In this program as well as others, it would make sense to track the work performance of program participants over time. At the same time, the small numbers who have accessed the program call into question its overall value.



Background

Incentive Purpose

The Hire a Veteran Credit is intended to encourage hiring qualified veterans, who were previously unemployed, by providing employers with a tax credit based on the total amount of wages paid to the veteran during their first 12-month period of employment.

Legislative History

The credit was enacted in 2013. The date for veterans to commence employment in order for a taxpayer to qualify for the credit has been extended to January 21, 2025 (originally 2022). The maximum allowable credits have been increased since the 2013 legislation was passed. There have also been minor adjustments to eligibility.

Incentive Design

The credit is administered by the Department of Taxation and Finance (Department). It is available for tax years beginning on or after January 1, 2015, and before January 1, 2026. It may be taken by corporations against the franchise tax or by other employers (such as sole proprietors and partnerships) against their personal income tax. The credit may be carried forward for three years. Employers taking this credit may not use other credits for the same hiring. It is available to taxpayers statewide.

Incentive Benefits

The value of the credit is 15 percent of the total amount of wages paid to the veteran during their first 12-month period of employment, or 20 percent of wages for disabled veterans. The maximum allowable credit varies, based on whether the veteran is a disabled veteran, and the number of hours worked in a year. The maximum credit for a disabled veteran employed full-time (1,820 or more hours in one 12-month period) is \$20,000, while the maximum for part-time employment (between 1,040 and 1,819 hours) is \$10,000. The maximum credit for any other qualified veteran employed full-time is \$15,000, and the maximum for part-time employment is \$7,500.

Incentive Requirements

The qualified veteran must begin employment on or after January 1, 2014, but before January 1, 2025. The taxpayer must employ the veteran in NYS for a twelve-month period.

A qualified veteran is an individual who served on active duty in the United States Army, Navy, Air Force, Space Force, Marine Corps, Coast Guard or reserves, or who served in active military service as a member of the Army National Guard, Air National Guard, New York Guard or New York Naval Militia, or who served in the active uniformed services of the National Oceanic and Atmospheric Administration or the commissioned corps of the U.S. Public Health Service.

The veteran must certify that they are qualified by completing an Employee Affidavit verifying the new employment and start date, their relevant active duty or service, release from active duty by general or honorable discharge, whether the veteran is disabled or not, and that the veteran has not been employed for 35 or more hours during any week in the 180-day period immediately prior to the date on which the new



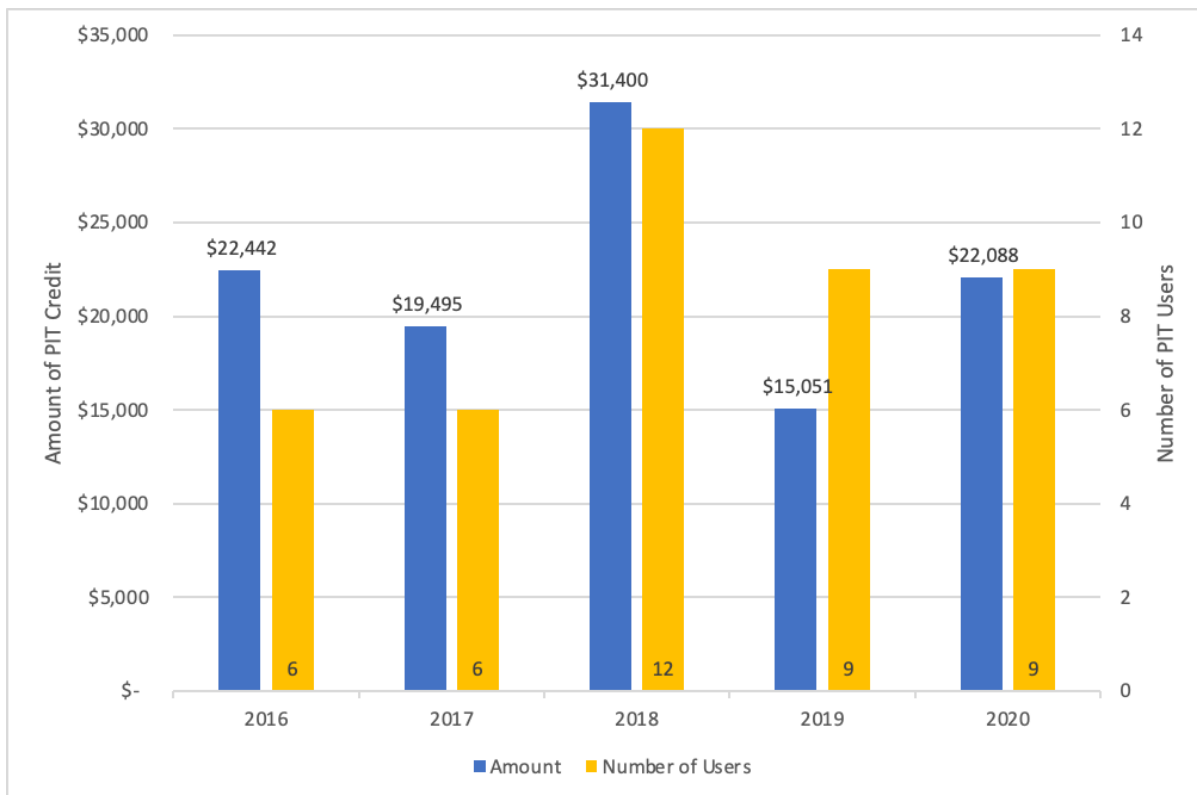
employment began. This Affidavit is given to the employer. Employers keep these Affidavits and make them available to the Department upon request.

Corporations complete a Hire a Veteran Credit form that must be filed with their franchise tax return. All others complete a different Hire a Veteran Credit form that must be submitted with their income tax or partnership return. These forms require veteran names, social security numbers, employment period, and wages paid for both full- and part-time positions.

Incentive Use

This credit is rarely used. Between 2016 and 2020, 42 taxpayers used the credit. The total value of the credit taken over this time was \$110,476 for an average credit per taxpayer of approximately \$2,630. All credits were taken by individuals against the personal income tax; no corporate tax filers used the credit (Figure 24).

Figure 24: Number of Personal Income Tax Filers using the Hire a Vet Credit and Credit Amounts, 2016-2020



Source: Open Data- New York State Economic Incentive Tax Credit Utilization: Hire a Vet Credit and MFR Consultants

The Fiscal Year 2024 Annual Report on New York State Tax Expenditures reports that the foregone revenue from this credit was less than \$0.1 million in 2020. It forecasts foregone revenue of \$1.0 million in 2023. It may be worth noting that the 2021 tax expenditures report forecast \$5.0 million in foregone revenue for this credit in 2020, while the actual amount was less than \$0.1 million.



Benchmarking

This section benchmarks the reach and impact data of the Hire a Veteran Credit against that of similar incentive programs in other states.¹⁹⁹

Table 157: Hire a Veteran Tax Credit – Comparable Programs

State/ Program	Operational Years	Maximum Months of Employer Eligibility	Maximum Funding Cap
New York: Hire a Veteran Credit	2014-2025	12	\$20,000 per qualified disabled veteran
Alabama: Veterans Employment Act Employer Credit	2018-*	12	\$2,000 per veteran
Alaska: Veteran Employment Tax Credit	2012-*	12	\$3,000 per disabled veteran
Delaware: Veterans Opportunity Credit	2012-2016	12	\$1,500 per qualified veteran
Utah: Utah Veteran Employment Tax Credit	2012-*	24	\$4,800 per qualified veteran

* Currently running with no scheduled sunset date. Source: Center for Regional Economic Competitiveness

Alabama: Veterans Employment Act Employer Credit

The Veterans Employment Act (previously known as the "Heroes for Hire" tax credit) provides a flat \$2,000 tax credit to qualifying businesses for each unemployed or combat veteran hired for a full-time position paying at least \$14.00 per hour, the majority of the duties of which are at a business location within Alabama. The business qualifies for this tax credit the fiscal year that the veteran completes 12 months of employment. The intended reach of the program is to increase veteran employment by incentivizing the hiring of unemployed or combat veterans.²⁰⁰ The actual value of the credit taken was \$0 for the corporate income tax and \$1,220 for the individual income tax, according to the most recent tax expenditure report.²⁰¹

Alaska: Veteran Employment Tax Credit

Credits are available for eligible businesses that employ veterans at least 1,560 hours or more during 12 consecutive months. To qualify as a veteran for the purposes of the credit under this section, the veteran must have been unemployed for more than four weeks immediately preceding the date employment begins and must have been discharged or released from military service: 1) not more than 10 years before the date employment begins in the case of a veteran who is a disabled veteran; or 2) not more than two years before the date employment begins in the case of a veteran who is not a disabled veteran. The credit is equal to flat \$3,000 for a disabled veteran or \$2,000 for a veteran who is not disabled. For a veteran employed in the state for 500 hours or more in a seasonal position during the three consecutive months immediately following the

¹⁹⁹ United States Bureau of Labor Statistics, "Table 6A. Employment Status of Veterans 18 Years and over by State, 2022 Annual Averages - 2022 A01 Results", United States Bureau of Labor Statistics, March 21, 2023, accessed online at <https://www.bls.gov/news.release/vet.t06A.htm>.

²⁰⁰ "Income Tax Incentives", Alabama Department of Revenue, accessed online at <https://www.revenue.alabama.gov/tax-incentives/income-tax-incentives/>.

²⁰¹ "Report on Alabama Tax Expenditures", Alabama Legislative Services Agency, Fiscal Division, January 2022, accessed online at <https://alison-file.legislature.state.al.us/pdfdocs/lisa/Fiscal/TaxExpenditure/ExpendReport2022.pdf>.



date the veteran is first employed by an employer in a seasonal position the credit is equal to \$1,000.²⁰² Fewer than three businesses qualified for the tax credit in 2015-16 and 2018-19. No businesses qualified in 2017.²⁰³

Delaware: Veterans Opportunity Credit

The Veterans Opportunity Credit is a refundable tax credit that is an incentive to hire veterans who served in overseas conflicts since 2001. The credit is 10% of the gross wage but may not exceed \$1,500 for each qualified veteran employed by a qualified employer. The tax credit created by this Act is designed to work in conjunction with the combined efforts of the Departments of Labor and Finance, the Delaware Economic Development Office, and veterans' organizations throughout the State to develop and implement comprehensive and coordinated measures designed to assist these veterans as they transition to civilian life.²⁰⁴ Delaware's 2021 Tax Preference Report indicates that the credit sunset in 2015, noting that "this credit appears to have provided little incentive to hire combat veterans."²⁰⁵

Utah Veteran Employment Tax Credit

The Utah Veteran Employment Tax Credit is for employers that hire qualified veterans who were: 1) mobilized to federal military service in an active or reserve component of the U.S. Armed Forces; 2) received honorable or general discharge within 2 years prior to the employment start date; 3) employed by the eligible business on or after January 1, 2012; 4) must be collecting or eligible to collect Unemployment Insurance benefits or have exhausted UI benefits within the past two years; and 5) must work at least 35 hours per week for no less than 45 out of the past 52 weeks after the employment start date. For each veteran hired, the tax credit begins at \$200.00 per month the first year, not to exceed \$2,400.00 per year and increases the second year to \$400.00 per month, not to exceed \$4,800.00 per year.²⁰⁶

New York State's credit is much more generous than similar tax credits in the benchmark states, but it remains lightly used. This is also the case in the other states examined here, with very few businesses using the tax credit. Tax credits to hire veterans have not proven effective in either New York or the benchmark states.

Additional State Impact Analysis

In Washington state, a 2020 evaluation of the Hiring Unemployed Veterans tax credit found that only 132 veterans had been hired by 45 businesses using the tax preference. The assessment noted that the tax credit did not meet the goal of reducing the number of unemployed veterans by 30 percent, and the number of unemployed veterans had increased by 20 percent since the tax credit was passed in 2015. Potential reasons for the limited use were that no agency was charged with publicizing the tax credits, businesses reported mixed views on how much the credits impacted their hiring decisions, and Washington businesses used an

²⁰² "Alaska Tax Credits", Alaska Department of Revenue - Tax Division, accessed online at <https://tax.alaska.gov/programs/programs/credits/index.aspx>.

²⁰³ "Indirect Expenditure Report", Alaska Legislative Finance Division, January 2021, accessed online at <https://documents.ncsl.org/wwwncsl/Fiscal/evaluationDB/2021IndirectExpenditureBook.pdf>.

²⁰⁴ "Veterans' Opportunity Tax Credit", Delaware Division of Revenue, accessed online at <https://revenue.delaware.gov/business-tax-forms/veterans-opportunity-tax-credit/>

²⁰⁵ "Tax Preference Report, 2021 Edition", Delaware Department of Finance, Division of Revenue, accessed online at <https://financefiles.delaware.gov/Reports/TaxPref/Tax-Preference-Report-2021.pdf>.

²⁰⁶ "Utah Veteran Employment Tax Credit", Utah Department of Workforce Services, accessed online at <https://jobs.utah.gov/employer/business/vetcredit.html>.



existing federal hiring credit at a much higher rate, although businesses are permitted to use both the federal and state tax credits.²⁰⁷ This tax credit expired July 2023.²⁰⁸

Other states, including Delaware, New Mexico, and Maryland, have also allowed their tax credits to lapse.

- In Maryland, the Hire Our Veterans Tax Credit applied to employment between 2017 and 2020.²⁰⁹ A July 2020 Department of Commerce report indicated that since the program's inception, ten businesses had been certified to receive tax credits totaling \$19,800 for tax years 2017-2019, for employment of 12 qualified veterans.²¹⁰ The state now refers employers to the Job Creation Tax Credit for positions created in tax year 2021 and later. The Job Creation Tax Credit provides an enhanced credit for positions filled by a qualified veteran employee.²¹¹
- New Mexico has a Veteran Employment Credit in statute, but the credit cannot be claimed on tax returns after the 2019 tax year. The 2021 Tax Expenditure Report notes, "The credit is underutilized. Possible explanations are that taxpayers are unaware of the credit or that the credit is too small to incentivize the full-time hiring of eligible veterans."²¹²

²⁰⁷ "20-07 Final Report: 2020 Tax Preference Performance Reviews: Hiring Unemployed Veterans", Washington Joint Legislative Audit and Review Committee, December 2020, accessed online at https://leg.wa.gov/jlarc/taxReports/2020/f_final_default.html.

²⁰⁸ "Credit for hiring unemployed veterans (expired July 1, 2023)", Washington State Department of Revenue, accessed online at <https://dor.wa.gov/taxes-rates/tax-incentives/tax-incentive-programs/credit-hiring-unemployed-veterans-expired-july-1-2023>.

²⁰⁹ "Hire Our Veterans Tax Credit", Maryland Department of Commerce, accessed online at <https://commerce.maryland.gov/fund/programs-for-businesses/hire-our-veterans-tax-credit>

²¹⁰ "Hire Our Veterans Tax Credit Program Status Report", Maryland Department of Commerce, July 2020, accessed online at <https://commerce.maryland.gov/Documents/ProgramReport/hire-our-veterans-tax-credit-annual-report-2019.pdf>

²¹¹ "Job Creation Tax Credit (JCTC)", Maryland Department of Commerce, accessed online at <https://commerce.maryland.gov/fund/programs-for-businesses/job-creation-tax-credit>

²¹² "New Mexico Tax Expenditure Report 2021", Taxation and Revenue New Mexico, accessed online at <https://klvg4oyd4j.execute-api.us-west-2.amazonaws.com/prod/PublicFiles/34821a9573ca43e7b06dfad20f5183fd/7b276088-a9f1-4afa-b009-5eae788aae79/2021%20NMTRD%20Tax%20Expenditure%20Report.pdf>.



Return on Investment

Data Availability

The data available from the Department does not indicate the number of veterans hired, their wages, industry of employment, hours worked, or whether their employment was full- or part-time. Overview

There is insufficient data to perform an economic impact and tax revenue analysis of this program. To estimate the economic impact of the program, the Department of Taxation and Finance should collect and store the following information by company and tax year: wages, hours worked, or industry of employment for each certified employee. Without this information it is not possible to accurately estimate the program's economic impact or net fiscal impact for the State.

Job Creation, Temporary Hires, Number of Jobs Retained

The New York Open Data portal indicates that 42 taxpayers used the credit between 2016 and 2020, but no data was provided to the project team indicating how many individuals were employed by tax credit users or any details associated with their employment.

Impact on Revenues for New York State and its Municipalities

According to the New York Open Data portal the total value of the credit claimed between 2016 and 2020 was \$110,476. There is insufficient data to estimate the taxes generated by beneficiaries of this tax credit program to determine the net impact on revenues.

Other Qualitative Economic Benefits and the But-For Test

While there certainly is some positive qualitative impact for the relatively small number of individuals who have benefited from hiring under this program, the small number of users suggest it has little to no material impact on hiring. This is consistent with other states' experiences, and some of those states have eliminated the tax incentives.

Summary Findings

It is notable that nearly any incentive that is provided through the tax code can also be structured as a grant or other form of programmatic assistance. It may be that NYS would benefit more from directing a similar level of resources to programs directed at employer awareness, veteran skills development, or other efforts.



Workers with Disabilities Credit (WDTC)



Executive Summary

Purpose and History

Created in 2015, the Workers with Disabilities Tax Credit is intended to encourage qualified employers to employ individuals with developmental disabilities in New York state (NYS) and to assist individuals with barriers to employment to become gainfully or competitively employed. This program has been inactive since 2020.

Design and Administration

The credit is available to participants in the Department of Labor's (DOL) Workers with Developmental Disabilities Tax Credit program.²¹³ Employers must be certified by DOL as qualified to receive the credit. Employees must be certified as qualified by either the State Education Department or Office for People with Developmental Disabilities.

The Workers with Disabilities Tax Credit (WDTC) is distinct from the Employment of Persons with Disabilities Credit, which is also referred to as the Workers with Disabilities *Employment* Tax Credit (WETC). In fact, employers using this credit are not eligible to claim the Employment of Persons with Disabilities credit (WETC).

Benefit

The value of the credit is 15 percent of wages for qualified full-time employees, with a maximum credit of \$5,000 per employee. The credit for part-time employees is 10 percent of wages with a maximum credit of \$2,500. The tax credit is available only after the employee has worked at least six months.

Use

No credits have been issued during the program's existence.

Benchmarking

State tax credits focused specifically on encouraging employers to hire individuals with developmental disabilities are rare. North Dakota offers a Credit for Employing an Individual with a Developmental Disability or Severe Mental Illness. The value of this credit is 25 percent of wages paid to eligible individuals, with a maximum credit of \$1,500 per individual per year. No more than 100 individuals may be certified for purposes of the credit each year.

Return on Investment

There is insufficient data to perform an economic impact and tax revenue analysis of this program. While there certainly is some positive qualitative impact for the relatively small number of individuals who may have benefited from hiring under this program, the small number of tax credit users indicated through the New York Open Data Portal suggests it has little to no material impact on hiring.

²¹³ "Workers with Disabilities Tax Credit Program," New York Department of Labor, accessed online at <https://dol.ny.gov/system/files/documents/2021/02/wddtc-ppt.pdf>



Summary Findings

- The Workers with Disabilities Tax Credit is described as inactive by the DOL, although the state statute indicates the program continues through 2026.
- According to the New York Open Data portal, 12 taxpayers used the credit between 2017 and 2019. The total value of the credit claimed for these three years was \$14,177.
- This credit may not be taken with the WETC.
- There is insufficient data to perform an economic impact and tax revenue analysis of this program. The return on investment to the state cannot be calculated because data is not available on the wages, hours worked, or industry of employment for each certified employee.
- State tax credits focused on encouraging employers to hire individuals with developmental disabilities are rare. The only other example found was North Dakota's Credit for Employing an Individual with a Developmental Disability or Severe Mental Illness.

Background

Incentive Purpose

The Workers with Disabilities Tax Credit was intended to encourage qualified employers to employ individuals with developmental disabilities in New York State (NYS) and to assist individuals with barriers to employment to become gainfully or competitively employed. The credit is available to participants in the DOL's Workers with Developmental Disabilities Tax Credit program.²¹⁴

The Workers with Disabilities Tax Credit is distinct from the ongoing Employment of Persons with Disabilities Credit, which is also referred to as the Workers with Disabilities *Employment* Tax Credit or WETC.

Legislative History

The credit took effect in 2015.²¹⁵ According to the DOL, the program has been inactive since 2020.²¹⁶ However, the FY2024 Annual Report on New York State Tax Expenditures states that the expiration date for the tax credit was extended three years to include the taxable years beginning before January 1, 2026.

²¹⁴ Ibid.

²¹⁵ NY Tax L § 210-B 48 - <https://www.nysenate.gov/legislation/laws/TAX/210-B> and NY LAB § 25-B - <https://www.nysenate.gov/legislation/laws/LAB/25-B>

²¹⁶ "Workers with Disabilities Tax Credit Program," New York Department of Labor, accessed online at <https://dol.ny.gov/system/files/documents/2021/02/wddtc-ppt.pdf>



Incentive Design

This tax credit is administered by DOL. The value of the credit is based on the wages paid to qualified employees. The credit may be taken by corporations against the franchise tax and by other employers (such as sole proprietors and partnerships) against the personal income tax. The credit is available for tax years beginning on or after January 1, 2015, and before January 1, 2026 and is available statewide. The credit may be carried forward for three years. It is not refundable. The annual program cap is \$6.0 million.²¹⁷ Employers using this credit are not eligible to claim the Employment of Persons with Disabilities credit.

Incentive Benefits

The value of the credit is 15 percent of wages for qualified full-time employees, with a maximum credit of \$5,000 per employee. The credit for part-time employees is 10 percent of wages with a maximum credit of \$2,500. The tax credit is available only after the employee has worked at least six months.

Incentive Administration

Employers must be certified by DOL as qualified to receive the credit. Employees must be certified as qualified by either the State Education Department or Office for People with Developmental Disabilities.

To access the credit, businesses must participate in the DOL Workers with Disabilities Tax Credit Program. Applications are due to DOL by November 30 of the year prior to the tax year when the credit would be taken. As part of the review, DOL determines if the business is in good standing in New York. DOL then sends qualified businesses a Certificate of Eligibility.

Certified businesses must submit a form to DOL to confirm each hire. The form must include business and employee names, social security numbers, job titles, hiring and termination dates, wages, total hours worked, and contact information. At the end of the tax year, employers must also obtain a Certificate of Eligibility from DOL that verifies the credit claim and describes the maximum credit allowed.²¹⁸

To participate, individuals must also complete an application to determine if they are qualified. Businesses may not submit an application on behalf of an individual. Qualified employees are those deemed to have a development disability, as defined in New York's Mental Hygiene Law, and are certified by the State Education Department or the Office for People with Developmental Disabilities as a person with a disability that is a substantial handicap to employment. They must also be receiving or have completed vocational rehabilitation services.²¹⁹ Qualified employees must also be either a current employee of a sheltered workshop or unemployed for at least three months prior to January 1, 2015; have worked for the qualified employer with wages equivalent to those paid for other jobs and for which no other employee has been terminated; have not worked for another entity related to the qualified employer within the last 24 months; and be employed in NYS.²²⁰

²¹⁷ "Fiscal Year 2024 Annual Report on New York State Tax Expenditures" New York Division of the Budget, Department of Taxation and Finance, p.168, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.

²¹⁸ "Fiscal Year 2024 Annual Report on New York State Tax Expenditures" New York Division of the Budget, Department of Taxation and Finance, p.168, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.

²¹⁹ "Workers with Disabilities Tax Credit Program," New York Department of Labor, p. 11 accessed online at <https://dol.ny.gov/system/files/documents/2021/02/wddtc-ppt.pdf>

²²⁰ Department of Taxation and Finance, Instructions for Form CT-644, Workers with Disabilities Tax Credit.



Case managers work on behalf of individuals to connect them to certified businesses, but this is not a requirement for the tax credit.²²¹

Incentive Use

The DOL response to PFM data requests indicates that this program is inactive, and that no certifications have been issued. However, the New York Open Data portal indicates that 12 taxpayers used the credit between 2017 and 2019. The total value of the credit claimed for these three years was \$14,177.

The Fiscal Year 2024 Annual Report on New York State Tax Expenditures reports that the cost of this credit was less than \$0.1 million from 2016-2020 for personal income tax. It forecasts a cost of \$1.0 million in 2023. Elsewhere in the Report, the actual value of the tax credit associated with the corporate franchise tax is listed as zero for 2015, 2017, 2018 and 2019.

Benchmarking

State tax credits focused specifically on encouraging employers to hire individuals with developmental disabilities are rare. **North Dakota offers a Credit for Employing an Individual with a Developmental Disability or Severe Mental Illness.** The value of this credit is 25 percent of wages paid to eligible individuals, with a maximum credit of \$1,500 per individual per year. The credit can be used for multiple years for as long as the individual is employed. No more than 100 individuals may be certified for purposes of the credit. Employers must obtain certification from the North Dakota Department of Human Services, Vocational Rehabilitation Division that the individual has a severe disability, is eligible for agency services, and requires customized or supported employment to be employed. The state's 2023 Business Tax Incentives report does not contain information on the cost or use associated with this tax credit, but with a maximum of 100 individuals certified and a maximum credit of \$1,500 a year, the maximum foregone revenue for a year would be \$150,000.

Best Practices Research and Practice

While creating incentives for private sector employers to expand work opportunities for individuals with developmental disabilities has been put forth as a policy priority,²²² the project team found no research on the use and impact of such tax credits at the state level.

Some states take different approaches to encouraging employment among individuals with developmental disabilities. For example, Connecticut's Employment First policy commits the state's Department of Developmental Services to "ensure that individuals who identify employment as their first and preferred option have support accessing community-based integrated employment and services."²²³ In Tennessee, the state's Employment First Task Force 2022 Report the Governor describes several networking and outreach strategies to increase the number of employers who value and hire people with disabilities and suggests

²²¹ "Workers with Disabilities Tax Credit Program," New York Department of Labor, p. 17 accessed online at <https://dol.ny.gov/system/files/documents/2021/02/wddtc-ppt.pdf>.

²²² National Association of Councils on Developmental Disabilities, <https://nacdd.org/employment-training-and-wages/>.

²²³ "Employment First Overview," Connecticut Department of Development Services, accessed online at <https://portal.ct.gov/DDS/EmploymentDayServices/Employment-First/Employment-First-Overview>



using the number of employers who claim the state’s tax credit for hiring people with disabilities as a tracking measure – not a strategy of itself.²²⁴ Virginia’s Board for People with Disabilities emphasizes providing grants for and sharing information on training and integrated employment as well as reducing barriers to employment (including transition services and supports for students), but does not mention tax incentives.²²⁵

Data Discussion

There is no additional data available to indicate how many companies or individuals sought certification. No data was provided to the project team indicating how many individuals were employed by tax credit users or any details associated with their employment.

Return on Investment

There is insufficient data to perform an economic impact and tax revenue analysis of this program. To estimate the economic impact of the program, either DOL or the Department of Taxation and Finance should collect and store the following information by company and tax year: wages, hours worked, or industry of employment for each certified employee. Without this information it is not possible to accurately estimate the program’s economic impact or net fiscal impact for the State.

While there certainly is some positive qualitative impact for the relatively small number of individuals who may have benefited from hiring under this program, the small number of tax credit users indicated through the New York Open Data Portal suggests it has little to no material impact on hiring.

It is notable that nearly any incentive that is provided through the tax code can also be structured as a grant or other form of programmatic assistance. It may be that NYS would benefit more from directing a similar level of resources to programs directed at employer awareness, skills development, or other efforts to support individuals with developmental disabilities.

Summary Findings

- The Workers with Disabilities Tax Credit is described as inactive by the DOL, although the state statute indicates the program continues through 2026.
- According to the New York Open Data portal, 12 taxpayers used the credit between 2017 and 2019. The total value of the credit claimed for these three years was \$14,177.
- Employers using this credit are not eligible to claim the Employment of Persons with Disabilities credit (WETC), and it is possible that employers prefer that credit for employees who would be eligible for both.
- There is insufficient data to perform an economic impact and tax revenue analysis of this program. The return on investment to the state cannot be calculated because data is not available on the wages, hours worked, or industry of employment for each certified employee.
- State tax credits focused on encouraging employers to hire individuals with developmental disabilities are rare. The only other example found was North Dakota’s Credit for Employing an Individual with a Developmental Disability or Severe Mental Illness.

²²⁴ Tennessee Employment Task Force, *Expect Employment. 2022 Report to the Governor*, p. 9.
https://www.dropbox.com/s/ptprcr2fqs0zyle/2022_Expect_Employment_Report.pdf?dl=0

²²⁵ Virginia Board for People with Disabilities, “FFY 2024 Update to Five-Year State Plan; Goals, Objectives, and Activities.” August 2023.



Employment of Persons with Disabilities Credit (WETC)



Executive Summary

Purpose and History

The Employment of Persons with Disabilities Credit took effect in 1998 and is intended to encourage businesses to hire workers with disabilities by providing employers a tax credit based on the wages paid to qualified workers. This tax credit is referred to as the “Employment of Persons with Disabilities Credit” by the New York Department of Taxation and Finance. It is called the Workers with Disabilities Employment Tax Credit (WETC) by the New York Department of Labor.

Design and Administration

This tax credit provides a maximum credit of \$2,100 per qualified worker for either first-year or second-year wages. There are no limits on the number of qualified workers for which an employer can use the credit. The credit can only be claimed for qualified workers certified by either the New York State Education Department’s Adult Career and Continuing Education – Vocational Rehabilitation (ACCES-VR)²²⁶ or the State of New York Office of Children and Family Services’ Commission for the Blind and Visually Handicapped (CBVH)²²⁷ who also meet certain additional requirements.

Use

A total of 105 taxpayers claimed the Employment of Persons with Disabilities Tax Credit between 2016 and 2019. The total credits claimed over this period were \$246,196. Each year, between 16-34 taxpayers claimed the credit for an average credit amount of \$2,345.

The number of taxpayers using the Employment of Persons with Disabilities Tax Credit is a small fraction of the number of employers and qualified employees applying for and certified to use the credit. For example, in 2018, DOL received 1,050 WETC applications and approved or certified 1,047 of the applications, but only 16 taxpayers used the credit. Between 2018-2022, 4,081 certifications were issued for this program. Since each certification requires employment, this figure also represents the number of jobs.

Benchmarking

Similar tax credits are offered in some other states, including Delaware and Maryland. The specific rules guiding use of the tax credit vary by state, but the impact has been negligible in both Delaware and Maryland. The Delaware Tax Preference Report concludes, “While the goal of incentivizing work opportunities for the disadvantaged is a laudable one, achieving such a goal through direct appropriation or via a single tax preference linked to the federal WOTC would be simpler and more transparent.”²²⁸

²²⁶ “Apply for Vocational Rehabilitation Services”, New York State Education Department, accessed online at <https://www.acces.nysed.gov/vr/apply-vocational-rehabilitation-services>.

²²⁷ “New York State Commission for the Blind (NYSCB)”, New York Office of Children and Family Services, accessed online at <https://ocfs.ny.gov/programs/nyscb/>.

²²⁸ “Tax Preference Report, 2021 Edition”, Delaware Department of Finance, accessed online at <https://financefiles.delaware.gov/Reports/TaxPref/Tax-Preference-Report-2021.pdf>.



Return on Investment

There is insufficient data to perform an economic impact and tax revenue analysis of this program. The return on investment to the state cannot be calculated because sufficient data is not available on wages and hours worked for each employee.

Benefits associated with this program include support for work opportunities among individuals with disabilities who are receiving vocational rehabilitation services in New York, thereby furthering the state's economic development goals to increase employment and develop the state's workforce.

The Council of State Governments (CSG) and National Council of State Legislatures (NCSL) have both indicated support for tax incentives or wage subsidies to encourage employers to hire individuals with disabilities.²²⁹ However, the project team found little research on the use and impact of such tax credits at the state level. As this analysis has indicated, it appears that similar tax credits in other states are used by few employers and have minimal impact on employment. It appears that the same situation exists in NYS as it relates to this tax incentive.

Background

Incentive Purpose

The Employment of Persons with Disabilities Credit is intended to encourage businesses to hire workers with disabilities by providing employers with a tax credit based on the wages paid to qualified workers.

This tax credit is referred to as the Employment of Persons with Disabilities Credit by the New York Department of Taxation and Finance. It is called the Workers with Disabilities Employment Tax Credit (WETC) by the New York Department of Labor (DOL).

Legislative History

The credit for Employment of People with Disabilities²³⁰ was initiated for tax years beginning on or after January 1, 1998. In 2018, a change was made to enable this tax credit to apply to second year wages for cases when first year wages qualify for the Federal work opportunity tax credit.

Incentive Design

This tax credit is administered by DOL. The value of the credit is based on the wages paid to qualified employees. The credit may be taken by corporations against the franchise tax, transportation and transmission companies' taxes, and utility company taxes and by other employers (such as sole proprietors

²²⁹ "Work Matters. A Framework for States on Workforce Development for People with Disabilities", The Council of State Governments and National Conference of State Legislatures, December 2016, accessed online at <https://www.ncsl.org/labor-and-employment/work-matters>.

²³⁰ "Consolidated Laws of New York, Chapter 60 (TAX), Article 9, Section 187-A: Credit for employment of persons with disabilities", The New York State Senate, January 5, 2018, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/187-A>.



and partnerships) against the personal income tax.²³¹ The credit may be carried forward, and there is no limitation on the carryforward period. It is not refundable. The credit is available statewide and does not have a sunset date. Employers using this credit are not eligible to claim the Workers with Disabilities Tax Credit.

Incentive Benefits

The value of the credit is 35 percent of the first \$6,000 in qualified first-year wages paid to all qualified workers. The maximum credit per worker is \$2,100. There are no limits on the number of qualified workers for which an employer can use the credit.

If the first-year wages qualify for the Federal Work Opportunity Tax Credit, taxpayers may apply second-year wages to use the state credit.

New York State tax law also allows a deduction for the portion of the wages and salaries that qualifies for the credit. As a result, the taxpayer receives both a deduction and credit for the wages.²³²

Incentive Requirements

The credit can only be claimed for qualified, certified employees. To qualify, employees must meet the eligibility requirements under the Work Opportunity Tax Credit program as a referral. Qualified employees must also be certified by either the New York State Education Department's Adult Career and Continuing Education – Vocational Rehabilitation (ACCES-VR)²³³ or the State of New York Office of Children and Family Services' Commission for the Blind and Visually Handicapped (CBVH).²³⁴ The certification must determine the person has a disability that results in a substantial handicap to employment or has completed or is receiving services under a rehabilitation plan approved by either ACCES-VR or CBVH. Qualified employees must also work full-time for the employer claiming the credit for at least 180 days or 400 hours.

Employers must submit a Workers with Disabilities Tax Credit (WETC) Pre-Screening Eligibility Form to DOL.²³⁵ This form requires the job applicant to provide their name, social security number, address and contact information, and check whether they have received the required services from either ACCES-VR or CBVH. The job applicant must sign the form and agree to an information release authorization allowing ACCES-VR to access records needed to determine eligibility and to provide vocational rehabilitation services.

Employers then complete and submit this form to DOL to apply for the credit. The form also requires the employer to provide their name, FEIN, New York State Employer Identification Number, address and contact information, dates on which the job applicant was hired and began employment, and wages. Employers

²³¹ "Instructions for Form CT-41: Claim for Credit for Employment of Persons with Disabilities", New York Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pdf/current_forms/ct/ct41i.pdf; "Workers (with Disabilities) Employment Tax Credit, New York State Department of Labor, accessed online at <https://dol.ny.gov/workers-disabilities-employment-tax-credit>.

²³² "Instructions for Form CT-41: Claim for Credit for Employment of Persons with Disabilities", New York Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pdf/current_forms/ct/ct41i.pdf.

²³³ "Apply for Vocational Rehabilitation Services", New York State Education Department, accessed online at <https://www.acces.nysed.gov/vr/apply-vocational-rehabilitation-services>.

²³⁴ "New York State Commission for the Blind (NYSCB)", New York Office of Children and Family Services, accessed online at <https://ocfs.ny.gov/programs/nyscb/>.

²³⁵ "Workers with Disabilities Tax Credit (WETC) Pre-Screening Eligibility Form", New York State Department of Labor, accessed online at <https://dol.ny.gov/system/files/documents/2021/02/wetc1-a.pdf>.



appear to self-certify as there does not appear to be any additional level of verification or process for DOL to issue of a certificate of eligibility.

Companies claim the tax credit on their tax forms. Corporations must file Form CT-41, while other employers file Form IT-251. The forms require employee names, social security numbers, work dates, and wages (up to \$6,000) paid during the tax year.

DOL does not need to issue a final certificate of eligibility in order for employers to claim the credit, and there do not appear to be any additional reporting requirements.

Incentive Use

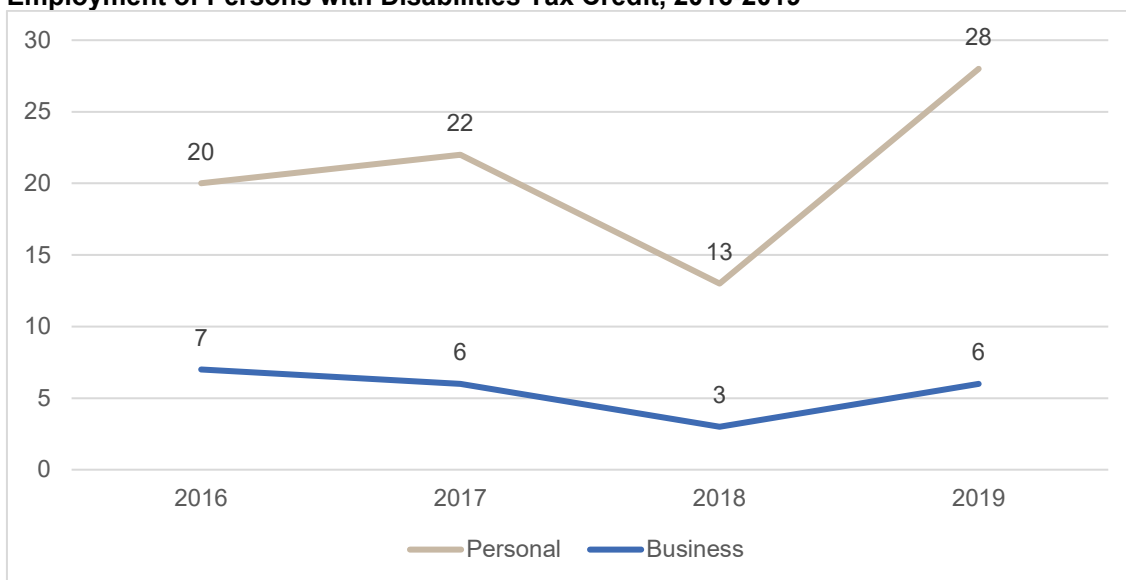
The credit was claimed by 105 taxpayers between 2016 and 2019. The total credits claimed over this period were \$246,196. Each year, between 16-34 taxpayers claimed the credit for an average credit amount per taxpayer of \$2,345 (Table 164). Figures 27 and 28 show the distribution of tax credit use across both personal and corporate taxpayers.

Table 158: Credits Claimed, Employment of Persons with Disabilities Tax Credit, 2016-2019

	2016	2017	2018	2019	Total
Credit Claimed	\$82,797	\$49,668	\$48,704	\$65,027	\$246,196
Number of Taxpayers	27	28	16	34	105
Average Amount of Credit	\$3,067	\$1,774	\$3,044	\$1,913	\$2,345

Source: Open Data-New York State Economic Incentive Tax Credit: Credit for Employment of Persons with Disabilities and MFR Consultants

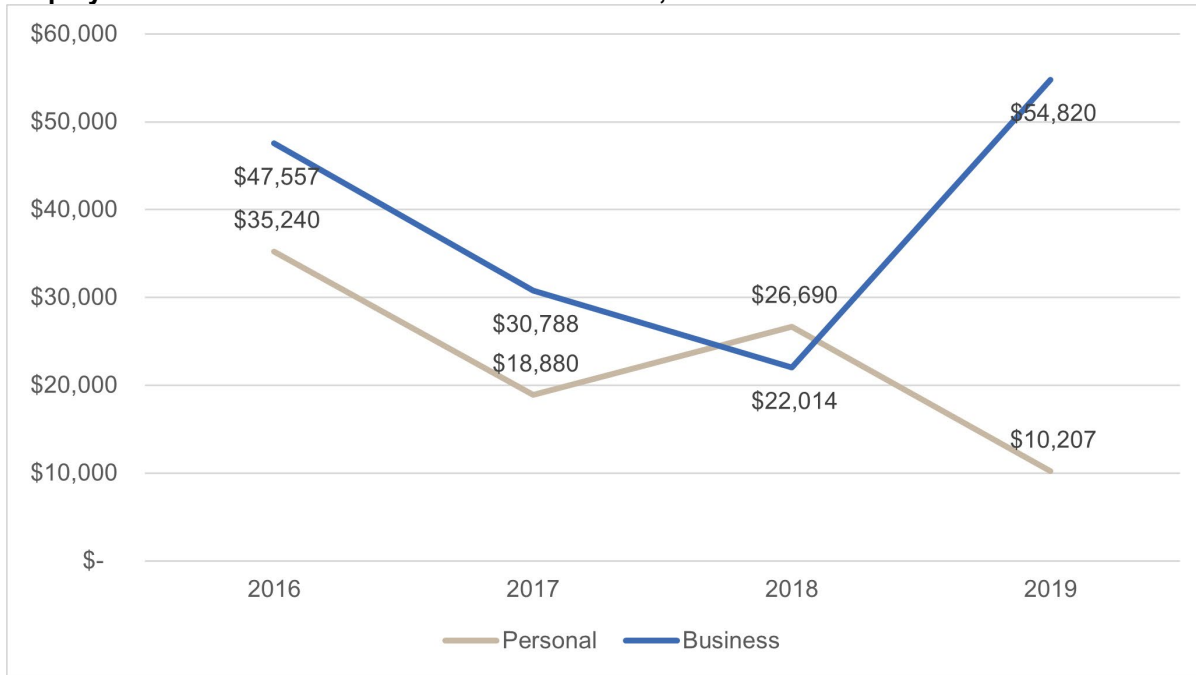
Figure 25: Number of Taxpayers per Year Claiming the Employment of Persons with Disabilities Tax Credit, 2016-2019



Source: Open Data-New York State Economic Incentive Tax Credit: Credit for Employment of Persons with Disabilities and MFR Consultants



**Figure 26: Credit Claimed per Year
Employment of Persons with Disabilities Tax Credit, 2016-2019**



Source: Open Data-New York State Economic Incentive Tax Credit: Credit for Employment of Persons with Disabilities and MFR Consultants

The Fiscal Year 2024 Annual Report on New York State Tax Expenditures reports that the foregone revenue associated with this credit was \$0.1 million or less for all years from 2016-2020. It forecasts the same for 2023.

The number of taxpayers using the Employment of Persons with Disabilities Tax Credit is a small fraction of the number of employers and qualified employees applying for and certified to use the credit. Table 165 shows the number of WETC applications submitted to and certifications from DOL. In 2019, DOL received 859 WETC applications and approved or certified 856 of the applications, but only 34 taxpayers used the credit. If each employer took the maximum credit of \$2,100 per employee, these 34 employers would have hired an estimated 30-31 qualified employees, though each of the 34 employers certified to claim the credit would have had to hire at least one employee.

Table 159: WETC Applications and Certifications, 2018-2022

Year	WETC Applications	WETC Certifications
2018	1,050	1,047
2019	859	856
2020	737	727
2021	966	860
2022	731	591
TOTAL	4,343	4,081

Source: Department of Labor

The 2013 “New York State Business Tax Credits: Analysis and Evaluation” by Marilyn M. Rubin and Donald J. Boyd also found that this tax credit is rarely used and claimed by few taxpayers per year, concluding that



this and other rarely used tax credits show limited success in achieving policy goals in relation to the costs of administering them.

Benchmarking

This section benchmarks the reach and impact of the Employment of Persons with Disabilities Credit (WETC) against that of similar programs in a set of other states.

Table 160: Employment of Persons with Disabilities Credit – Select Comparable Programs

State/ Program	Operational Years	Maximum Months of Employer Eligibility	Annual Maximum Credit per Employee
New York: Employment of Persons with Disabilities Credit	1998-*	One year of wages	\$2,100 per qualified employee
Delaware: Individuals with Disabilities Employer Tax Credit	2016-*	Three years	\$1,500 per employee
Iowa: Income Tax Deduction for Iowa Employers Who Hire Persons with Disabilities	ongoing	One year	\$20,000 per employee
Louisiana: Employment of Certain Disabled Individuals Deduction	2015-*	ongoing	50% of gross wages for first four months; 30% during subsequent months of employment
Maryland: Disability Employment Tax Credit	2014-*	Two years	\$2,700 per employee
Tennessee: Jobs Tax Credit for Hiring Persons with Disabilities	ongoing	One year	\$5,000 per employee

* Currently running with no scheduled sunset date. Source: Center for Regional Economic Competitiveness

Delaware: Individuals with Disabilities Employer Tax Credit, aka Vocational Rehabilitation Hiring Credit

This tax credit incentivizes Delaware employers to hire job candidates referred by vocational rehabilitation facilities. Employers may receive a tax credit for 10% of the wages of qualified employees up to a maximum of \$1,500 per employee. The credits are available for the first three years of employment. This credit can be combined with the Federal WOTC.

The State of Delaware Tax Preference Report 2021 Edition describes the estimated revenue loss from the Vocational Hiring Tax Credit as negligible for FY21 and FY22. The report notes that employers taking this credit may already employ individuals with a disability and receive the Federal WOTC. Also, the record retention requirements of this credit increase the complexity of the tax return, increasing administrative costs. “While the goal of incentivizing work opportunities for the disadvantaged is a laudable one, achieving such a goal through direct appropriation or via a single tax preference linked to the federal WOTC would be simpler and more transparent.”²³⁶

²³⁶ “Tax Preference Report, 2021 Edition”, Delaware Department of Finance, accessed online at <https://financefiles.delaware.gov/Reports/TaxPref/Tax-Preference-Report-2021.pdf>.



Iowa: Income Tax Deduction for Iowa Employers Who Hire Persons with Disabilities

Small businesses that employ qualified persons with disabilities may take a deduction on their income tax returns for 65% of wages paid in the first 12 months of employment up to a maximum of \$20,000. This deduction may be used in combination with the Targeted Jobs Tax Credit. There are no requirements regarding previous unemployment, and the qualified employees may work either part- or full-time. The small business must have 20 or fewer full-time equivalent employees and annual revenue under \$3 million. The deduction is taken on individual income tax returns under “other adjustments” or on the corporate income tax return under “other reductions.”²³⁷ Information on the cost and use of this deduction is not available from Iowa’s tax expenditure reports.

Louisiana: Employment of Certain Disabled Individuals Deduction

Taxpayers who provide continuous employment to qualified disabled individuals in Louisiana can take an income tax deduction of 50 percent of gross wages for the first four months of employment and 30 percent of gross wages for subsequent months.²³⁸ Qualifying individuals must work at least 20 hours per week at rates and settings comparable to other employees performing similar work. This deduction is limited to 100 employers. Taxpayers apply to the Louisiana Department of Health (LDH) to qualify for one of these slots.²³⁹ LDH reviews the application, completes the form and returns it to the employer who must attach a copy to their tax return to claim the deduction.²⁴⁰ The Department of Revenue reports that it is unable to determine the fiscal effect of this deduction.²⁴¹

Maryland: Maryland Disability Employment Tax Credit

Businesses that employ qualified persons with disabilities may be eligible for a tax credit equal to 30% of the first \$9,000 of wages paid – for a maximum credit of \$2,700 per employee per year – during the first and second years of employment. A credit of up to \$900 for qualified childcare or transportation expenses during those two years can also be claimed. Certification from the Division of Rehabilitation Services (DORS) in the Maryland State Department of Education, or the Maryland Department of Labor for a disabled veteran, is required. This credit can be combined with the Federal WOTC. The Maryland FY22 tax expenditure report describes the cost of the Maryland Disability Employment Tax Credit as “negligible” for FY19-22.²⁴²

Tennessee: Jobs Tax Credit for Hiring Persons with Disabilities

Qualified employers hiring persons with disabilities can receive a one-time tax credit of \$2,000 (part-time jobs) or \$5,000 (full-time jobs). To qualify, employers must hold franchise and excise tax accounts in Tennessee and must “participate in an existing state government employment incentive program pursuant to which persons with disabilities are being served.” Employment must last at least twelve months, the employed person must be enrolled in the employer’s health insurance program, and the employment must represent a

²³⁷ “Income Tax Benefit for Iowa Employers Who Hire Persons with Disabilities”, Iowa Department of Revenue, accessed online at <https://tax.iowa.gov/income-tax-benefit-iowa-employers-who-hire-persons-disabilities>.

²³⁸ “Title 47 – Revenue and Taxation, RS 47:296.13 – Tax deduction; employment of certain qualified disabled individuals; requirements; limitations”, Justia US Law, accessed online at <https://law.justia.com/codes/louisiana/2018/code-revisedstatutes/title-47/rs-47-297.13/>.

²³⁹ “What’s New for Louisiana 2015 Individual Income Tax?”, Louisiana Department of Revenue, accessed online at [https://revenue.louisiana.gov/VendorForms/IT540i\(2015\).pdf](https://revenue.louisiana.gov/VendorForms/IT540i(2015).pdf).

²⁴⁰ “Application for Deduction for Employment of Certain Qualified Disabled Individuals”, Louisiana Department of Health, accessed online at <https://ldh.la.gov/assets/docs/OCDD/Providers/ProviderApplicationDisabledIndividuals.pdf>.

²⁴¹ “2022-2023 Tax Exemption Budget”, Louisiana Department of Revenue, July 2023, accessed online at [https://revenue.louisiana.gov/Publications/TEB\(2022\)FINAL.pdf](https://revenue.louisiana.gov/Publications/TEB(2022)FINAL.pdf).

²⁴² “Fiscal Year 2022 Tax Expenditure Report”, Maryland Department of Budget and Management, February 2021, accessed online at <https://dbm.maryland.gov/budget/taxexpendreports/FY2022TaxExpenditureReport.pdf>.



net increase in the number of persons with disabilities employed by the taxpayer. Businesses apply for the tax credit through the Tennessee Department of Revenue.²⁴³ The 2022 Tennessee Tax Credit report does not provide information on jobs, taxpayers or claims for this tax credit to protect taxpayer confidentiality, indicating the credit is used by a small number of taxpayers.²⁴⁴

Incentive Research and Practice

The Council of State Governments (CSG) and National Council of State Legislatures (NCSL) have both indicated support for tax incentives or wage subsidies to encourage employers to hire individuals with disabilities.²⁴⁵ However, the project team found little research on the use and impact of such tax credits at the state level. As this analysis has indicated, it appears that similar tax credits in other states are used by few employers and have minimal impact on employment.

Given this lack of research, Smart Incentives started examining state incentives to hire individuals with disabilities in recent years. Limited inquiries conducted in 2020 and 2021 into the effectiveness of these state incentives concluded that while incentive programs have achieved some success in helping some people find and retain employment, they have had a very small impact. A common phrase used by interviewees during this inquiry was that “the juice was not worth the squeeze” when it came to employer use of tax credits, and other policy initiatives and employer efforts would be more helpful for encouraging employment of people with disabilities.²⁴⁶ It should be noted that these were observational findings.

Research on the federal Work Opportunity Tax Credit (WOTC) is also limited but provides some relevant insights. A 2015 report from the Congressional Research Service on the federal WOTC noted the lack of definitive data on WOTC usage but cited figures on both certifications and tax expenditures to provide general insights. Previous research, a limited purpose analysis conducted in 2001, indicated that the tax credits play little or no role in employer recruitment policies with high turnover among participating employees. Options presented for improving the tax credit included streamlining program administration, broadening eligibility, and promoting use of the program.²⁴⁷

The NYS credit is tied to the federal Work Opportunity Tax Credit (WOTC), as with qualification for the NYS credit, employees must meet the eligibility requirements under the federal WOTC program. In New York, vocational rehabilitation accounted for 1,181 WOTC certifications out of a total of over 179,000 WOTC certifications in FY22 -- approximately 1 percent. As background, the project team found that in FY22, vocational rehabilitation accounted for over 28,000 WOTC certifications in the US. out of a total 1.8 million WOTC certifications – also about 1 percent.²⁴⁸ As points of comparison, the CSG and NCSL report stated

²⁴³ “Are there tax incentives for hiring?”, Tennessee Department of Labor and Workforce Development, accessed online at <https://lwdsupport.tn.gov/hc/en-us/articles/203083890-Are-there-tax-incentives-for-hiring->.

²⁴⁴ “2022 Tennessee Tax Credit Report”, State of Tennessee Department of Revenue, December 20, 2022, accessed online at <https://www.tn.gov/content/dam/tn/revenue/documents/pubs/TaxCreditsFY2022Report.pdf>.

²⁴⁵ “Work Matters. A Framework for States on Workforce Development for People with Disabilities”, The Council of State Governments and National Conference of State Legislatures, December 2016, accessed online at <https://www.ncsl.org/labor-and-employment/work-matters>.

²⁴⁶ Regan Price and Ellen Harpel, “Leaving No One Behind: Finding Policy Solutions to Eliminate Barriers to Work for People with Disabilities”, Smart Incentives, 2022, accessed online at <https://smartincentives.org/wp-content/uploads/Finding-Policy-Solutions-to-Eliminate-Barriers-to-Work-for-People-With-Disabilities-June-2022.pdf>.

²⁴⁷ Benjamin Collins and Sarah A. Donovan, “The Work Opportunity Tax Credit”, Congressional Research Service, September 25, 2018, accessed online at <https://crsreports.congress.gov/product/pdf/R/R43729/8>.

²⁴⁸ “WOTC Certifications by Recipient Group, State and National Details for Fiscal Year 2022”, US Department of Labor, accessed online at <https://www.dol.gov/sites/dolgov/files/ETA/wotc/pdfs/FY22-WOTC-Certification-Data-Report.pdf>.



that 56.7 million Americans live with a disability, while the number of individuals receiving state vocational rehabilitation services was over 328,000.²⁴⁹

In 2011, a research paper identified job duration as a limiting factor in employer use of hiring tax credits (not just those related to vocational rehabilitation). Employees must work a required number of hours in order for employers to become eligible to use the credit. However, many participants are in high turnover industries. As a result, they do not meet the time threshold to allow employers to take the tax credit. This makes participation unattractive to employers, because they must make the upfront commitment (time and effort) to access the program, but the benefits are uncertain. As a result, it appears that many firms participate only if the administrative costs of participating in the program can be spread over a large number of qualified workers.²⁵⁰

A 2022 investigative article reported on the challenge of job duration from the employee's perspective, finding that nearly one quarter of jobs certified for the WOTC between 2018 and 2020 were with temp agencies and that the credit "has become a financial boon for large low-wage employers with high turnover." The short-term nature of many WOTC jobs means that the program may not be having the intended effect of putting people on a path to permanent employment.²⁵¹

It appears that the following finding from 2001 on wage subsidy programs still applies today:

The bottom line of national wage subsidy programs thus far in the United States is that the targeted programs, whether discretionary or entitlement, have always operated at quite a modest scale—always affecting less than one million new hires per year, and usually at an activity level much less than that. However, this does not necessarily mean that these targeted wage subsidy programs could not pass a benefit-cost test, since these programs also do not cost very much—always costing less than \$1 billion per year. It does mean that one could raise questions about whether these targeted wage subsidies have any potential for making a sizable dent in poverty without significant reform."²⁵²

Findings

- The Council of State Governments (CSG) and National Council of State Legislatures (NCSL) have both indicated support for tax incentives or wage subsidies to encourage employers to hire individuals with disabilities.
- However, the project team found little research on the use and impact of such tax credits at the state level.
- The project team's review of hiring tax credits for individuals with disabilities in other states indicates they are used by few employers and have minimal impact on employment. It is likely that other types of policy initiatives would be more helpful for encouraging employment of people with disabilities.

²⁴⁹ "2023 Annual Disability Statistics Compendium", University of New Hampshire Institute on Disability, accessed online at <https://disabilitycompendium.org/compendium/2023-annual-disability-statistics-compendium?page=19>

²⁵⁰ Sarah Hamersma, "Why Don't Eligible Firms Claim Hiring Subsidies? The Role of Job Duration", *Economic Inquiry* 49(3), July 2011, accessed online at <https://doi.org/10.1111/j.1465-7295.2009.00260.x>.

²⁵¹ Emily Corwin, "A Tax Credit Was Meant to Help Marginalized Workers Get Permanent Jobs. Instead It's Subsidizing Temp Work", *ProPublica*, August 23, 2022, accessed online at <https://www.propublica.org/article/work-opportunity-tax-credit-temp-permanent-employment>

²⁵² Timothy J. Bartik, "Jobs for the Poor. Can Labor Demand Policies Help?", Russell Sage Foundation, 2001, accessed online at <https://www.jstor.org/stable/10.7758/9781610440288>.



- Limited, related research on the federal WOTC suggests the following reasons for low usage of hiring tax credits among employers: burdensome program administration, limited eligibility, lack of promotion, and job duration rules that limit the credit's value for both employers and employees.

Return on Investment

Data Limitations

The data provided by the Department of Labor indicates the total number of certifications (jobs), occupational categories, and wage ranges, but does not describe hours worked. More precise data on wages paid above \$15 per hour and actual hours worked would enable future impact analyses. Data on hours worked may also help explain the gap between the number of DOL certifications and the number of taxpayers using the tax credit.

Economic Impact Analysis

There is insufficient data to perform an economic impact and tax revenue analysis of this program. To estimate the economic impact of the program, either DOL or the Department of Taxation and Finance should collect and store the following information by company and tax year: wages and hours worked, for each certified employee. Without this information it is not possible to accurately estimate the program's economic impact or net fiscal impact for the State.

DOL did provide summary occupational and wage information to the project team for jobs associated with program certifications. This data was helpful but not sufficient to calculate economic and fiscal impact. The project team first used occupational categories and the program requirement for full-time work to estimate wages and calculate the economic and fiscal impact. However, the resulting output indicated total labor income and taxes paid that were inconsistent with the wage ranges DOL provided. The project team then attempted to use the wage ranges to estimate economic and fiscal impact, but with the top range at \$15.01 - \$100/hour and no information on number of hours actually worked, the impact calculations required too many assumptions to be confident in the findings. This conclusion was reinforced by the team's benchmarking and best practices research, which found that low tax credit usage is connected to workers not meeting the hourly requirements of similar programs. The economic and fiscal impact could vary widely depending on actual hours worked.

Job Creation, Temporary Hires, Number of Jobs Retained

The project team submitted a request to the Department of Labor for the most recent five years of data for the Employment of Persons with Disabilities Tax Credit program. From 2018-2022, DOL provided 4,081 certifications, representing that number of jobs. Table 167 provides the aggregated certifications by occupational category. Table 168 reports the annual total certifications for all occupations.

Table 161: Reported Occupation Certifications, 2018 to 2022

Occupational Category	Total 2018 to 2022
Office and Administrative Support	1,554
Sales and Related	1,064
Production	362
Food Preparation and Serving Related	296
Building and Grounds Cleaning and Maintenance	186
Transportation and Material Moving	163



Occupational Category	Total 2018 to 2022
Business and Financial Operations	132
Protective Service	112
Healthcare Support	74
Personal Care	52
Installation, Maintenance, and Repair	23
Management	20
Healthcare Practitioners and Technical	18
Occupations with less than 10 Certifications	25
Total	4,081

Source: Certified Occupations Reported by Department of Labor

The Department of Labor also reported certifications for the following occupations that had less than 10 certifications between 2018 and 2022. These were aggregated into the category *Occupations with less than 10 Certifications*.

- Art, Design, Entertainment, Sports, and Media
- Community and Social Service
- Construction and Extraction
- Computer and Mathematical
- Educational Instruction and Library
- Architecture and Engineering
- Life, Physical, and Social Science
- Farming, Fishing, and Forestry

Table 162: Total Annual Certifications

	2018	2019	2020	2021	2022	Total
Total Annual Certifications	1,047	856	727	860	591	4,081

Source: Certified Occupations Reported by Department of Labor

Impact on Revenues for New York State and its Municipalities

According to the New York Open Data portal the total value of the credit claimed between 2016 and 2010 was \$246,196. The credit was claimed by 105 taxpayers during this time period. There is insufficient data to estimate the taxes generated by beneficiaries of this tax credit program to determine the net impact on revenues.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy. As indicated, the wage categories provided by DOL (Table 169) are helpful but insufficient for calculating the economic impact of the program. Without insight into the number of hours worked, it is not possible to calculate the total compensation for program participants.



Table 163: Certifications by Wage

Wage Range	Certifications by Year				
	2018	2019	2020	2021	2022
\$0 - \$9.99	147	5	0	0	0
\$10 - \$10.99	552	120	1	0	0
\$11 - \$11.99	181	215	66	24	0
\$12 - \$12.99	57	203	237	334	15
\$13 - \$13.99	58	81	104	48	139
\$14 - \$14.99	14	11	47	54	19
\$15	15	172	180	244	287
\$15.01 - \$100	23	49	92	156	131
Total	1,047	856	727	860	591

Other Qualitative Economic Benefits and the But-For Test

Additional benefits associated with this program include support for work opportunities among individuals with disabilities who are receiving vocational rehabilitation services in New York, thereby furthering the state’s economic development goals to increase employment and develop the state’s workforce. However, the program’s impact is limited by its modest reach relative to the population of potential participants. The fact that relatively few of the employers who are certified to use the credit actually claim the credit on their tax forms implies that the tax credit itself is not effective in driving hiring decisions. On the other hand, hundreds of employers put in the effort every year to obtain the tax credit certification even if they do not ultimately claim the credit. It is possible that the availability of the tax credit influences business behavior even if the value of the credit does not.

Summary Findings

It is notable that nearly any incentive that is provided through the tax code can also be structured as a grant or other form of programmatic assistance. It may be that NYS would benefit more from directing a similar level of resources to programs directed at employer awareness, skills development, or other efforts to support employment for individuals with disabilities.



MISCELLANEOUS EMPIRE STATE DEVELOPMENT TAX CREDITS



Empire State Jobs Retention Credit



Executive Summary

Purpose and History

Effective for tax years beginning on or after January 1, 2012, pertaining to emergencies declared on or after January 1, 2011, the Empire State Jobs Retention Program provides competitive financial incentives to support the retention of the state's most strategic businesses that are at risk of leaving the state due to the impact on its business operations in the event of an emergency or natural disaster.

Design and Administration

The program is available to firms operating in the strategic industries that are in a county in which an emergency has been declared by the Governor, demonstrate substantial physical damage and economic harm resulting from the event leading to the emergency declaration, employ at least 100 employees in the county in which an emergency has been declared, and retain or exceed that number of jobs in NYS.

Firms may qualify for a refundable jobs tax credit of 6.85 percent of wages per impacted job that is retained in NYS. Impacted jobs are those jobs of the firm existing at a location within a county declared an emergency by the governor on the day before the event occurred that led to the emergency declaration. The benefits are available state-wide and can last for 10 years.

Program Use

Since its inception in 2013, the Empire State Jobs Retention Credit has awarded approximately \$72 million in awards to retain an average of approximately 1,800 jobs per year. In addition to retaining jobs, the program encourages creation of new jobs. In each year of data, participants added at least 49 new jobs net of their retention commitments.

Return on Investment Analysis

To date, three or fewer firms have participated in the program in each year of activity, preventing economic impact analysis from being representative. One reason for the lack of participation could be the very narrow definition of the program, requiring substantial physical damage from a declared natural disaster.

There most certainly will be quantitative economic benefits within the communities of program recipients, as the substantial damage requirements mean it is quite possible that existing businesses would cease being a going concern without the assistance, which could also create substantial disruption for their employees.

Summary Findings

While it is likely that there are substantial local benefits to the incentive, the length of the potential assistance (10 years) will drive up the 'cost per job' for the program and doesn't align with incentive design best practices. This is something of a niche program that will likely never be widely accessed, but it certainly serves a purpose in a specific set of facts and circumstances.



Background

Incentive Purpose

The Empire State Jobs Retention Program provides competitive financial incentives to support the retention of the state's most strategic businesses that are at risk of leaving the state due to the impact on its business operations in the event of an emergency or natural disaster.

Legislative History

Effective for tax years beginning on or after January 1, 2012, pertaining to emergencies declared on or after January 1, 2011.

Incentive Design

The program is available to firms operating in the strategic industries that are in a county in which an emergency has been declared by the Governor, demonstrate substantial physical damage and economic harm resulting from the event leading to the emergency declaration, employ at least 100 employees in the county in which an emergency has been declared, and retain or exceed that number of jobs in NYS.

The strategic industries that can apply are:

- Manufacturing
- Hi-tech
- Biotech and clean tech
- Financial services data centers, and customer back-office operations
- Distribution
- Software development
- Back office
- Agriculture

Incentive Benefits

Firms admitted to the Empire State Jobs Retention Program may qualify for a jobs tax credit of 6.85 percent of wages per impacted job that is retained in New York State (NYS). Impacted jobs are those jobs of the firm existing at a location within a county declared an emergency by the governor on the day before the event occurred that led to the emergency declaration.

The benefits are available state-wide and can last for 10 years. Credits are refundable according to New York State (NYS) tax law, but failure to satisfy eligibility criteria in any given year does not extend the original ten-year period.



Incentive Administration

Program applications are provided to Empire State Development (ESD). For those accepted into the program, participants must submit annual performance reports reflected the jobs retained and associated wages, and once reviewed by ESD, a corresponding tax credit certificate is issued.²⁵³

Incentive Use

This program has supported the retention of up to 2,300 jobs per year in NYS from its start, while awarding \$72 million in tax credits. The average jobs retained per year is approximately 1,800. Since the program started in 2011, three companies have been accepted, with two companies still actively using the credits. Two companies began receiving credits in 2012, while a third began receiving credits in 2013. One of the companies stopped receiving credits in 2017, while another was still receiving the same amount of tax credits it initially received through 2021.

The limited number of applicants accepted into this program suggests that the stringent eligibility requirements (such as the strategic industry requirements, the number of preexisting employees at the business, and the substantial physical damage requirement) make qualifying difficult. Applications only come on the basis of a natural disaster, which occurs infrequently.

Table 164: Retained Jobs and Job Commitments, 2013-2022

	Retained Jobs	Job Retention Commitments
2013	2,150	2,150
2014	2,285	2,285
2015	2,285	2,285
2016	2,150	2,150
2017	2,310	2,325
2018	2,354	2,362
2019	1,158	1,192
2020	1,192	1,192
2021	1,192	1,192
2022	1,153	1,192

Source: Data provided by Empire State Development Corporation

The program tracks job commitments as well as actual retained jobs. Participants in the program do well in estimating the number of jobs that can be retained through the benefit of the award – the largest variance from the estimate was 3 percent, which is generally considered to be a reasonably accurate estimate. ESD also tracks total employment at the participant level, which can show new jobs created when compared to the retained jobs commitment.

²⁵³ "Empire State Jobs Retention Program Regulations", Empire State Development, accessed online at <https://esd.ny.gov/sites/default/files/Jobs-retention-regs.pdf>.



Table 165: Percent of Job Commitments and Net New Jobs Created, 2013-2022

Year	Percent of committed jobs retained	Net New Jobs
2013	100%	119
2014	100%	79
2015	100%	76
2016	100%	88
2017	99%	49
2018	100%	134
2019	97%	124
2020	100%	189
2021	100%	145
2022	97%	74

Source: Data provided by Empire State Development Corporation

The use of the tax credit has been decreasing over time. The maximum amount issued in any year was \$10.2 million in 2013. It has steadily declined, to \$3.7 million in 2022.

Table 166: Tax Credits by Year: 2013-2022

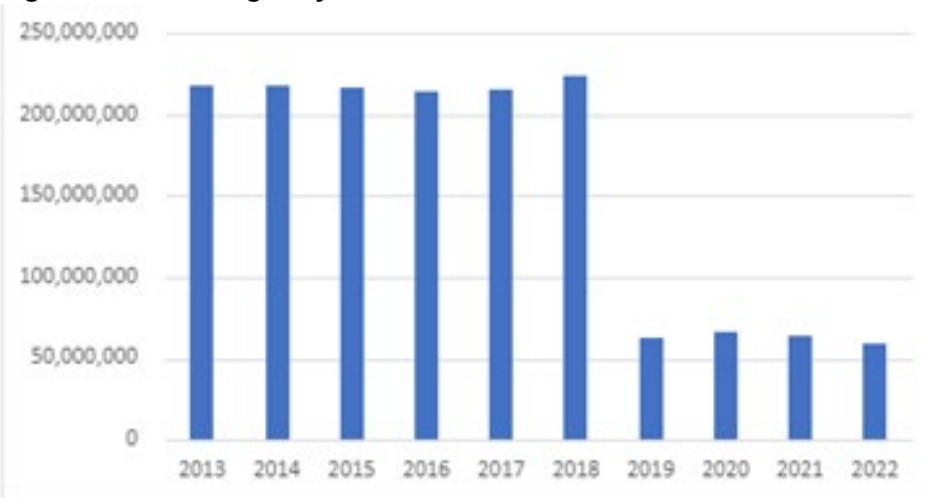
	Total Tax Credits Issued
2013	\$10,219,500
2014	\$10,205,240
2015	\$9,742,740
2016	\$9,407,000
2017	\$8,803,048
2018	\$8,870,869
2019	\$3,716,082
2020	\$3,821,344
2021	\$3,803,290
2022	\$3,665,101
Total	\$72,254,214

Source: Data provided by ESD

As expected, as the number of retained jobs has declined, so have the total wages associated with the program. Data provided by ESD does not disaggregate retained wages and total wages, meaning the dollar values in the following table include both retained jobs and new employment by firms receiving the tax credit.



Figure 27: Total Wages by Year: 2013-2022



Source: Data provided by Empire State Development Corporation

The Credit does not have a cap on the benefit offered, which leaves NYS open to larger than expected foregone future revenues. Given the low utilization of the program, this has not been an issue in prior years, but could be considered in future iterations of the incentive. The use of “strategic industries” as a requirement for the program ensures alignment with the rest of the tax incentive portfolio but limits the number of firms eligible.

Benchmarking

Table 167: Other Programs

State/ Program	Operational Years	Funding Type	Firms Eligible to Receive Benefit
New York: Empire State Jobs Retention Credit	2011-*	Tax Credit	Businesses after an Emergency Declaration
Rhode Island: Natural Disaster Rebuilding	1994-*	Tax Credit	Businesses Recovering from Disasters

* Currently running with no scheduled sunset date.

Rhode Island: Natural Disaster Rebuilding

Under the Jobs Development Act, the State of Rhode Island includes a provision for disaster recovery for manufacturing businesses. The “Natural Disaster Rebuilding” program provides corporate income tax rate reductions for jobs retained or added. In order to qualify, manufacturers must have lost at least 60 percent or more of their facilities due to a natural disaster, preventing employees from continuing production. These businesses may also qualify for an exemption from sales taxes related to construction materials otherwise not reimbursed by insurance.

- Similar to New York’s program, the Rhode Island program is directly focused on disaster relief for businesses.
- The programs have similar requirements in documentation and reporting. However, Rhode Island’s program has a more specific requirement in terms of damage (60 percent versus “substantial”) and in terms of firms eligible (manufacturers).



Return on Investment

Economic Impact Model Methodology and Definitions

The project team has used the IMPLAN model to determine economic impact.²⁵⁴ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

As it relates to the Empire State Jobs Retention Credit, there is insufficient utilization of this program to conduct an economic impact analysis using IMPLAN. In any given year of the program, there are three or fewer recipients. Without this information it is not possible to accurately estimate the program’s economic impact or net fiscal impact for the State.

The current data collected by the Department is sufficient to conduct an economic impact analysis should the program receive the requisite number of firms participating.

Within the quantifiable impacts, there are jobs associated with the credit, and, from a ‘but for’ test perspective, there is a fair likelihood that the jobs would not be retained without the credit, which has a lengthy eligibility period and has been used by the respective firms for several years.

Qualitative Impacts

While utilization of the program is low, it is possible the localized impacts are significant. Natural disasters large enough to require an emergency declaration are unlikely to damage just one facility. Offering the incentive to retain employees in these businesses while they repair and return to full capacity provides a back stop to a local economy. As has been seen through the COVID-19 pandemic and the “return to work” conversation, having employees in physical proximity generates additional spending and supports additional jobs. Communities that rely on these employees to purchase goods and services benefit from maintained, and in some cases higher, levels of employment associated with the program.

ROI Discussion

The program issued \$3.6 million in tax credits in 2022 to generate total wages of \$59.6 million, which includes both retained and net new jobs. Since the inception of the program, the average cost per job retained is about \$3,800 including a high of \$4,753 in 2013. The average wage per job in the same period is about \$75,000 though this figure includes retained and net new jobs. Both of these data points would

²⁵⁴ Further information on the IMPLAN model is provided in Appendix A.



suggest a positive return on investment should the pattern be consistent across a larger sample size. When taken together with the qualitative impacts discussed in this section, it is highly likely that the program has a positive overall return on investment. Utilization is very limited due to the specific intent of the program, which limits its overall impact to the New York economy. Similar credits are not available in other states, which may point to a lack of need in general. The State might consider studying the communities where the tax credit was claimed in order to understand the experience of the businesses receiving the credit in comparison to others that were either not physically damaged to the same extent and therefore ineligible or were simply unaware of the program's offer. These conversations could provide insight into whether the program requirements are too stringent or if the market for this type of relief is simply smaller than the other ESD programs.

Summary Findings

The Empire State Jobs Retention Credit is targeted at strategic industries with physical damage related to a declared emergency that could impact on their operations and employment levels. In this respect it is a sensible approach. Its limited use is, no doubt, related to the specific set of facts and circumstances that can trigger eligibility for it. In that respect, the credit may be seen as well-crafted and targeted.

The limited use triggers data confidentiality requirements and does not allow for an economic impact analysis. It is notable, however, that the credit's length of eligibility – 10 years for qualifying firms – does not align with incentive best practices, and the state may wish to determine whether a greater up-front benefit for a shorter period of time would be more beneficial.



Life Sciences Tax Credit



Executive Summary

Purpose and History

New York state's life sciences industry has seen significant growth since 2017 when its Life Sciences Initiative was formally launched. As part of this coordinated effort, the Life Sciences Tax Credit is designed to provide incentives to businesses investing in research and development (R&D) in the State.

Design and Administration

The program allocates \$10.0 million per year for 10 years to support new life sciences businesses in NYS. Between 2018 and 2028, eligible companies can receive a fully refundable credit based on qualified research and development expenditures incurred in NYS.

Qualified research expenses are defined as wages paid or incurred to employees for R&D, supplies used in research, and computer usage rights for research. Contract research expenses are excluded. There are no standard reporting requirements, but Empire State Development (ESD) reserves the right to review any relevant records.

Use

Since 2020, the Life Sciences Tax Credit Program has made 57 awards to qualified research and development investments. The average award is about \$244,000. Overall, this represents approximately \$113 million in R&D investments from the life sciences industry, leveraging an additional \$100 million. The majority of the awards, 48 out of 57, were made in New York City. The remaining awards were made in Central NY (3 awards), Mid-Hudson (3), and Southern Tier (3).

Overall utilization is low, at least compared to the program annual cap. There has not been a single year where the program approached its annual cap of \$10 million.

Return on Investment

The program has generated an estimated 1,771 total jobs at a relatively high average income of \$107,000 per year. The IMPLAN economic impact model estimates that, when accounting for foregone revenue, the ROI is \$0.66 for \$1.00 of incentive awarded. However, incentives that focus on research and development are generally undervalued, as the model cannot effectively value R&D that results in new products or processes that arise from it.

Summary Findings

It is likely that the use of the program is negatively impacted by the Excelsior Jobs Program, as it offers similar benefits, and some possible program participants may choose it instead. It is likely that the design focus offers promise that the return on investment is adequate for the state. There are design aspects that might be reconsidered, particularly the length of the incentive benefit.



Background

Incentive Purpose

The Life Sciences Tax Credit is designed to encourage and attract new life sciences companies to fund research and development within New York State (NYS). It is one component of the State's Life Science Initiative, which was authorized in April 2017.²⁵⁵

Legislative History

The credit was established in the tax year 2018 and extends to December 31, 2027.²⁵⁶

Incentive Design

The Life Sciences Research and Development Tax Credit Program allocates \$10.0 million per year for 10 years to support new life sciences businesses in NYS.

Between 2018 and 2028, eligible companies can receive a fully refundable credit based on qualified research and development expenditures incurred in NYS.

Incentive Benefits

Companies that have 10 or more employees receive a 15 percent credit, and companies with 10 or less receive a 20 percent credit. For eligible firms, the credit is capped at \$0.5 million and allowed for up to the three years following the first taxable year, with a lifetime cap of \$1.5 million.

Incentive Requirements

Program application is available to a new business entity whose efforts are focused on research, development, technology transfer and commercialization in any life science field. The application review includes tax returns, financial statements, job descriptions and their salaries, withholdings, wage reports, and unemployment insurance returns.

Life sciences fields include:

- Agricultural biotechnology
- Biogenetics
- Bioinformatics
- Biomedical engineering
- Biopharmaceuticals
- Academic medical centers
- Biotechnology
- Chemical synthesis
- Chemistry technology

²⁵⁵ "Life Science Initiative Annual Report: 2022", Empire State Development Corporation, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Life-Science-Initiative-Annual-Report-2022.pdf>.

²⁵⁶ "NY Tax Law § 43 – Life Sciences Research and Development Tax Credit", Justia US Law, accessed online at <https://law.justia.com/codes/new-york/2019/tax/article-1/43/>.



- Medical diagnostics
- Genomics
- Medical image analysis
- Marine biology
- Medical devices
- Medical nanotechnology
- Natural product pharmaceuticals proteomics
- Regenerative medicine
- RNA interference
- Stem cell research
- Medical and neurological clinical trials
- Health robotics
- Veterinary science

Qualified research expenses are defined as wages paid or incurred to employees for R&D, supplies used in research, and computer usage rights for research. Contract research expenses are excluded. There are no standard reporting requirements, but Empire State Development (ESD) reserves the right to review any relevant records.

Incentive Use

The Life Sciences Tax Credit is part of a larger effort by NYS to develop its life sciences industry. The Life Sciences Initiative through ESD was designed to fill specific challenges to growth in the space, including:

- Limited ability to commercialize basic research,
- Lack of managerial talent, resulting in academic Intellectual Property leaving New York,
- Lack of early-stage venture capital investments,
- Lack of commercial incentives and affordable space,
- Disconnect between upstate and downstate.

As part of this commitment to the industry, NYS's Excelsior Jobs Program includes life sciences as a target industry per its eligibility criteria. Relatedly, the overall investment in the life science industry has increased during the course of the initiative – taking it from the ninth ranked state in terms of private investment to third, behind Massachusetts and California.²⁵⁷ These developments are positive and associated with additional economic impacts, but this evaluation is limited to the economic impact of the specific tax credit for research and development employment.

The first year of data for the program is 2018, but the first reports on activities were received in 2020. Since 2020, the number of reports has been uneven. A maximum of 32 reports were received in 2021, while 7 were received in both 2022 and 2023. Since 2018, approximately \$13.1 million in tax credits have been awarded, with an average benefit per report of \$229,077. There has not been a single year where the program reached its \$10 million annual cap, and its total remains well short of its \$100 million program cap. One reason for this may be the Excelsior program capturing some potential applicants for the Life Sciences credit – a firm receiving Excelsior funding would not be eligible for both programs.

²⁵⁷ "New York's Life Sciences Industry Enters High-Growth Phase for Investment & Job Creation", Partnership Fund for New York City, April 2021, accessed online at <https://pfnyc.org/wp-content/uploads/2021/04/New-Yorks-Life-Sciences-Industry-Enters-High-Growth-Phase-for-Investment-Job-Creation-Partnership-Fund-for-New-York-City-April-2021.pdf>.



Table 168: Total Tax Benefits and Average Tax Credit Used

Year	Number of Reports	Total Credit Benefits	Average Tax Credit Issued
2020	11	\$2,670,827	\$242,802
2021	32	\$6,724,446	\$210,139
2022	7	\$1,640,117	\$234,302
2023	7	\$2,021,998	\$288,857
Total	57	\$13,057,389	\$229,077

Source: Data provided by ESD.

In terms of geography, the Life Sciences program has reached four of the ESD Regions since inception. Most of the reports are associated with projects in New York City, with three reports each in Central NY, Mid-Hudson, and Southern Tier regions. Due to the small sample sizes, the project team was not able to analyze the contents of the regional awards.

Table 169: Total Reports by ESD Region

	Central NY	Mid-Hudson	New York City	Southern Tier
2020	1	1	8	1
2021	2	2	26	2
2022	0	0	7	0
2023	0	0	7	0
Total	3	3	48	3

Source: Data provided by ESD.

A program goal is to incent additional R&D investment from Life Sciences firms. The following table highlights total spending by year for program participants as well as the private investment associated with the project. Since 2018, participants in the program have spent approximately \$113.8 million. For context, Empire State Development reported \$2.3 billion in private investment into life sciences firms in 2019-2020 alone.²⁵⁸ While that number includes more than just R&D investments, it shows that the relative level of spending and investment leveraged through this specific tax credit to be a small part of a larger initiative.

²⁵⁸ "Life Science Initiative Annual Report: 2022", Empire State Development Corporation, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Life-Science-Initiative-Annual-Report-2022.pdf>.



Table 170: Total Spending and Private Investment Leveraged

	Total Spending in NYS (R&D Qualified Expenses)	Private Investment Leveraged
2020	\$23.0 million	\$20.4 million
2021	\$55.7 million	\$48.9 million
2022	\$21.9 million	\$20.3 million
2023	\$12.7 million	\$10.7 million
Total	\$113.4 million	\$100.4 million

Source: Data provided by ESD.

Benchmarking

To better understand the efficacy of the New York State’s Life Sciences Tax Credit, this section benchmarks the reach and impact data of the program against that of similar incentive programs across the U.S. Specifically, the section compares each program’s value of credits claimed, jobs created, and eligibility requirements as indicators of reach and impact. The benchmark programs have been selected based on proximity, size, and eligibility of programs using CREC’s State Business Incentive Database, with special focus given to states considered primary competitors with New York for attracting business.

Other states like California and Massachusetts are traditionally considered innovation hubs in the industry, but New York is beginning to emerge as a key market. As you will see in the benchmarking section below, Massachusetts boasts an impressive amount of spending on credits from its program and has created a substantial number of jobs as a result.

- Table 171 compares the reach and impact metrics of comparable state incentive programs to that of the Life Sciences Tax Credit Program.
- Since the data availability years are different for each program, the metrics were compared on an “average annual” basis. This methodology makes comparing the programs across different data years possible.

Table 171: Comparable Programs

State/ Program	Operational Years	Data Years	AA Claimants	AA Value of Credits Claimed	AA Jobs Created
New York: Life Sciences Tax Credit	2018-2028	2018-2019	N/R	\$1.6 million	N/R
Georgia: Life Sciences Facilities Fund	2005*	N/R	N/R	N/R	N/R
Massachusetts: Life Sciences Tax Incentives Program	2009*	2009-2023	33	\$25.9 million	942
Pennsylvania: Life Science Greenhouse Initiative	2001*	2016-2018	15	\$1.26 million	N/R

* Is a currently running with no current scheduled sunset date.



Georgia: Life Sciences Facilities Fund⁴

The Georgia Life Sciences Facilities Fund provides low-cost loan assistance for the purchase of fixed assets that are considered relocation or expansion sites to life science businesses. Loans are specifically dedicated to life science companies that are unable to locate or expand without financial assistance, filling gaps unmet by the private sector (including angel investors, venture capital, traditional commercial financing, developer financing, etc.). Eligible jobs follow the strict definitions of NAICS codes [3254](#) (Pharmaceutical and Medicine Manufacturing) and [3391](#) (Medical Equipment and Supplies Manufacturing). There is no cap on loan amount, but generally they will not exceed 25% of the fixed asset needs of the company's Georgia location. Loan approvals are left to up to the discretion of the Board of the Georgia Department of Community Affairs following an application review process. Quantitative data is not available at the time of this report. However, Governor Kemp announced in April 2023 that Meissner, a California-based life sciences manufacturer, is building a \$250 million facility in Athens GA. The project will be complete sometime in 2026 and aims to create 1,700 jobs.⁵

Massachusetts: Life Sciences Tax Incentives Program⁷

The Massachusetts Life Sciences Center, a quasi-public agency, is allowed up to \$30 million a year to distribute funds via the Life Sciences Tax Incentive Program, which is a combined set of several different tax incentives that relieve the tax burden of life science R&D and commercialization expenditures. For-profit life science firms doing research, development, manufacturing, or commercialization in Massachusetts are eligible. The State's life sciences definition is very similar to the State of New York.²⁵⁹ Below is a list of the individual incentives under this program:

- Life Sciences Refundable Investment Tax Credit (ITC)
- Life Sciences Refundable FDA User Fees Tax Credit
- Life Sciences Refundable Section 38M Research Tax Credit
- Life Sciences Research Tax Credit
- Life Sciences Refundable Jobs Tax Credit

Companies must employ at least 10 permanent full-time employees and commit to hiring at least 10 net new jobs in 2021, while retaining those jobs through 2025. The program costs between \$20-25 million annually. In the most recent year with data, 2019, the program offered incentives to participants totaling \$17.7 million and supporting 180 jobs. Starting in 2009, the program has generated 10,361 jobs and 356 awards. More than \$285 million has now been distributed to eligible firms. Massachusetts is largely considered a hub of life sciences and innovation with schools like MIT and Harvard.

Pennsylvania: PA Life Science Greenhouse Initiative⁹

The Life Science Greenhouse (LSG) Initiative distributes \$3 million in funds to local partners to administer the funding: the BioAdvance Biotechnology Greenhouse of Southeastern Pennsylvania, Life Sciences Greenhouse of Central Pennsylvania, and the Pittsburgh Life Sciences Greenhouse. Funds support activities that bolster the Life Sciences Greenhouse program in the form of grants, loans, equity investments, royalty/payback agreements, or other forms of financial support. Eligible expenses include those related to direct services to business, technical assistance to clients, and technology and entrepreneurial infrastructure support to regions and the state. Funds can go towards start-ups and incubators, applied R&D projects, information and physical infrastructure, network development, clinical trials, capital investment, related workforce development, intellectual property protection, marketing

²⁵⁹ Massachusetts statute defines life sciences as "advanced and applied sciences that expand the understanding of human physiology and have the potential to lead to medical advances or therapeutic applications including, but not limited to, agricultural biotechnology, biogenerics, bioinformatics, biomedical engineering, biopharmaceuticals, biotechnology, chemical synthesis, chemistry technology, diagnostics, genomics, image analysis, marine biology, marine technology, medical devices, nanotechnology, natural product pharmaceuticals, proteomics, regenerative medicine, RNA interference, stem cell research and veterinary science."



activities, and management assistance. The program is required to collect performance data consistently in preparation for an annual report. Data should include number of jobs created or retained, commercialization pipeline information, new companies, additional federal, state, and other funding amounts, number of applications, generated investment, and other program impacts.¹⁰ From 2015 to 2018, approximately \$3.78M was awarded and 45 companies received the grant between the three branches.

State Comparisons

- States are utilizing an assortment of approaches to incentivize Life Science businesses. Programs spanning from loans to bundles of tax credits aim to accomplish goals ranging from generating jobs and investment to encouraging R&D.
- Other programs have far more descriptive reporting requirements to track incentive benefits and economic impacts relative to New York.
- New York's lack of reporting makes it harder to fully recognize impacts relative to other programs.
- Not only is New York's program newer, the state itself is also an emerging market in life sciences and innovation. Thus, lessons may be gleaned from what other states are doing with their respective incentive programs in the field.

Return on Investment

Economic Impact Model Methodology and Definitions

As previously noted, the project team used an IMPLAN model for NYS. IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include "non-market" transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

The project team submitted a request to the Empire State Development Corporation (ESDC) for the most recent five years of data for the Life Sciences tax credit program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment, which in this case includes qualified Research and Development (R&D) expenditures.



For the impact analysis, the project team used an IMPLAN model for New York State. The project team aggregated industries into sectors that correspond to Life Sciences. The program does not report job creation or retention, but it did include total wages, which provided the input for the IMPLAN modeling once converted to IMPLAN's employee compensation.¹ Table 172 presents the impacts reported by ESD that were imported to IMPLAN for the analysis with the annual impacts by sector grouped by year to account for any inflation effects.

Table 172: Reported Job Creation Impacts, 2020 to 2023

Year	No. of Reports	Actual Jobs Created (FTE)	Total Wages (\$ Millions)
2020	11	0	\$17.8
2021	32	0	\$40.8
2022	7	0	\$20.4
2023	7	0	\$8.9
Total 2020-2023	57	-	\$87.9

Source: Job Creation Reported by ESD.

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the Life Sciences program supported a total of 1,771 total (direct, indirect, and induced) jobs in the state of New York between 2020 and 2023.

Table 173: Total Job Impacts in New York State, 2020 to 2023

Year	Direct	Indirect	Induced	Total
2020	186	99	115	400
2021	426	226	262	914
2022	213	113	131	457
2023	-	-	-	-
Total	826	438	507	1,771
Annual Average	206	110	127	443

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.

Impact on Revenues for New York State and its Municipalities

Table 174: Estimated Taxes in New York State, Total for 2020 to 2023 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$3	\$2	\$4	\$10
County	\$0	\$0	\$1	\$2
State	\$4	\$2	\$3	\$10
Total State, County, Local	\$8	\$5	\$8	\$21

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.



Table 175: Total Taxes, Total for 2020 to 2023 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$7.6	\$5.3	\$8.3	\$21.2
Federal	\$21.7	\$9.1	\$7.5	\$38.2
Total Taxes	\$29.3	\$14.4	\$15.8	\$59.4

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported ESD.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 176: Labor Income, 2020 to 2023 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2020	\$23,880.6	\$10,148.1	\$8,895.4	\$42,924.1
2021	\$54,608.1	\$23,205.9	\$20,341.2	\$98,155.2
2022	\$27,316.7	\$11,608.3	\$10,175.3	\$49,100.3
2023	\$0.0	\$0.0	\$0.0	\$0.0
Annual Average	\$26,451.4	\$11,240.6	\$9,853.0	\$47,544.9

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 177: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$128,000	\$103,000	\$78,000	\$107,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The But-For Test

Since the “true” level of the Life Science tax credit’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

In the case of the Life Science tax credit program, the state does not break even on its investment even in the unlikely event this incentive is 100 percent responsible for the tax revenue generated by program participants.

Qualitative Economic Benefits

As mentioned in the introduction, the life sciences industry in New York is certainly growing, even if the Life Sciences Tax Credit is only a small part of the equation. Providing this targeted economic development support has moved New York up the rankings in a short period of time. The industry creates high paying



jobs, and benefits from concentration of businesses and talent. A recent Partnership Fund for New York City report cited the State's increase in National Institutes of Health (NIH) funding, which has a velocity greater than Massachusetts and California. In 2020, New York state's universities and research institutions attracted \$3.2 billion in public funding.²⁶⁰ As more of the life science break throughs developed through NIH funding are commercialized, it creates a virtuous cycle of capital and talent accumulation.

Summary Findings

Whether the program yields a net benefit to the state of New York is a function of several factors, including economic impacts, revenue generated, and qualitative benefits to the State and its residents. Between 2020 and 2023, the foregone revenue for this program totaled \$13.1 million. For the program to provide a positive net fiscal benefit, it must return more than that foregone revenue through the taxes associated with the economic activity from that program.

Table 178: Reported Direct Impacts, 2020 to 2023

Year	No. of Reports	Total Wages (\$ Millions)	Qualified R&D Expenses (\$ Millions)	NY State Foregone Revenue (\$ Millions)
2020	11	\$17.8	\$23.1	\$3
2021	32	\$40.8	\$55.7	\$7
2022	7	\$20.4	\$21.9	\$2
2023	7	\$8.9	\$12.7	\$2
Total 2020-2023	57	\$87.9	\$113.4	\$13.1

Source: Impacts Reported by ESD.

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the Life Sciences analysis, the project team also based this analysis only on the taxes generated by the job creation and job retention. Generally starting a new business is more challenging than expanding an existing business, but these new businesses play an important role in diversifying the economy and promoting innovation. Job retention is included because it helps to account for the longevity of the new businesses.

²⁶⁰ "New York's Life Sciences Industry Enters High-Growth Phase for Investment & Job Creation", Partnership Fund for New York City, April 2021, accessed online at <https://pfny.org/wp-content/uploads/2021/04/New-Yorks-Life-Sciences-Industry-Enters-High-Growth-Phase-for-Investment-Job-Creation-Partnership-Fund-for-New-York-City-April-2021.pdf>.



Table 179: Fiscal Return on Investment to State of New York, 2020 to 2023

Total State Costs and Return (2018-2022)	Total Tax Credits Awarded	Direct Taxes	Total Taxes
State Taxes Only (\$M)	\$13.1	\$4.3	\$9.7
Return on \$1 in Foregone Revenue		\$0.33	\$0.74

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

From the foregone revenue of \$13.1 million, the Life Sciences program generated \$4.3 million in direct state taxes and total state taxes of \$9.7 million. The state's spending provided an overall return of \$0.33 based on direct taxes to the state and \$0.74 based on total state taxes, which is less than the state's investment.

In the context of the State's larger push for a larger life sciences industry presence, the ROI of the program is difficult to quantify. On the one hand, it plays one role in a crowded initiative that appears to have been successful over the past several years. However, that success has been driven in large part by venture capital and other investment dollars flowing into the State, and not necessarily through the specific R&D hiring that this program is targeted to incentivize. Clearly the industry is futureproof – creating high paying jobs developing important treatments, products, and approaches that increase quality of life led by firms that will continue to increase in size and value.

There is also significant value to a state, region, or city being seen as a source of these innovative developments which in turn can drive further growth as successful start-ups emerge and a virtuous circle of talent and capital accumulation develops. The State should conduct additional research – such as interviews and focus groups with recipients of the credit – and determine the need for this specific Life Sciences tax incentive given the current industry climate. If it is found to be a meaningful factor in investment decisions, it should continue through its sunset date. If there are more pressing needs that would allow recipients increased access to private capital, the State should redeploy the funding in other channels under the Life Sciences Initiative that have been more successful to this end.



Restaurant Return to Work Tax Credit



Executive Summary

Purpose and History

New York State's Restaurant Return-to-Work Tax Credit was originally effective for tax years beginning on or after January 1, 2021, and before January 1, 2022. The credit was offered to small independently owned and operated restaurants with less than 100 employees. As the name implies, the credit was intended to help restaurants return to regular operations by providing assistance with employee costs.

Design and Administration

To be eligible for the credit, restaurants had to be located in areas that were designated orange or red zones by the New York State Department of Health for at least 30 consecutive days during the pandemic and demonstrate COVID-related losses of at least 40 percent in revenue or employee headcount.

The credit was \$5,000 per new employee added after January 1, 2021. In 2021, the incentive was capped at \$50,000 per restaurant. In 2022, the program was expanded to increase the cap for those previously receiving the credit to 20 employees and allowing a total maximum credit of \$100,000. The program has no termination date but will be closed after it provides \$35 million in tax credits. As of December 31, 2022, the program had expended \$24.7 million of the \$35 million cap.

Benchmarking

Overall, the New York state program has several characteristics that make it unique in terms of COVID-19 pandemic response incentives – including being a tax credit and being tied to a specific emergency level. It does follow many best practices for incentive design including creating a cap for individual awards. It also appears to be among the strongest in terms of data collection, though this is only based on publicly available information.

New York's program was the only tax credit identified among states offering COVID-19 related relief for businesses in the hospitality industry. Several states, including Pennsylvania, offered grant and/or loan funding in place of a tax credit. This could have been a programmatic choice to increase the velocity of funding at a critical time, however New York's approach appears to have achieved its goals in terms of speed to award.

Use

Most of the restaurants receiving the credit were based in New York City - 542 of the 601 recipients. The program generated 6,610 new jobs and retained 6,340 jobs, measured as full-time equivalents (FTEs). Out of the 761 applications submitted (of which 601 were processed as of December 31, 2022), 126 restaurants applied for more than \$50,000 (10 employees) in credits, and 53 restaurants applied for the full credit of \$100,000 (20 employees).²⁶¹ Of these credits, 601 were processed through December 31, 2022, with an average credit amount of \$41,023.

²⁶¹ "New York State Restaurant Return to Work Tax Credit Program Report", Empire State Development, December 31, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Q42022-Restaurant-Return-To-Work-Tax-Credit-Report-Final.pdf>.



Return on Investment

Based on the economic impacts estimated by the IMPLAN model, the Restaurant Return-to-Work Tax Credit program supported 9,200 total jobs in New York state, with an average labor income per employee of \$52,000. The Restaurant Return-to-Work Tax Credit program generated a positive return on investment as well as highly positive economic impacts. With an investment of \$24.7 million, the output generated by this program is estimated to be \$30.6 million in total state taxes, an overall return of \$1.24 per dollar invested.

The COVID-19 Pandemic had a profound impact on the restaurant industry, and a significant percentage of restaurants went out of business. Given that reality, it is likely that ‘but for’ the credit, employment at eligible restaurants would not have reached the levels associated with the tax credit.

The number of seated diners in restaurants reached pre-pandemic levels in December 2022, and by May 2023, restaurant employment has returned to pre-pandemic levels.²⁶² While New York State still lags slightly behind the rest of the country in terms of restaurant employment compared to pre-pandemic levels,²⁶³ it is reasonably likely that without this program the recovery of the industry would have continued to lag.

Background

Incentive Purpose

The Restaurant Return-to-Work Tax Credit provides COVID-impacted restaurants with an incentive to bring staff back-to-work, and to increase hiring at New York State (NYS) restaurants.

Legislative History

The Restaurant Return-to-Work Tax Credit was originally effective for tax years beginning on or after January 1, 2021, and before January 1, 2022. Business entities that received the tax credit were eligible for an additional Restaurant Return-to-Work Credit for the tax year that ends December 31, 2022. Due to high demand for the program, the cap for the number of jobs eligible and the total credit cap per recipient was increased in the FY2023 budget.

Incentive Design

The Program was open to eligible restaurants located in New York City, or areas outside of New York City that were designated an orange or red zone by the New York State Department of Health for at least 30

²⁶² “Restaurant Sector,” Office of the New York State Comptroller, accessed online at <https://www.osc.state.ny.us/osdc/reports/nyc-sectors/restaurant>.

²⁶³ *Ibid.*



consecutive days during the pandemic.²⁶⁴ The program was open to all small independently owned and operated restaurants (excluding franchises) with less than 100 employees. Eligible applicants were required to demonstrate COVID-related losses of at least 40 percent in gross receipts or full-time equivalent employees. To be considered for the program, new hires were defined as full-time workers and had to represent a net increase in the workforce.

Restaurants were provided with a fast-track option to claim the credit before the end of the 2021 tax year if they demonstrated a net employee increase of at least one full-time employee between April 1, 2021, and August 31, 2021. Alternatively, restaurants were able to claim the tax credit on their 2021 New York State tax return if the business demonstrated a net employee increase of at least one full-time employee between April 1, 2021, and December 31, 2021.

Incentive Benefits²⁶⁵

Qualifying businesses were eligible for a tax credit of \$5,000 per net new worker above the number of workers the business had in January of 2021, up to 10 workers (or a total of \$50,000) per business. In response to many businesses increasing employment by more than 10 jobs, the cap was increased from 10 to 20 employees and the maximum total credit increased to \$100,000 as part of the FY 2023 budget. In order to receive the additional credits, the initial application had to be submitted by July 1, 2022, and the business had to verify that the jobs created remained.

The program has a maximum expenditure of \$35.0 million in tax credits and will close once the \$35.0 million is depleted.²⁶⁶ By the end of 2022, the program had expended \$24.7 million.²⁶⁷

Incentive Requirements

Applicants had to demonstrate COVID-related losses of at least 40 percent in gross receipts or full-time equivalent employees. Applicants had to hire at least one full-time worker at the restaurant. Applicants were required to submit certain supporting documentation with the application.

Incentive Use

Considering that this credit was enacted in response to the COVID-19 pandemic and is time-limited, the data provided by Empire State Development in Table 186 covers the period from incentive inception to December 31, 2022. Of the 601 credits issued, 348 participants (58 percent) took advantage of the advance payment option.

²⁶⁴ The state used the color classifications to identify regions in the state where COVID-19 infections were on the rise, with red zones being areas with the biggest increase, and orange zones the next biggest. These were generally areas with the largest public restrictions.

²⁶⁵ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 46: Restaurant return-to-work tax credit", The New York State Senate, April 23, 2021, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/46>.

²⁶⁶ "Restaurant Tax Credit", Empire State Development, 2023, accessed online at <https://esd.ny.gov/restaurant-return-work-tax-credit>.

²⁶⁷ "New York State Restaurant Return to Work Tax Credit Program Report", Empire State Development December 31, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Q42022-Restaurant--Tax-Credit-Report-Final.pdf>.



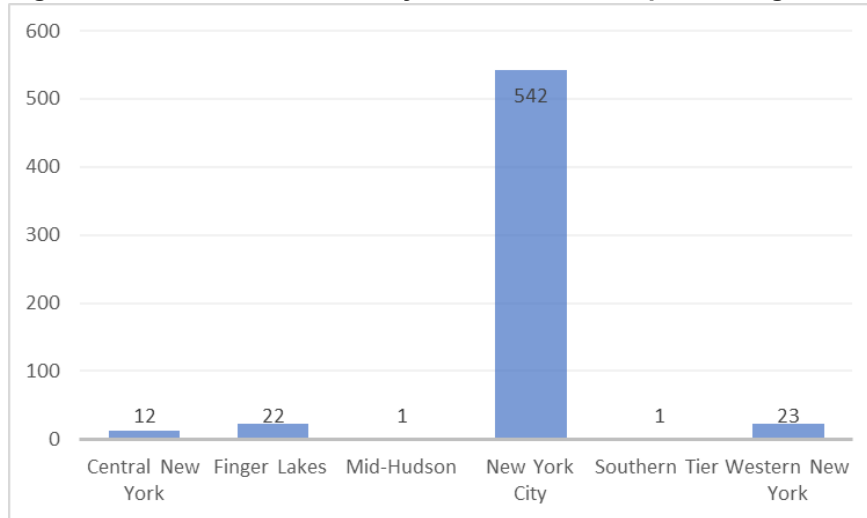
Table 180: Overall Program Tax Credit Detail

No. of Credits Issued	Total Tax Benefits	Average Tax Credit Issued	Jobs Retained	Jobs Created	Total Wages for All Jobs
601	\$24.7 million	\$41,023	6,340	6,610	\$220.9 million

Source: Data Provided by ESD; New York State Restaurant Return to Work Tax Credit Program Report, December 31, 2022

As Figure 28 illustrates, of the 601 awards made through this program, the substantial majority were for restaurants located in the New York City Economic Development Region. Only locations in New York City and certain areas of Chemung, Erie, Monroe, Onondaga, Rockland, and Westchester Counties qualified for the credits.

Figure 28: Number of Awards by Economic Development Region



Source: “New York State Restaurant Tax Credit Program Report,” December 31, 2022



Benchmarking

While many states had grant and loan programs to aid hospitality businesses in response to the COVID-19 pandemic, NYS’s tax credit program was unique.

While not entirely analogous to the New York Restaurant Tax Credit, this section benchmarks the reach and impact data of the program against that of similar non-COVID-related incentive programs offered by other states. Quantitative data, such as the number of claimants, value amount of credits claimed, and jobs created is not available at this time. Therefore, the benchmarking analysis will primarily rely on qualitative data on each program’s intent and eligibility requirements.

Table 181: Programs in Other States

State/Program	Operational Years	Funding Type	Firms Eligible to Receive Benefit
New York: Restaurant Return to Work Tax Credit	2021-2022	Tax Credit	In person food and beverage establishments
Illinois: Hospitality Emergency Grant Program	2020	Grant	Small bars, restaurants, caterers, and hotels
Pennsylvania: COVID-19 Hospitality Industry Recovery Program	2021	Grant / Pass Through Funding	Accommodations and Food Service Sector
Wisconsin: We’re All in Program	2020	Grant	Hospitality businesses
Delaware: Hospitality Emergency Loan Program	2020	Loan	Hospitality and tourism businesses

* Currently running with no scheduled sunset date.

Analysis of Other State Programs

New York’s program was the only tax credit identified among states offering COVID-19 related relief for businesses in the hospitality industry. Several states, including Pennsylvania,²⁶⁸ offered grant and/or loan funding in place of a tax credit. This could have been a programmatic choice to increase the velocity of funding at a critical time, however New York’s approach appears to have achieved its goals in terms of speed to award.

Eligibility varied by state, but all were generally targeted at bars, restaurants, and other hospitality services that were especially impacted by the pandemic. In Pennsylvania and Delaware,²⁶⁹ the state identified NAICS codes. New York and Pennsylvania were most specific in terms of size requirements; other states,

²⁶⁸ “Covid-19 Hospitality Industry Recovery Program”, Pennsylvania Department of Community and Economic Development, February 2021, accessed online at <https://dced.pa.gov/download/covid-19-hospitality-industry-recovery-program-guidelines-2021/?wpdmdl=105383>.

²⁶⁹ “Delaware launches emergency loan program for hospital industry small businesses. Here are the details”, Delaware Division of Small Business, accessed online at <https://business.delaware.gov/2020/03/18/delaware-launches-emergency-loan-program-for-hospitality-industry-small-businesses-here-are-the-details/>.



including Illinois²⁷⁰ and Wisconsin²⁷¹ targeted “small businesses” but did not publish size requirements such as number of employees or revenues. Illinois’ program was unique in that businesses applied for grant funding, then a lottery was conducted to select the firms that passed the initial application screening.

Each program had a cap associated with individual awards. In Wisconsin and Illinois, there were multiple caps depending on the type of business receiving the award. For example, in Illinois, bars and restaurants received an average grant of \$14,000 while hotels received an average of \$30,000. New York appears to be the only program to have adjusted in the course of the program.

Benchmarking Summary

Overall, the NYS program has several characteristics that make it unique in terms of COVID-19 pandemic response incentives – including being a tax credit and being tied to a specific emergency level. It does follow many best practices for incentive design including creating a cap for individual awards. It also appears to be among the strongest in terms of data collection, though this is only based on publicly available information.

A leading practice adopted for this incentive program was the inclusion of a process to expedite the receipt of the credit by businesses by allowing them to claim the credit at the end of August, instead of the end of the year. This allowed them to have the cash on hand to hire and/or rehire workers that they might not have been able to afford previously.

Many restaurant jobs are part time, rather than full time. Some restaurant owners have pivoted further into part time employment to deal with the decreased attendance and the more ‘rush hour’ cycles of their daily and weekly business.²⁷² This program did not take into account that part of the restaurant business structure but could be altered should a future need arise to provide a decreased credit to encourage greater hiring of part time employees.

Return on Investment

Available Data

The project team requested data from ESD to determine use of the tax incentive, and used the data provided as well as information from the Database of Economic Incentives available on the New York State website, and the New York State Tax Credit Program Report for the Restaurant Return-to-Work Tax Credit, issued by ESD, dated December 31, 2022.

²⁷⁰ “Hospitality Emergency Grant Program – Grant Recipients”, Illinois Department of Commerce and Economic Opportunity, accessed online at <https://dceo.illinois.gov/smallbizassistance/hospitalitygrantawards.html>.

²⁷¹ “We’re All in and Wisconsin Tomorrow Programs”, Wisconsin Legislative Audit Bureau, November 2022, accessed online at https://legis.wisconsin.gov/lab/pdfs/viewer.html?file=/media/3496/22-21full_620724.pdf#B2.

²⁷² Jack Holmes, “The Restaurant World’s Tipping Point,” Esquire, November 19, 2021, accessed online at <https://www.esquire.com/news-politics/a38289128/restaurants-minimum-wage-new-york/>.



Economic Impact Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for NYS.²⁷³ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment.
- Location (city, county) of companies claiming exemptions.

The project team aggregated industries into sectors that correspond to the reported jobs created and retained by for the restaurant sector.

Based on the IMPLAN model, using the reported wages generated by the Restaurant Return-to-Work Tax Credit program of \$220.9 million, the program supported a total of 9,200 total (direct, indirect, and induced) full-time-equivalent jobs in the state of New York. This number of jobs is lower than the total number of jobs reported above because jobs were created throughout the period.

Table 182: Total Job Impacts in New York State, Program Inception through December 31, 2022 (FTEs)

Direct	Indirect	Induced	Total
6,900	1,100	1,300	9,200

Source: *Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.*

²⁷³ Further discussion of the IMPLAN model can be found in Appendix A.



Impact on Revenues for New York State and its Municipalities

Table 183: Estimated Taxes in New York State, Program Inception through December 31, 2022 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$19.6	\$8.7	\$11.0	\$39.3
County	\$3.5	\$1.6	\$2.1	\$7.3
State	\$16.2	\$6.8	\$7.5	\$30.6
Total State, County, Local	\$39.4	\$17.1	\$20.6	\$77.1

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 184: Total Taxes, Program Inception through December 31, 2022 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$39.4	\$17.1	\$20.6	\$77.1
Federal	\$54.9	\$20.8	\$18.6	\$94.3
Total Taxes	\$94.3	\$37.9	\$39.3	\$171.4

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 185: Labor Income, Program Inception through December 31, 2022 (Dollars in Millions)

Direct	Indirect	Induced	Total
\$273.6	\$106.3	\$98.1	\$478.1

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 186: Average Labor Income

	Direct	Indirect	Induced	Overall
Average per Employee	\$40,000	\$99,000	\$78,000	\$52,000

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The But-For Test

As noted in the introduction, the ‘but for’ test is an important step in the process of determining the benefit of an incentive, but it is practically impossible to quantify with any degree of certainty. It is unlikely that 100% of the estimated economic and fiscal benefits from the business activity described in this section can be attributed to the influence of the Restaurant Return-to-Work Credit. Since the “true” level of the Restaurant Return-to-Work Credit’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax



credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

As noted below, the break-even point for this incentive is 80.6 percent, indicating that the incentive would have to be responsible for 80.6 percent of the total state tax impact for the state to break even on its investment. Given the unique circumstances of the COVID-19 pandemic and its impacts on the restaurant industry, it is reasonable to assume that a large proportion of the economic impact detailed above is attributable to this tax credit and that the “but for” test is met.

Other Qualitative Economic Benefits

Over the course of this program more than 6,000 workers have been hired, or rehired. Of the 761 applications for this program submitted by the end of 2022, 126 were for more than 10 workers, and 53 were for the full credit of 20+ new hires.²⁷⁴

In May 2021, a survey showed that 53 percent of currently employed restaurant workers were considering leaving, and 78 percent said that they would stay for a full living wage plus tips.²⁷⁵ This demand for higher wages is being met by higher salaries from employers who are trying to keep workers, while still being squeezed by inflation. Given this information, it is best to think of this credit as aiding businesses in paying for the increased wages of the employees that they brought back.

The number of seated diners in restaurants reached pre-pandemic levels in December 2022, and by May 2023, restaurant employment has returned to pre-pandemic levels.²⁷⁶ While New York State still lags slightly behind the rest of the country in terms of restaurant employment compared to pre-pandemic levels²⁷⁷, it is likely that without this program the recovery of the industry would have lagged even further behind.

²⁷⁴ “New York State Restaurant Return to Work Tax Credit Program Report”, Empire State Development, December 31, 2022, accessed online at <https://esd.ny.gov/sites/default/files/Q42022-Restaurant-Return-To-Work-Tax-Credit-Report-Final.pdf>.

²⁷⁵ “It’s a Wage Shortage Not a Worker Shortage”, One Fair Wage and UC Berkeley Food Labor Research Center, May 2021, accessed online at https://onefairwage.site/wp-content/uploads/2021/05/OFW_WageShortage_F.pdf.

²⁷⁶ “Restaurant Sector”, Office of the New York State Comptroller, accessed online at <https://www.osc.state.ny.us/osdc/reports/nyc-sectors/restaurant>.

²⁷⁷ *Ibid.*



Summary Findings

Table 187 presents the actual and forecast credit amounts modeled in IMPLAN as a financial investment activity and grouped by year to account for any inflation effects.

Table 187: Reported Direct Impacts, Program Inception through December 31, 2022

No. of Reports	Retained Jobs	Actual Jobs Created	Tax Credits Awarded
601	6,340	6,610	\$24,655,000

Source: Impacts Reported by ESD.

Using taxes is a conservative starting point for whether an incentive pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the Restaurant Return-to-Work Tax Credit program analysis, the project team also based this analysis only on the taxes generated by the job creation and job retention. The project team included job retention, because it helps to account for the longevity of the businesses receiving the credits.

Table 188: Assessment of the "But-For" ROI Requirement (Jobs Created and Retained)

Total State Costs and Return (2021)	Tax Credits Awarded	Direct Taxes	Direct + Indirect + Induced Taxes
State Taxes Only (\$M)	\$24.7	\$16.2	\$30.6
Return on \$1.00 of State Foregone Revenue		\$0.66	\$1.24
"But For" ROI Required to Breakeven			80.6%

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

From the investment of \$24.7 million, the program generated \$16.2 million in direct state taxes and total state taxes of \$30.6 million. The state's investment provided an overall return of \$0.66 per invested dollar based on direct taxes to the state, but \$1.24 based on total state taxes.

Based on this analysis, the Restaurant Return-to-Work Tax Credit program generated a positive return on investment when considering all state taxes, as well as the highly positive economic impacts of incentivizing restaurants to hire and retain workers in a time of pandemic-related uncertainty.



Economic Transformation and Facility Redevelopment Program Tax Credit



Executive Summary

Purpose and History

The Economic Transformation and Facility Redevelopment Program Tax Credit was created in 2011 and is intended to establish support for the economies of communities affected by the closure of certain correctional, juvenile justice, or psychiatric facilities.

Design and Administration

To qualify for the program, a business must be located within an Economic Transformation Area (ETA), which are comprised either of a single location of a former state-owned facility or a radius encompassing the facility and the surrounding area. In addition to being in an ETA, the qualifications require the business must:

- be either a new business or located at a former state-owned psychiatric facility located within the Metropolitan Commuter Transportation District (MCTD) but outside New York City;
- create and maintain at least five net new jobs in the economic transformation area, and
- apply for and receive a certificate of eligibility from ESD.

The program consists of four components: a jobs tax credit component, an investment tax credit component, a job training credit component, and a real property tax credit component. The benefit period for these credits is five consecutive taxable years, beginning with the first taxable year in which five net new jobs are created.

Benchmarking and Best Practices

The project team identified four programs that were similar in scope or had been utilized for a similar purpose as what this program was designed to achieve. The comparable programs include the Pennsylvania State Facility Closure Transition Program, the Texas Defense Economic Readjustment Zone Program, the California Rapid Response Funding Program, the California Community Economic Resilience Fund, and the US Economic Development Administration Public Works and Economic Development Act of 1965.

No program was directly comparable in scope or administration of program and the project team was unable to identify standard best practices.

Return On Investment

There is insufficient data to perform an economic impact and tax revenue analysis of this program, as it has not yet awarded any tax credits.

Summary Findings

According to ESD, there have been no tax credits issued under the program. Out of a total of four applicants, three were granted a certificate of eligibility and preliminary schedule of benefits. None of those three have applied for credits or received any credits as of October 2023. One of the participants, whose benefit period extends through fiscal year 2023, could still apply for credits.



Despite the program's lack of use, several of the targeted facilities have been successfully redeveloped. Those sites include the Arthur Kill Correctional Facility in Staten Island, the Fulton Correctional Facility in the Bronx, and the Harlem Valley Psychiatric Center in Dutchess County. This suggests that the tax credit is not integral to a successful redevelopment effort.

Background

Incentive Purpose

The Economic Transformation and Facility Redevelopment Program Tax Credit establishes support for the economies of communities affected by the closure of certain correctional, juvenile justice, or psychiatric facilities.

Legislative History²⁷⁸

The Economic Transformation and Facility Redevelopment Program Tax Credit is effective for tax years beginning on or after March 31, 2011, and before December 31, 2026.

The program was first introduced in 2011 to support new business in communities affected by the shuttering of certain state juvenile and correctional facilities.²⁷⁹ The law was amended in 2014, 2016, and 2021.²⁸⁰ In 2016, the program was expanded to include a number of state-owned psychiatric facilities that had been closed, waiving the new business requirement at those sites.²⁸¹ In 2021, the program's expiration date was extended from the end of the 2021 calendar year to the end of the 2026 calendar year in response to another round of prison closures.²⁸²

Incentive Design

To qualify for the program, a business must be located within an Economic Transformation Area (ETA), which is comprised either of a single location of a former state-owned facility or a radius encompassing the

²⁷⁸ "Fiscal Year 2024 Annual Report on New York State Tax Expenditures", New York State Division of the Budget, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.

²⁷⁹ "Economic Transformation Program", Empire State Development, accessed online at https://cdn.esd.ny.gov/BusinessPrograms/Data/Economic_Transformation/090811_EconTransformationProgramOverview.pdf

²⁸⁰ "N.Y. Tax Law § 35", Casetext, accessed online at <https://casetext.com/statute/consolidated-laws-of-new-york/chapter-tax/article-1-short-title-definitions-miscellaneous/section-35-multiple-versions-repealed-effective-12312026-economic-transformation-and-facility-redevelopment-program-tax-credit>.

²⁸¹ "Summary of Changes to Existing Tax Credits Enacted as Part of the 2016-2017 New York State Budget", New York State Department of Taxation and Finance, September 23, 2016, accessed online at https://www.tax.ny.gov/pdf/memos/multitax/m16_8c_6i.pdf.

²⁸² "Bill A03009 Summary", New York State Assembly, accessed online at https://nyassembly.gov/leg/?default_fld=&leg_video=&bn=A03009&term=2021&Summary=Y&Actions=Y&Committee%26nbspVotes=Y&Floor%26nbspVotes=Y&Memo=Y&Text=Y&LFIN=Y&Chamber%26nbspVideo%2FTranscript=Y.



facility and the surrounding area. The size of the area depends on the type of shuttered facility, the number of people who had been employed there, and other factors including the population density, poverty rate, and unemployment rate of the surrounding community, as well as whether it is located in the Metropolitan Commuter Transportation District (MCTD), Port Authority District, or New York City.²⁸³

In addition to being in an ETA, the qualifications require the business must:

- Be either a new business or located at a former state-owned psychiatric facility located within the Metropolitan Commuter Transportation District (MCTD)²⁸⁴ but outside New York City.
- Create and maintain at least five net new jobs in the economic transformation area, and
- Apply for and receive a certificate of eligibility from Empire State Development (ESD).

Applications must be submitted by the later of three years after the facility's closing or January 1, 2015.

Incentive Benefits

The program consists of four components, which are a:

- Jobs tax credit.
- Investment tax credit.
- Job training credit.
- Real property tax credit.

The **jobs tax credit** is equal to 6.85 percent of the gross wages of each net new job created. The **investment tax credit** is equal to 10 percent of the cost of investments at a closed facility, with a facility-based cap of \$8 million; and 6 percent of the cost of investments elsewhere in an ETA, with a cap of \$4 million per entity (if the participant is a partnership, a limited liability company, or an S corporation, the \$4 million limitation is applied at the entity level). The **job training credit** is equal to the lesser of 50 percent of the qualified training expenses paid during the tax year or \$4,000 per employee. This credit applies only to qualified training provided to employees who were hired after they lost their jobs at a closed facility as a result of the closure of that facility. The **real property tax credit (RPTC)** is equal to 50 percent of real property taxes for projects located entirely within the grounds of a closed facility, declining by 10 percent a year; and 25 percent of real property taxes for projects elsewhere in an ETA, declining by 5 percent a year.²⁸⁵

The benefit period for these credits is five consecutive tax years, beginning with the first tax year when the five net new jobs are created. This period cannot start later than two years after the certificate of eligibility has been issued. If the recipient fails to maintain the required level of five net new jobs in any year of the benefit period, the taxpayer will not be allowed a credit for that year. The failure to be allowed a credit will not extend the benefit period. The level of five net new jobs is to be measured quarterly.

²⁸³ Economic Transformation and Facility Redevelopment Program, Quarterly Report March 31, 2019", Empire State Development, Updated January 21, 2021, accessed online at <https://esd.ny.gov/sites/default/files/ECONOMIC-TRANSFORMATION-PROGRAM%20REPORT-2019-updated-012121.pdf>

²⁸⁴ The MCTD is an area subject to certain taxes benefiting the Metropolitan Transportation Authority. It includes the counties of New York City (New York, Bronx, Kings, Queens, and Richmond) as well as seven suburban counties (Rockland, Nassau, Suffolk, Orange, Putnam, Dutchess, and Westchester).

²⁸⁵ "Economic Transformation and Facility Redevelopment Program Tax Credit", New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/econ_trans.htm.



Incentive Administration²⁸⁶

Before applying for the tax credit, the applicant must first receive a certificate of eligibility from the Commissioner of ESD. In the eligibility application process, ESD can request the business submit materials including a plan for meeting job and investment requirements, prior year's tax returns, and a schedule of projected investments. An applicant must agree to a preliminary schedule of benefits as prescribed by ESD. Admittance to program is at the discretion of the commissioner.²⁸⁷

If at the end of the five-year benefit period the recipient has not created sufficient net new jobs and made sufficient qualified investments to achieve a benefit-cost ratio of at least 10:1, they are required in the final year to pay back as tax a portion of credits claimed in the years of the period as necessary to achieve the required benefit-cost ratio.²⁸⁸

The credit legislation requires the commissioner to publish a quarterly report on the program's applications and usage, with the first report due on July 31, 2012. The project team was only able to locate one such report, dated March 31, 2019.

Incentive Use

According to ESD, there have been no tax credits issued under the program. Out of a total of four applicants, three were granted a certificate of eligibility and preliminary schedule of benefits. None of those three have applied for credits or received any credits as of October 2023. One of the participants, whose benefit period extends through fiscal year 2023, could still apply for credits. Additionally, the three-year eligibility window remains open six prison facilities that closed in 2022.²⁸⁹

Despite the program's lack of use, several of the targeted facilities have been successfully redeveloped. Those sites include the Arthur Kill Correctional Facility in Staten Island (now a film studio²⁹⁰), the Fulton Correctional Facility in the Bronx (currently being redeveloped as a residential facility for formerly incarcerated "returning citizens"²⁹¹), and the Harlem Valley Psychiatric Center in Dutchess County

²⁸⁶ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 35*2: Economic transformation and facility redevelopment program tax credit", The New York State Senate, April 23, 2021, accessed online at https://www.nysenate.gov/legislation/laws/TAX/35*2.

²⁸⁷ "Official Compilation of Codes, Rules and Regulations of the State of New York, Title 5, Chapter XX, Part 201", Thomson Reuters Westlaw, accessed online at <https://govt.westlaw.com/nycrr/Document/I73a7f9953d0311e19fcd0000845b8d3e>.

²⁸⁸ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 35*2: Economic transformation and facility redevelopment program tax credit", The New York State Senate, April 23, 2021, accessed online at https://www.nysenate.gov/legislation/laws/TAX/35*2.

²⁸⁹ Interview with Greg Mailman, Empire State Development Corporation; October 5, 2023.

²⁹⁰ "Broadway Stages: Locations", Broadway Stages, accessed online at <https://www.broadway-stages.com/locations>.

²⁹¹ "Fulton Community Reentry Center: Under Construction", Osborne NY, accessed online at <https://www.osborneny.org/our-services/fulton-community-reentry-center-under-construction>.



(redeveloped as the now shuttered Olivet University²⁹²). Given the ability to successfully redevelop past shuttered facilities, there is a legitimate question as to whether the incentive is necessary.

Benchmarking

Table 189: State Facility Closure Programs

Program	Operational Years	Maximum Project Award	Who is Eligible to Receive Benefit
Pennsylvania: State Facility Closure Transition Program (SFCTP)	2020 – 2021	\$2.1 million	Eligible counties
Texas: Defense Economic Readjustment Zone Program	2009 – present	\$5 million	Local municipalities, counties, defense base development authority, junior college districts, and Texas State Technical College campuses
California: Rapid Response Funding as part of the Federal Workforce Innovation and Opportunity Act	1998 – present	N/A	Workers or businesses at risk of layoff or affected by layoff
California: Community Economic Resilience Fund (CERF)	2021 – present	N/A	Non-profits, Economic Development Districts, Higher Education Institutions, Indian Tribes
Federal: US Economic Development Administration Public Works and Economic Development Act of 1965	1988 – present	N/A	Eligible recipients affected by a military of Department of Energy installation closing or scheduled for closure.

*Pennsylvania: State Facility Closure Transition Program (SFCTP)*²⁹³

Grant funds provided under this program are used to support counties impacted or that will be impacted by state facility closures. Eligible counties are encouraged to comprehensively evaluate their countywide needs and distribute the grant funds as equitably as possible. This program is specific and exclusive to 13 counties in northeast and northwest Pennsylvania that were affected by the closure of three state-owned facilities.

SFCTP was appropriated a combined total of \$5 million with a funding formula that allocated no less than \$21,306 and no more than \$2.1 million to any one county affected by the facility closures. The funding formula was determined by the number of staff members residing in that county.

²⁹² “Olivet University shut down; what Christian group says it will use Dover campus for next”, Poughkeepsie Journal, July 7, 2022, accessed online at <https://www.poughkeepsiejournal.com/story/news/local/2022/07/07/olivet-university-in-dover-ordered-closed-whats-next-for-campus/65367711007/>.

²⁹³ “State Facility Closure Transition Program,” Pennsylvania Department of Economic Development, accessed online at <https://dced.pa.gov/programs/state-facility-closure-transition-program-sfctp>



Eligible uses of the funding include, but are not limited to:

- Environmental assessments, remediation of hazardous substances to reclaim brownfields, demolition, and/or rehabilitation of blighted properties and other site preparations work necessary to prepare land for future use.
- Construction, upgrade, or rehabilitation of infrastructure necessary to help improve services to the community, attract businesses or increase tourism to the area including main street improvements.
- The development of a comprehensive regional plan to address blight, attract businesses and or increase tourism to the region.
- Offsetting cost of direct county response, planning, and outreach efforts related to the closure of the facility(s).
- Retraining, apprenticeship, or other workforce development programs for commonwealth residents.
- Behavioral Health & Substance use disorder treatment services.
- Grant programs administered by Community Development Financial Institutions (CDFIs) or Community Economic Development Organizations (CEDOs) to assist small businesses directly affected by closure of the facility(s).
- Broadband internet deployment with priority given to unserved or underserved areas.
- Administrative costs, permit fees, legal costs, and expenses for other professional services (maximum 2 percent).

*Texas: Defense Economic Adjustment Assistance Grant (DEAAG)*²⁹⁴

This is an infrastructure grant program designed to assist defense communities that have been positively or negatively impacted by a change or announced change by the Department of Defense. DEAAG funding is available to local municipalities, counties, defense base development authority, junior college districts and Texas State Technical College campuses, and regional planning commissions representing these communities.

DEAAG funding is available to meet matching requirements for federal funding. Grants awarded may range from \$50,000 to \$5 million per project. Since the program's inception, the Texas Military Preparedness Commission has awarded \$111.4 million in 45 grants.

Projects can include the purchase of Department of Defense property, new construction, or rehabilitation of facilities in support of job creating projects and opportunities. Funds can be awarded to educational institutions for the purchase or leasing of capital equipment for the purpose of training displaced defense workers.

*California Rapid Response Funding (part of Federal Workforce Innovation and Opportunity Act)*²⁹⁵

Rapid Response is a proactive, business-focused program designed to assist companies facing potential layoffs or plant closures. The primary purpose of Rapid Response as stated in federal guidance is to enable affected workers to return to work as quickly as possible following a layoff, or to prevent layoffs altogether. Rapid Response teams provide early intervention assistance to help avert potential layoffs, and immediate on-site services to assist workers facing job losses. Rapid Response services are tailored to

²⁹⁴ "Grant Program - Defense Economic Adjustment Assistance Grant (DEAAG), Office of the Governor of Texas, accessed electronically at <https://gov.texas.gov/organization/military/grants>.

²⁹⁵ "RAPID RESPONSE AND LAYOFF AVERSION ACTIVITIES," California Employment Development Department, accessed online at https://edd.ca.gov/siteassets/files/jobs_and_training/pubs/wsd16-04.pdf.



each company based on the needs of the affected employees. These services are carried out by state and local workforce development agencies in partnership with the America's Job Center of California network.

Employers are required to pay for a significant cost of the training for those participants in incumbent worker training; this can be done through both cash and/or in-kind payments. The wages paid to participants, while in training, may be considered as a source of matching funds.

This program was used to support workers and communities impacted by the closure of the California Correctional Center in Susanville in June 2023 to assist in planning for changes in the region affected by the closure and strategically invest in job creation and opportunity.

California: Community Economic Resilience Fund (CERF)²⁹⁶

This program was created to promote a sustainable and equitable recovery from the economic distress of COVID-19 by supporting new plans and strategies to diversify local economies and develop sustainable industries that create high-quality, broadly accessible jobs for all Californians. Eligible organizations that can apply to receive funding include non-profits, economic development districts, higher education institutions, and Indian tribes.

A total of \$600 million has been allocated to the program, organized to be distributed in two phases, \$100 million towards regional planning grants distributed to 13 regional collaboratives, and \$500 million towards regional implementation grants.

Eligible projects support for economic recovery and transition for populations and/or industries disproportionately impacted by COVID-19. These are projects that promote economic diversification, sustainability, and equity drive the growth of globally competitive, sustainable industries with well-paying, high quality, accessible jobs or bolster equity outcomes by race, ethnicity, gender and geography.

This program was used to support workers and communities impacted by the closure of the California Correctional Center in Susanville in June 2023 to assist in planning for changes in the region affected by the closure and strategically invest in job creation and opportunity.

US Economic Development Administration: Public Works and Economic Development Act of 1965²⁹⁷

This federal law allows for economic adjustment grants to eligible communities to help them respond to sudden changes in economic conditions including those resulting from natural disasters, changing trade patterns and military base closures.

The Economic Development Administration has provided grants from their appropriated funds in excess of \$640 million since the first Department of Defense (DOD) Base Realignment and Closure (BRAC) round in 1988, as well as administering \$274 million of DOD funds and \$8 million from the Department of Energy for defense adjustment projects that have included some closed military bases. EDA grants are made on a cost-share basis with local governments, redevelopment agencies, and private or non-profit organizations. The grants include monies for planning and technical assistance, infrastructure improvement, and revolving loan funds for private business development.

²⁹⁶ "California Community Economic Resiliency Fund," Governor's Office of Planning and Research, accessed online at <https://opr.ca.gov/economic-development/cerf/#what-is>.

²⁹⁷ "Public Works and Economic Development Act of 1965," U.S. Department of Commerce, accessed online at [2010-2014.commerce.gov/sites/default/files/documents/2012/january/eda_pweda_042310_0.pdf](https://www.commerce.gov/sites/default/files/documents/2012/january/eda_pweda_042310_0.pdf).



Benchmarking Comparisons

New York's program is the most targeted of all the benchmarked jurisdictions. Only the federal program is also specifically for businesses impacted by the departure of a government-run facility. The other programs either have a larger targeted audience and can be used for impacted businesses or for other governments (such as county or municipal) who can then deploy the resources as they see fit.

Return on Investment

There is insufficient utilization of this program to conduct an economic impact analysis within the scope of this project. While several firms have been approved to access the program, no taxpayer has claimed any credit under this program. In fact, in some cases the approved sites for this program have been developed without accessing the credit. It suggests that the program is targeted at a type of activity that has an economic impact associated, but perhaps the credit is not designed and/or marketed to incentivize the desired behavior. Since the transactions occur without the credit, it is difficult to argue that there is a need to offer this incentive.

That being said, the program end date was extended to allow sufficient time for certain approved taxpayers to complete their project and file to claim the tax credit offered. Should these projects come to fruition within the time period, there should be sufficient data available to estimate impacts over the full history of the credit. Potential qualitative impacts could be related to the transformational nature of the project, depending on the scale of the development that takes place. There could also be a potential for “halo effects” on nearby properties and businesses if new activity is spurred in the area of the project. These impacts on property valuation and property taxes have been shown to be significant in similar programs aimed at returning large parcels of real estate to productive use.

While there has been no use of the incentive, to the extent there are administrative costs associated with the program, there is a negative return on investment – at least until the program is used and any return can be considered in the calculation of ROI.

Summary Findings

According to ESD, there have been no tax credits issued under the program. Out of a total of four applicants, three were granted a certificate of eligibility and preliminary schedule of benefits. None of those three have applied for credits or received any credits as of October 2023. One of the participants, whose benefit period extends through fiscal year 2023, could still apply for credits.

Despite the program's lack of use, several of the targeted facilities have been successfully redeveloped. Those sites include the Arthur Kill Correctional Facility in Staten Island, the Fulton Correctional Facility in the Bronx, and the Harlem Valley Psychiatric Center in Dutchess County. This suggests that the tax credit is not integral to a successful redevelopment effort.

These types of programs exist in other states, and the federal government has had military base relocation assistance available for many years. It is understandable that NYS would seek to provide assistance.

The program's lack of use may be related to program design. At the same time, there have been successful efforts within NYS to redevelop closed facilities. It may well be that other tools are more useful for these efforts.





Start-up NY Program



Executive Summary

Purpose and History

Effective for tax years beginning on or after January 1, 2014, the Start-Up NY Program is designed to promote entrepreneurship and attract white-collar talent by helping new and expanding businesses through tax-based incentives and innovative academic partnerships.

Design and Administration

The program is composed of the START-UP NY Tax Elimination Credit, and the Start-Up NY Telecommunication Services Excise Tax Credit. Both are available state-wide and last for 10 years after beginning the program. For businesses with 100 percent of operations (defined as both assets and payroll) in a tax-free zone(s), the credit would be 100 percent of tax liability. If assets and payroll are located in a mix of taxable and tax-free zones, the credit is prorated based on percentage of those operations in a tax-free zone.

Additionally, personal income taxes for employees located in a tax-free zone are eligible for 100 percent credit for the first five years. In the remaining five-year eligibility period, no tax would be paid on incomes up to \$200,000 for individuals, \$250,000 for a head of household, and \$300,000 for taxpayers filing a joint return. There is an annual cap on the number of employees qualifying for this exemption, which is equal to 10,000 net new jobs per year.

Use

Since 2014, the Start-Up NY program has received 1,240 tax benefit reports, and the program has grown each year up to 2021, the most recent for which data is available. The program has retained 2,801 jobs new jobs across ten of the State's economic development regions.

Start-Up NY participants have spent approximately \$1.3 billion on wages and capital investment over the eight-year period. The vast majority of this spending is on wages – 96 percent in the most recent period. Based on the IMPLAN economic impact model, the economic impact is positive when accounting for foregone revenues; Start-Up NY returns \$1.58 for every \$1.00 of investment. Start-Up NY provides a host of qualitative benefits beyond its fiscal strength, including growth of small businesses, retention of homegrown entrepreneurs, and development of the state's higher education institutions.

Return on Investment

Start-up NY has a positive return on investment across the dimensions of economic impact. It tests very well on a straight return on foregone revenue calculation. It contributes positively to both the small business and start-up community in New York State by creating and expanding opportunities for hiring and investment. It contributes positively to the State's institutes of higher education by creating additional economic activity on campus, connecting students to potential employers or fields of study, and aligning research activities with commercial opportunities to grow New York based firms. The utilization of the program is relatively low considering the massive potential of the credit (up to 100 percent of tax liability) though the State is planning adjustments to the program that might enhance its appeal and aid in marketing the offering to potential recipients.



Background

Incentive Purpose

The Start-Up NY Program is designed to promote entrepreneurship and attract white-collar talent by helping new and expanding businesses through tax-based incentives and innovative academic partnerships. This also benefits the State's colleges and universities by connecting them to tenants for unused space and creating relationships with local firms to provide opportunities for the student body. Partnering also gives businesses direct access to advanced research laboratories, development resources, and experts in key industries.

Legislative History

The Start-Up NY Tax Credit is effective for tax years beginning on or after January 1, 2014.²⁹⁸

Incentive Design

The program is composed of the START-UP NY Tax Elimination Credit, and the Start-Up NY Telecommunication Services Excise Tax Credit. Both are available state-wide and last for 10 years after beginning the program. For businesses with 100 percent of operations (defined as both assets and payroll) in a tax-free zone(s), the credit would be 100 percent of tax liability. If assets and payroll are located in a mix of taxable and tax-free zones, the credit is prorated based on percentage of those operations in a tax-free zone.

Additionally, personal income taxes for employees located in a tax-free zone are eligible for 100 percent credit for the first five years. In the remaining five-year eligibility period, no tax would be paid on incomes up to \$200,000 for individuals, \$250,000 for a head of household, and \$300,000 for taxpayers filing a joint return. There is an annual cap on the number of employees qualifying for this exemption, which is equal to 10,000 net new jobs per year.²⁹⁹

Incentive Benefits

The Start-Up NY Tax Credit helps new and expanding businesses by offering new and expanding businesses the opportunity to operate tax-free for 10 years on or near eligible university or college campuses in New York State (NYS).

The Tax Elimination Credit creates tax-free zones to connect start-up companies in targeted industries with university research and development resources. Companies that locate in the zones are exempt from paying sales taxes, business or corporate state and local income taxes, and property taxes. Employees of companies enrolled in the program pay no personal state income tax for the first five years of employment, and a reduced income tax rate for the second five years.

The Telecommunication Services Excise Tax Credit portion of the program provides tax credits equal to the amount of excise tax paid by the approved business on telecommunication services.

²⁹⁸ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 39: Tax benefits for businesses located in tax-free NY areas and employees of such businesses", The New York State Senate, January 9, 2015, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/39>.

²⁹⁹ "Start-Up NY Tax-Free Information", Empire State Development, accessed online at <https://esd.ny.gov/startup-ny-tax-free-information>.



Incentive Administration

Businesses must apply through the college or university where they intend to locate. The school then coordinates with Empire State Development (ESD) to complete additional due diligence on the applicants. For businesses that advance through this ESD review, ESD provides a certificate of eligibility.

To participate in the Tax Elimination Credit, a company must meet the following requirements:

- Be a new business in NYS, or an existing NYS business relocating to or expanding within the state.
- Partner with an approved New York State college or university (via the ESD Directory).
- Create new jobs (minimum is one net new job) and contribute to the economic development of the local community (no specific criteria required).

Not all businesses are eligible. Ineligible businesses include:

- Retail and wholesale businesses
- Restaurants
- Law and accounting firms
- Medical or dental practices
- Real estate management companies/brokers
- Hospitality
- Retail banking
- Utilities and energy production
- Finance and financial services
- Businesses providing personal services
- Businesses providing business administration support and services

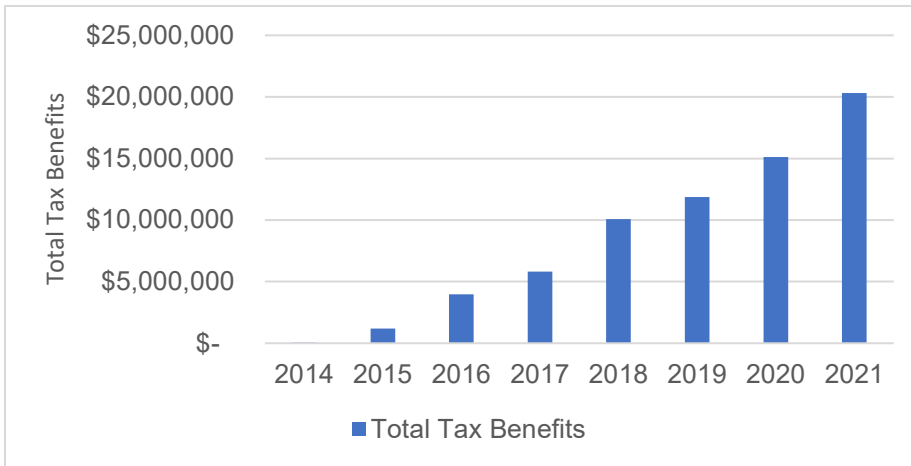
If a business is approved for the Tax Elimination Credit, has existing operations in a tax-free zone, is creating and maintaining net new jobs, and meeting the annual employment test, they can apply for the START-UP NY Telecommunication Services Excise Tax Credit. This portion of the program provides tax credits equal to the amount of excise tax paid by the approved business on telecommunication services. This tax credit also lasts for 10 years. Start-Up NY is also available to qualified international companies interested in relocating, expanding, or starting a business in New York State.

Incentive Use

Starting in 2014, 31 businesses participated in the program, creating 76 jobs with \$7.1 million in total spending. By 2021, business participation increased to 204 companies receiving this credit, with \$20.3 million in credits awarded. Total reported jobs as of 2021 were 3,353, with total spending in NYS of more than \$344 million. This represents a steady increase in the size of the program, and points to fairly strong leverage – a simple Benefit / Cost Ratio for 2021 would represent \$16.97 in return for every \$1.00 of credit. Figure 29 shows the amount of tax credit awards from program inception to 2021, the most recent year with available data.

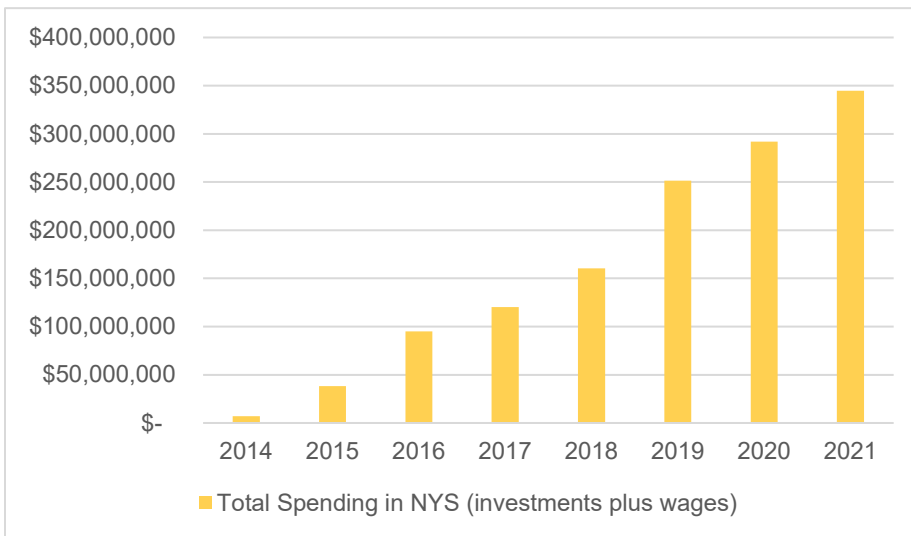


Figure 29: Tax Credits Awarded from 2014-2021



Source: Data provided by ESD.

Figure 30: Total Spending from 2014-2021

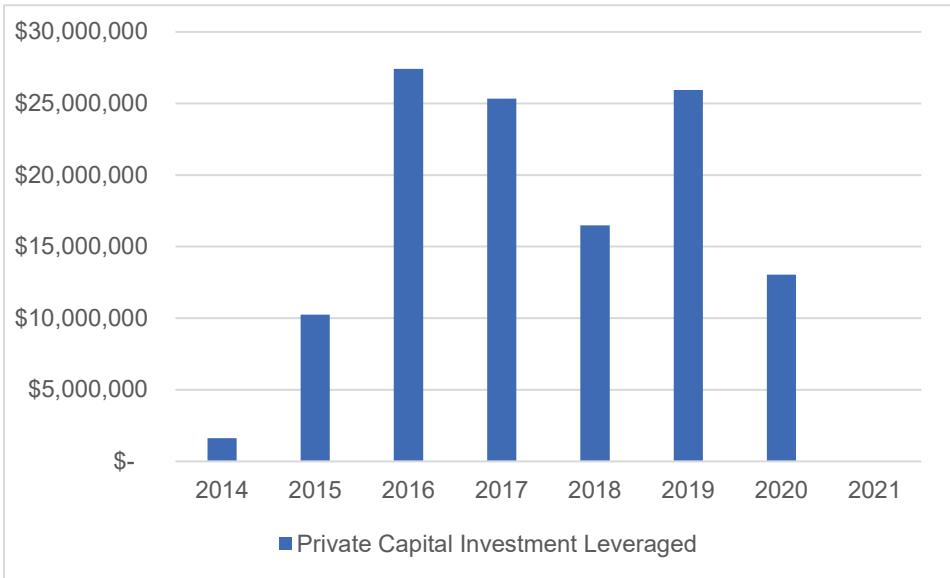


Source: Data provided by ESD.

Capital investment is captured separately as part of program administration and helps to demonstrate how participant spending changes over the course of the ten years in the program. In 2014, the first year of the program, capital investment represented approximately 23 percent of total spending. These investments would be consistent with the establishment of a new or expanded business. As businesses mature, the percentage drops to 4 percent of total spending in 2020, meaning wages make up 96 percent of spending.



Figure 31: Private Capital Investments from 2014-2021



Source: Data provided by Empire State Development Corporation

Jobs and wages have increased steadily since the program's inception. While net new jobs created have been uneven, the program has been successful at retaining jobs from year to year. Wage growth has been more consistent and reached more than \$325 million in 2021. The average wage per job is also relatively high, likely aided by relatively low wage industries, such as retail locations, being excluded from the program.

Table 190: Job and Wage Data from 2014-2021

Year	Retained Jobs	Job Commit by Year	Total Reported Jobs	Net New Jobs Created	Total Wages All Jobs	Average Wage Per Job
2014	-	-	76	76	\$5,445,494	\$71,651
2015	76	172	205	129	\$26,809,774	\$130,779
2016	205	602	1,135	930	\$63,522,742	\$55,967
2017	1,135	1,288	1,669	534	\$89,191,366	\$53,440
2018	1,669	1,487	2,076	407	\$134,048,674	\$64,571
2019	2,076	1,467	2,456	380	\$213,758,816	\$87,035
2020	2,456	1,953	2,801	345	\$263,894,675	\$94,214
2021	2,801	2,168	3,353	552	\$325,745,747	\$97,151

The Start Up NY program has been used throughout NYS. Among the ESD regions, Western New York has had the highest participation and the highest tax benefit, followed by New York City. Program administrators pointed to a desire to improve the balance of participation between Upstate and Downstate regions. Approximately 70 percent of the reports received were from the top three regions.



Table 191: Total Reports and Tax Credits Awarded, by Region, from 2014-2021

ESD Region	Number of Reports	Total Tax Benefit
Western New York	445	\$26,022,000
New York City	255	\$14,209,000
Capital Region	162	\$9,366,000
Long Island	94	\$1,212,000
Southern Tier	91	\$4,157,000
Finger Lakes	78	\$6,546,000
Mid-Hudson	52	\$5,215,000
Central NY	24	\$1,089,000
North Country	24	\$457,000
Mohawk Valley	15	\$148,000

Benchmarking

To better understand the efficacy of the Start-up NY Tax Elimination Credit program this section benchmarks the reach and impact data of the program against that of similar incentive programs across the country. Quantitative data, such as the number of claimants, value amount of credits claimed, and jobs created are not available for all the comparative programs. Therefore, the benchmarking analysis will rely on qualitative data on each program's intent and eligibility requirements.

Table 192: Comparable Programs

State/ Program	Start Year	Firms Eligible to Receive Benefits	Data Years	Average Annual Value of Benefits Claimed (During Data Years)
New York: START-UP NY Elimination Credit and Telecommunications Services Excise Tax Credit	2014	New Firms on University Campuses	2015-2019	\$0.6 million*
Pennsylvania: Keystone Innovation Zone Tax Credit Program	2004	New Firms proximate to higher education	2021	\$15 million
New Jersey: Grow NJ Assistance Program	2011	New or Retained Jobs in target geographies	2017	\$194 million

* Projected to have increased since 2019 data.

Pennsylvania: Keystone Innovation Zone (KIZ) Tax Credit Program

The KIZ Tax Credit Program was established to address the lack of entrepreneurial activity in the state's research and development clusters. These tended to be geographically located near academic institutions, so the state created 29 KIZs throughout Pennsylvania partnered with over 90 institutions of higher education. To be eligible a business must be located in a KIZ, less than eight years old, operating in a target industry or sector, and meet any additional requirements specified by the state's economic development agency.

In terms of benefits, a KIZ company approved for the program may claim a tax credit equal to 50 percent of the increase in gross revenues in year two of operations in the KIZ. The credit has a cap of \$100,000



annually per company.³⁰⁰ In 2021, the most recent year for which an annual report was made available, Pennsylvania received \$15 million in application requests, with an average award of \$72,000. More than half of the awards (51 percent) were the maximum \$100,000.³⁰¹

New Jersey: Grow NJ Assistance Program

Grow NJ is designed to create and retain jobs in targeted geographies within the state of New Jersey. The program requires the eligible activity take place in a Qualified Incentive Area (QIA), which has several definitions, one of which being a Garden State Create Zone (GSCZ). A GSCZ is defined as being “at or within a three-mile radius of the outermost boundary” of the campus of several universities. The program has several additional layers of eligibility including being in a targeted industry, signing a collaborative research agreement with a university, and minimum employment and capital investment amounts.

Qualified eligible businesses receive a per job, per year tax credit for up to ten years. For a firm located in a GSCZ the base amount per new or retained job is \$5,000 per year and can rise to \$12,000 per year if the project meets any number of bonus criteria. The maximum cap per business per year is \$10 million.³⁰² In calendar year 2017, the most recent year for which data appeared to be available, the total Grow NJ Program provided more than \$194 million in tax credits associated with more than 1,800 new and retained jobs.³⁰³

Peer States Comparisons

In both comparable cases reviewed, states implemented caps on individual awards and/ or an annual cap on the program. This is a best practice for all tax incentive programs to ensure predictability in cost from year to year. Unlike New Jersey and Pennsylvania, NYS does not have a cap on the program.

Return on Investment

Data Used

The project team submitted a request to the ESD for the most recent five years of data for the START-UP NY program. For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment.
- Location (city, county) of companies claiming exemptions.

³⁰⁰ “Keystone Innovation Zone (KIZ) Tax Credit Program”, Pennsylvania Department of Community and Economic Development, accessed online at <https://dced.pa.gov/programs/keystone-innovation-zone-tax-credit-program/>.

³⁰¹ “Keystone Innovation Zone Tax Credit and Tax Credit Sale Programs: FY2021-22”, Pennsylvania Department of Community and Economic Development, accessed online at <https://dced.pa.gov/download/kiz-tax-credit-annual-report-2021/?wpdmdl=117126>.

³⁰² “Grow NJ Assistance Program”, New Jersey Economic Development Authority, accessed online at <https://www.njeda.gov/grow/>.

³⁰³ “Annual Report to Legislative Budget Committees Discussion Points, FY 2018-19”, New Jersey Economic Development Authority, accessed online at <https://www.njeda.gov/wp-content/uploads/pdfs/FY-2019-EDA-Discussion-Points-FINAL.pdf>.



Economic Impact Modeling

For the impact analysis, the project team used an IMPLAN model for New York State.³⁰⁴ The project team aggregated industries into sectors that correspond to the reported **job creation and retention** by sector. Table 193 presents the job impacts imported to IMPLAN for the analysis with the annual impacts by sector grouped by year to account for any inflation effects.

Table 193: Reported Job Creation Impacts, 2018 to 2021

Year	No. of Reports	Retained Jobs	Actual Jobs Created	Total Reported Jobs
2017	176	1,135	534	1,669
2018	187	1,669	407	2,076
2019	194	2,076	380	2,456
2020	200	2,456	345	2,801
2021	204	2,801	552	3,353

Source: Job Creation Reported by ESD.

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the START-UP NY program supported a total of 26,060 total (direct, indirect, and induced) jobs in the state of New York between 2017 and 2021.

Table 194: Total Job Impacts in New York State, 2017 to 2021

Year	Direct	Indirect	Induced	Total
2017	1,670	940	1,100	3,710
2018	2,080	1,100	1,370	4,550
2019	2,460	1,210	1,600	5,260
2020	2,800	1,250	1,750	5,800
2021	3,350	1,350	2,030	6,740
Annual Average	2,470	1,170	1,570	5,210

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD. The estimates have been rounded to the nearest ten.

Impact on Revenues for New York State and its Municipalities

Table 195: Estimated Taxes in New York State, Total for 2017 to 2021 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$121.5	\$48.8	\$67.9	\$238.2
County	\$22.7	\$8.9	\$13.1	\$44.7
State	\$99.7	\$40.5	\$46.8	\$187.0
State and Local	\$244.0	\$98.0	\$128.0	\$470.0

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

³⁰⁴ More information on the IMPLAN model is found in Appendix A.



Table 196: Total Taxes, Total for 2017 to 2021 (Dollars in Millions)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$243.8	\$98.2	\$127.8	\$469.8
Federal	\$319.1	\$133.2	\$116.2	\$568.5
Total Taxes	\$562.9	\$231.3	\$244.0	\$1,038.3

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported ESD.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 197: Labor Income, 2017 to 2021 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2017	\$220.5	\$110.7	\$85.8	\$417.0
2018	\$282.8	\$128.6	\$106.9	\$518.3
2019	\$337.1	\$140.9	\$124.3	\$602.3
2020	\$380.9	\$143.7	\$136.6	\$661.2
2021	\$451.4	\$154.9	\$158.1	\$764.4
Annual Average	\$334.5	\$135.8	\$122.4	\$592.6

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

Table 198: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$135,380	\$116,068	\$77,905	\$113,723

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

The But-For Test

Since the “true” level of the Start-up NY tax credit’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

In the case of the Start-up NY tax credit program, the breakeven point is 63 percent of the economic activity. This means that the incentive would need to be responsible for nearly two-thirds of the decision to invest in order to pay for itself. Of course, this does not take into consideration other qualitative benefits.

Other Qualitative Economic Benefits

Leveraging the state’s large network of higher education institutions to drive economic development has several benefits beyond the fiscal impact. Providing incentives to keep start-up companies and emerging businesses in the state increases the odds of a significant business developing and generating sustained



economic impact beyond its ten-year eligibility in the program. Another benefit is the opportunities provided to college and university students through research and internship opportunities. Having new businesses operating on or near campus creates relationships with faculty, staff, and students that can encourage new entrepreneurs and provide high-quality jobs for graduates. These relationships and opportunities also make the colleges and universities themselves more attractive as the success of the firms reflect positively on the degrees being offered in New York state.

Summary Findings

Whether the program yields a net benefit to the state of New York is a function of several factors, including the state's foregone revenue from the program and its return on that investment. ESD awarded \$63.2 million for the START-UP NY program between 2017 and 2021. For the program to provide a positive net fiscal benefit, it must return more than that award amount through the taxes associated with the economic activity from that investment.

Table 199: Reported Direct Impacts, 2017 to 2021

Year	No. of Reports	Retained Jobs	Actual Jobs Created	Total Credits
2017	176	1,135	534	\$5,828,582
2018	187	1,669	407	\$10,066,200
2019	194	2,076	380	\$11,871,557
2020	200	2,456	345	\$15,127,275
2021	204	2,801	552	\$20,313,249

Source: Impacts Reported by ESD.

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the START-UP NY analysis, the project team also based this analysis only on the taxes generated by the job creation and job retention. Generally starting a new business is more challenging than expanding an existing business, but these new businesses play an important role in diversifying the economy and promoting innovation. The project team included the job retention because it helps to account for the longevity of the new businesses.

Table 200: Fiscal Return on Investment to New York State, 2017 to 2021

Total State Costs and Return (2017-2021)	Total Credits Awarded	Direct Taxes	Total Taxes
New York State Taxes (\$M)	\$63.2	\$99.7	\$187.0
Return on \$1.00 in Foregone Revenue		\$1.58	\$2.96
Breakeven "But for" Percentage		63%	34%

Source: Economic Impact Analysis by Fourth Economy based on Job Creation Reported by ESD.

From the foregone revenue of \$63.2 million, the START-UP NY program generated \$99.7 million in direct state taxes and total state taxes of \$187 million. The state's investment provided an overall return of \$1.58 or an additional \$0.58 based on direct taxes to the state and \$2.96 based on total state taxes. For the program to break even in terms of direct tax revenue, at least 63 percent of activity would to be directly attributable to the program (i.e., it would not have happened but for the incentive). Including tax revenue from indirect and induced economic activity, the 'but for' required to break even would be 34 percent.



Start-up NY has a positive return on investment across the dimensions of economic impact. It tests very well on a straight return on foregone revenue calculation. It contributes positively to both the small business and start-up community in New York State by creating and expanding opportunities for hiring and investment. It contributes positively to the State's institutes of higher education by creating additional economic activity on campus, connecting students to potential employers or fields of study, and aligning research activities with commercial opportunities to grow New York based firms. The utilization of the program is relatively low considering the massive potential of the credit (up to 100 percent of tax liability) though the State is planning adjustments to the program that might enhance its appeal and aid in marketing the offering to potential recipients.



**DEPARTMENT OF TAXATION AND
FINANCE AS-OF-RIGHT
TAX CREDITS**



Alcoholic Beverage Production Credit



Executive Summary

Purpose and History

New York State's Alcoholic Beverage Production Credit began in 2012 as the Beer Production Credit to replace an earlier excise tax exemption. In 2016, this credit was modified to include the production of ciders, wine, and liquor, along with beer, and was renamed to what is now known as the Alcoholic Beverage Production Credit.

Design and Administration

This credit is offered to qualified alcohol distributors in New York State that produce 60 million gallons or less of beer or cider, 20 million gallons or less of wine, or 800,000 gallons or less of liquor. The credit amounts to \$0.14 per gallon of alcohol produced in the state up to the first 500,000 gallons produced during the tax year, with an additional \$0.045 per gallon over 500,000 up to 15 million additional gallons for beer, cider, and wine; and 300,000 additional gallons of liquor.

Benchmarking

New York's credit compares favorably overall to similar credits in other states, providing both wider applicability in terms of the types of beverages covered and in terms of providing more dollars than other states with comparable programs. In 2019, New York awarded a comparable amount to Pennsylvania, New Mexico and Virginia combined.

Use

The total number of taxpayers utilizing this credit increased year over year from 2016 through 2019, from 328 to 532. The total dollar value of the credit utilized by taxpayers increased from \$2.9 million in 2016 to \$4.2 million in 2019, with estimated utilization from 2020-2023 ranging from \$3 million to \$4 million.

Return on Investment

Based on the IMPLAN model, the Alcoholic Beverage Production Credit supported 75 total jobs in New York State from 2018 through 2022, with an average labor income per employee of \$76,000. While the Alcoholic Beverage Production Credit was part of a comprehensive effort to grow the industry in the State, its quantitative return on investment is limited. With an investment of \$19.4 million from 2018 through 2022, the credit generated \$2.1 million in direct state taxes and an additional \$200,000 in indirect and induced state taxes.

This incentive should not be dismissed solely on its low ROI related to state tax revenue generated. It is also important to consider the qualitative impacts of this credit. Because the tax credit is limited (in terms of the gallons that receive the credit), there is the opportunity for some producers to 'grow out of' the credit, which would increase the economic benefit for the state. A thriving alcoholic beverage industry attracts tourists interested in culinary experiences and local beverages, creating a potential benefit not only to the producers but also the broader hospitality sector. Additionally, these credits may incentivize producers to invest in innovative products and production techniques, and help to boost local agriculture through the use of locally based ingredients. The project team also conducted a shift share analysis of employment within the targeted industry; it identified positive net job growth in NYS' alcohol industry in comparison to the national economy and the national alcohol industry, which suggests that the alcoholic beverage tax credit may help support job growth in excess of national economic and industry averages.



Background

Incentive Purpose

The Alcoholic Beverage Production Credit provides incentives to support and increase the number of small alcoholic beverage producers within New York State (NYS).

Legislative History

The Beer Production Credit was introduced in 2012 to replace an earlier excise tax exemption that was ruled to be unconstitutional. As of 2016, the former Beer Production Credit was amended to include the production of ciders, wine, and liquor along with beer and is now referred to as the Alcoholic Beverage Production Credit.

Incentive Design

To receive this refundable credit, an individual or business must be a registered distributor under Article 18 of the Tax Law (taxes on alcoholic beverages); and produce in NYS during the tax year:

- 60 million or fewer gallons of beer.
- 60 million or fewer gallons of cider.
- 20 million or fewer gallons of wine.
- 0.8 million or fewer gallons of liquor.

Incentive Benefits³⁰⁵

The credit is equal to \$0.14 per gallon for the first 0.5 million gallons of beer, cider, wine, or liquor produced in NYS in a tax year, plus \$0.045 cents per gallon for each additional gallon over 0.5 million (up to 15 million additional gallons for beer, cider, and wine and up to 0.3 million additional gallons for liquor) produced in NYS in the same tax year. If the taxpayer is a partner in a partnership or a shareholder of a New York S corporation, then the cap is applied at the entity level, so that the aggregate credit allowed to all the partners or shareholders of each entity in the tax year does not exceed that cap.³⁰⁶

Incentive Requirements³⁰⁷

To claim this credit, a taxpayer needs to file either as a corporation or a separate entity. The taxpayer must retain copies of tax forms filed for each month if filing monthly or each year if filing yearly. This form must be accompanied by a statement of inventory purchases for each month of the tax year. Additionally, a taxpayer distributing multiple types of alcohol must file tax returns separately by the type of alcohol sold.

³⁰⁵ “Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 37: Alcoholic beverage production credit”, The New York State Senate, May 12, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/37>.

³⁰⁶ “Alcoholic Beverage Production Credit”, New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/beer_prod_credit.htm.

³⁰⁷ “Alcoholic Beverage Production Credit”, New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/beer_prod_credit.htm.



Incentive Use

At the direction of the Department of Taxation and Finance, which administers the credit, the project team used the Annual Reports on New York State Tax Expenditures to determine the total dollar amount of tax expenditures and the New York State Open Data site to determine the number of taxpayers using the credit. Actual expenditure and taxpayer data is available through 2020 for personal income tax and 2019 for corporate franchise tax. Estimates of total expenditures are available thereafter through 2023.

As shown in Table 201, the total tax expenditures associated with this program increased from 2016 to 2017 and 2017 to 2018 consistent with the expansion of the former Beer Production Credit to other alcoholic beverages in 2016. They are estimated to remain between \$3.0 and \$4.0 million through 2023.

Table 201: Total Actual Tax Expenditures for Alcoholic Beverage Production Credit by Tax Year (Dollars in Millions)³⁰⁸

Tax Year	Personal Income Tax (PIT)	Corporate Franchise Tax (CFT)	Total (PIT & CFT)
2015	\$0.8	\$2.1	\$2.9
2016	\$1.2	\$1.7	\$2.9
2017	\$1.3	\$2.6	\$3.9
2018	\$1.5	\$2.7	\$4.2
2019	\$1.4	\$2.8	\$4.2
2020	\$1.4	\$2.0*	\$3.4*
2021	\$1.0*	\$3.0*	\$4.0*
2022	\$1.5*	\$2.5*	\$4.0*
2023	\$1.5*	\$2.5*	\$4.0*

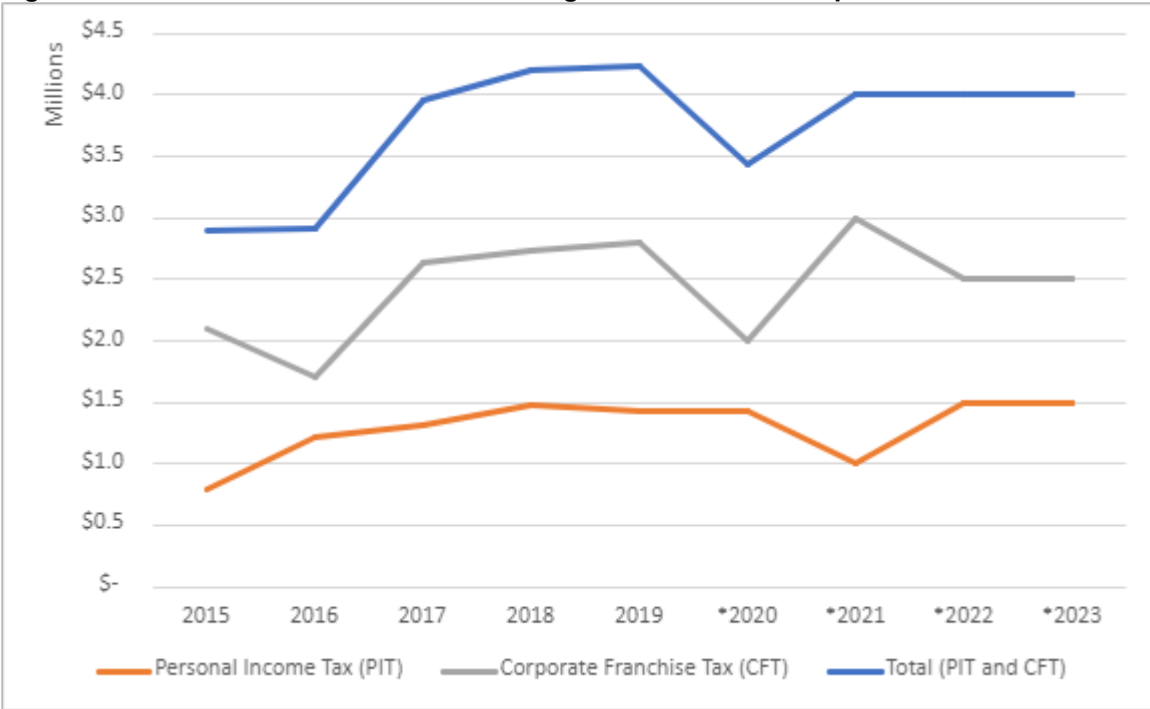
Source: Fiscal Year Annual Reports on New York State Tax Expenditures, Table 8
 *Forecasts based on FY21-FY24 Tax Expenditure Reports

Figure 32 illustrates the total dollar amount (in millions) of the Alcoholic Beverage Production credit utilized by personal income taxpayers, corporate franchise taxpayers, and total combined amount of PIT & CFT in tax years 2015 to 2023. Utilization has been relatively consistent since the credit eligibility change in 2017 other than a reduction in 2020, likely due to the effects of the pandemic.

³⁰⁸ New York State Tax Expenditure Report”, New York State Department of Taxation and Finance, accessed online at <https://www.tax.ny.gov/research/stats/statistics/annual-tax-expenditures.htm>.



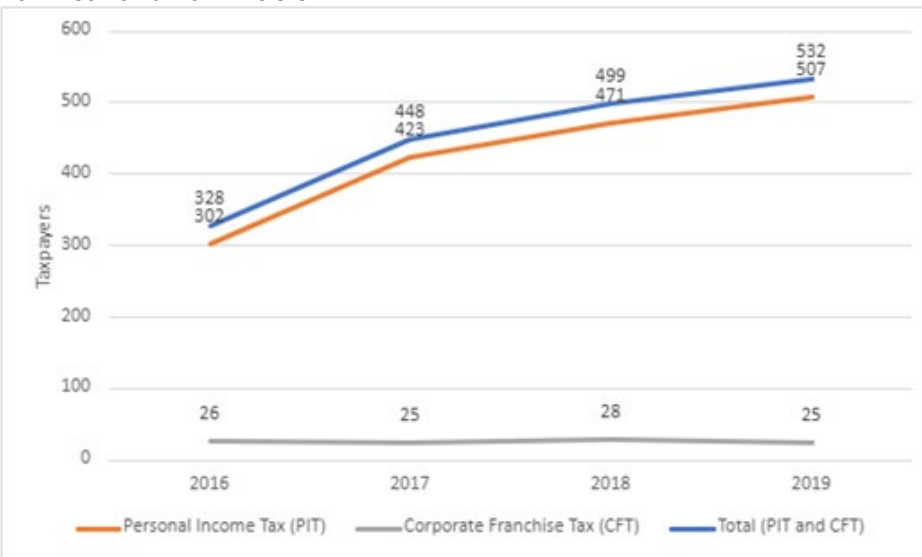
Figure 32: Total Amount of Alcoholic Beverage Production Credit per Year



Source: Fiscal Year Annual Reports on New York State Tax Expenditures, Table 8
 *Forecasts based on FY20-FY24 Tax Expenditure Reports

As shown in Figure 33, the total number of taxpayers utilizing this credit increased year over year throughout the period of 2016 through 2019, from a total of 328 to a total of 532. There has been little change in the number of corporate taxpayers using the credit over the period, while the number of personal income taxpayers using the credit increased by 67.9 percent.

Figure 33: Total Number of Taxpayers Using the Alcoholic Beverage Production Credit by Tax Year and Tax Article



Source: DATA.NY.GOV, New York State Economic Incentive Tax Credit Utilization: Beginning Tax Year 2016, Credit Name "Alcoholic Beverage Production Credit"



While there are far more personal income taxpayers using the Alcoholic Beverage Credit than corporate franchise taxpayers, the total amount of the credit used by personal income taxpayers is significantly less than that used by corporate taxpayers. The average credit during the period 2016-2019 for personal income taxpayers was \$3,274, while the average credit for corporate taxpayers was \$95,165.

Benchmarking

To better understand the efficacy of New York State's Alcoholic Beverage Production Credit program this section benchmarks the reach and impact data of the Alcoholic Beverage Production Credit against that of similar incentive programs across the U.S. Quantitative data, such as the number of claimants, value amount of credits claimed, and jobs created are not available for most of the alcohol production programs. Therefore, the benchmarking analysis analyzed qualitative data on each program's intent and eligibility requirements.

Table 202: Comparative Programs

State/ Program	Operational Years	Tax Benefit in 2019	Firms Eligible to Receive Benefit
New York: Alcoholic Beverage Production Credit	2016-*	\$4.2 million	Alcohol Producers/Distributors
Pennsylvania: Malt Beverage Tax Credit	2016-*	\$2.6 million†	Malt and Brewed Beverage Producers
Virginia: Farm and Wineries and Vineyards Tax Credit	2011-*	\$0.2 million	New or Improving Wineries or Vineyards
New Mexico: Beer and Wine Producers Preferential Tax Rate	1978-*	\$1.6 million	Microbreweries, Small Wineries

* Currently running with no scheduled sunset date.

† This was spent in the 2019-2020 fiscal year.

Other State Programs

Pennsylvania: Malt Beverage Tax Credit

This tax credit applies to manufacturers of malt or brewed beverages. The manufacturer may submit an application for tax credits against the malt beverage tax for investment in qualified capital expenditures. The intent of this program is to offset the cost of investment for manufacturing expenditures of small brewers. The credit may not exceed \$0.2 million per taxpayer per tax year, with the credit received being prorated if total applications for this program exceed \$5.0 million.³⁰⁹

When comparing the programs:

³⁰⁹ "Tax Credits," Pennsylvania Department of Revenue, accessed online at <https://www.revenue.pa.gov/IncentivesCreditsPrograms/TaxCredits/Pages/default.aspx>.



- Pennsylvania has a program cap, but its program has the highest potential for investment in its alcohol producers of any of the comparative programs.
- Since its program started in 2016, there has been a net increase of 326 craft breweries in Pennsylvania. It now has the second most craft breweries of any state and is experiencing some of the highest growth in this sector in the nation.³¹⁰ The high level of potential investment and the specification of brewers in the incentive together could account for this rapid increase in Pennsylvania's craft beer industry.
- In the same period New York had a net increase of 235 craft breweries. New York has the third most craft breweries of any State.

Virginia: Farm and Wineries and Vineyards Tax Credit

This income tax credit is available for Virginia farm wineries and vineyards and applies to both individuals and corporations. The credit is equal to 25 percent of all qualified capital expenditures made in connection with the establishment of new Virginia farm wineries and vineyards, and capital improvements made to existing Virginia farm wineries and vineyards. This credit may not exceed the total tax liability of the applicant, and expenses deducted as a Section 179 expense on a federal income tax return cannot be claimed as part of this program. This credit is prorated if total applications for this program exceed \$250,000.³¹¹

- The \$250,000 cap is the smallest incentive investment among these comparable programs.
- Virginia targets wine specifically, while New York's incentivizes more types of alcohol.
- Virginia does not use size of the winery or vineyard as a qualification, while New York's targets small producers.
- Virginia's program incentivizes the agricultural aspects of alcohol production by qualifying expenses such as fertilizer, irrigation equipment, and seeds, among other purchases necessary for farming, while New York's incentive is based solely on production.
- Virginia has fewer wineries than New York and is growing them at a slower rate.³¹²
- Between 2018 and 2023 Virginia had a net gain of only two wineries and during that same period New York had a net gain of 76 wineries.^{313, 314}

New Mexico: Beer and Wine Producers Preferential Tax Rate

This program offers a decreased tax rate for microbreweries producing less than 5,000 barrels of beer annually and small wineries producing less than 560,000 liters of wine per year. The basic tax rate for beer produced by a brewery is \$0.41 per gallon; beer produced by a microbrewery is taxed at \$0.08 per gallon. The basic tax rate for wine is \$0.45 per liter. Wine produced by a small vintner is taxed at a rate of \$0.10 per liter on the first 80,000 liters, and \$0.20 on production over that level up to 560,000 liters.³¹⁵

³¹⁰ "Pennsylvania's Craft Beer Sales & Production Statistics, 2022," Brewers Association, 2023, accessed online at <https://www.brewersassociation.org/statistics-and-data/state-craft-beer-stats/?state=PA>.

³¹¹ "Agriculture and Farming Credits", Virginia Department of Taxation, accessed online at <https://www.tax.virginia.gov/agriculture-and-farming-credits#farm-winerries-vineyards-credit>.

³¹² "How Many Wineries Are in Virginia?", Wineries of Virginia, June 24, 2018, accessed online at <https://wineriesvirginia.com/wineries-in-usa/>.

³¹³ "New York Wineries", New York Wine and Grape Foundation, accessed online at <https://newyorkwines.org/wineries/>.

³¹⁴ "All Wineries | Virginia Wine", Virginia Wine, accessed online at <https://www.virginiawine.org/wineries/all>.

³¹⁵ "Liquor Excise Tax", New Mexico Department of Taxation and Revenue, October 22, 2020, accessed online at <https://www.tax.newmexico.gov/all-nm-taxes/2020/10/22/liquor-excise-tax/>.



In 2019, the program tax benefit for New Mexico alcohol producers was \$1.6 million,³¹⁶ which was a larger investment than Virginia, but less than Pennsylvania and New York. This program has been in existence long enough that it is difficult to attribute any growth or changes in New Mexico's alcohol production to this program.

Benchmarking Summary

Overall, based on the information available, New York's Alcoholic Beverage Production Credit provided the largest total tax credit of the four states offering similar credits reviewed for tax year 2019.

The growth of the beer industry under the initial iteration of New York's program, the Beer Production Tax Credit, seems to be the impetus for its expansion. The program, in combination with other changes to alcohol production laws and taxes were very well received by small breweries, especially as this was a boom time nationwide for craft breweries. Part of the program's success can be inferred through the minimal changes it underwent during the expansion in 2016. The program offers the same credit to cider, wine, and liquor producers that it does to breweries. The only difference is in the amount of wine and liquor produced to be considered a 'small' producer.

Return on Investment

Data Explanation

As previously noted, the project team used data from New York State's Open Data portal and the Annual Reports on New York State Tax Expenditures for this analysis. The open data portal provided data on the number of taxpayers utilizing the credit for the period 2016 to 2019 for corporate tax and 2016 to 2020 for personal tax. The tax expenditure reports provided aggregated expenditure data for personal taxpayers through 2020 and corporate taxpayers through 2019, and estimated data for subsequent years through 2023.

For purposes of the economic impact analysis, the project team used the actual total credit used from the relevant Annual Reports on New York State Tax Expenditures for tax years 2018 and 2019, and the estimated total credit used for tax years 2020 through 2022.

Economic Impact Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for NYS.³¹⁷ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include "non-market" transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy

³¹⁶ "Monthly Alcohol Beverage Excise Tax Report", New Mexico Department of Taxation and Revenue, accessed online at <https://www.tax.newmexico.gov/all-nm-taxes/other-reports-overview/monthly-alcohol-beverage-excise-tax-report/>.

³¹⁷ Additional information on the IMPLAN model is found in Appendix A.



for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Impacts

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the number and value of credits utilized by year.

The analysis was based on the total dollar amount of Alcoholic Beverage Production Credits utilized by taxpayers as reported by the Annual Reports on New York State Tax Expenditures, which provided the actual credits utilized for 2018 and 2019 and the forecast credits to be utilized for 2020-2022. Table 208 presents the value of credits imported to IMPLAN for the Alcoholic Beverage production sector for the analysis with the annual impacts by sector, grouped by year to account for inflation effects.

Table 203: Reported Investment in Alcoholic Beverage Tax Credit, 2018 to 2022
(Dollars in Thousands)

Fiscal Year		NY State Investment
2018	Actual*	\$4,200
2019		\$4,200
2020	Forecast**	\$3,000
2021		\$4,000
2022		\$4,000
Total		\$19,400

*Actual tax credits utilized by taxpayers from Annual Reports on New York State Tax Expenditures

**Forecasts based on FY21-FY24 Tax Expenditure Reports

Based on the IMPLAN model, the Alcoholic Beverage Production Credit program supported a total of 75 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022, with 15 average annual jobs.

Table 204: Total Job Impacts in New York State, 2018 to 2022

Year	Direct	Indirect	Induced	Total
2018	9	4	3	16
2019	9	4	3	16
2020	6	3	2	12
2021	8	4	3	15
2022	8	4	3	15
Total	42	19	14	74
Annual Average	8	4	3	15



Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credit utilization from Annual Reports on New York State Tax Expenditures

Impact on Revenues for New York State and its Municipalities

Based on the IMPLAN model, the Alcoholic Beverage Production Credit generated an estimated \$8.5 million in tax revenue at the local, county and state levels from the period 2018 to 2022, as indicated in Table 205, and \$8.0 million when including federal impacts as shown in Table 211.

Table 205: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Thousands)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$4,723.1	\$223.2	\$132.5	\$5,078.7
County	\$1,045.4	\$43.9	\$25.6	\$1,114.8
State	\$2,061.1	\$146.8	\$91.1	\$2,299.1
Total State, County, Local	\$7,829.5	\$414.0	\$249.1	\$8,492.6

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credit utilization from Annual Reports on New York State Tax Expenditures

Table 206: Total Taxes, Total for 2018 to 2022 (Dollars in Thousands)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$7,829.5	\$414.0	\$249.1	\$8,492.6
Federal	-\$1,071.3	\$320.5	\$224.8	-\$526.0
Total Taxes	\$6,758.3	\$734.4	\$473.9	\$7,966.6

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credit utilization from Annual Reports on New York State Tax Expenditures

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g. wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 207: Labor Income, 2018 to 2022 (Dollars in Thousands)

Year	Direct	Indirect	Induced	Total
2018	\$605.0	\$384.0	\$258.1	\$1,247.0
2019	\$606.0	\$384.6	\$258.5	\$1,249.2
2020	\$429.0	\$272.3	\$183.0	\$884.3
2021	\$569.0	\$361.1	\$242.7	\$1,172.8
2022	\$565.9	\$359.2	\$241.4	\$1,166.4
Annual Average	\$555.0	\$352.2	\$236.7	\$1,143.9

Source: Economic Impact Analysis by Fourth Economy based on actual and projected credit utilization from Annual Reports on New York State Tax Expenditures



Table 208: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$67,000	\$96,000	\$78,000	\$76,000

Source: *Economic Impact Analysis by Fourth Economy based on actual and projected credit utilization from Annual Reports on New York State Tax Expenditures*

Prior to its expansion in 2016, the benefits for this credit were for small beer producers only. When this program expansion was announced, it was expected to provide tax benefits to NYS alcohol producers OF \$4.0 million over the next two years.³¹⁸ It dispersed more tax credits than expected, reaching \$2.6 million in corporate franchise tax credits and \$1.3 million in personal income tax credits.³¹⁹ The program received even more use in the following years, dispersing a total of \$4.2 million in tax credits in 2018 and 2019.³²⁰ The previous iteration of this program had provided a tax benefit to microbreweries of \$11.0 million over the previous four years, roughly \$2.75 million a year.³²¹ With this, close to \$1.0 million in tax benefits to alcohol producers could be attributed to the expansion of this program.

With the requirement that all alcohol producers attain licenses, there is an apparent correlation between this program and an increase in alcohol production throughout the duration of this program. In 2011, before the first iteration of this program was rolled out, there were a little more than 300 licenses for alcohol producers throughout the entire state of New York. In 2017, one year after the program expanded, the total number of licenses was closer to 800. In 2022, it was reported that 329 licenses out of the approximate 800 were issued to craft beer producers alone.³²² In 2018 New York experienced the second highest growth in number of wineries in the nation. There are now over 1,000 craft producers, with New York ranking first in the U.S. for the number of hard cider producers, third in the number of craft distillers and breweries, and fourth for the total number of wineries.³²³

Shift Share Analysis to Identify Incentive Impact on Industry Growth

As has been noted, New York has a well-established alcohol production industry, with tax incentives targeted at the industry that have been in place for several years. One rationale for the use of tax incentives is to grow an industry with the expectation that the growth will outpace that of its competitors. To determine how the industry's growth in NYS compares to that nationally, the project team conducted a shift-share analysis, examining employment within the sector in NYS, then comparing it to employment growth both within the entire national economy and the national alcoholic beverage manufacturing

³¹⁸ "Governor Cuomo Announces Alcohol Beverage Production Credit Expanded to Include Wine, Spirits and Cider Industries", New York State Department of Agriculture and Markets, June 9, 2016, accessed online at <https://agriculture.ny.gov/news/governor-cuomo-announces-alcohol-beverage-production-credit-expanded-include-wine-spirits-and>.

³¹⁹ New York State Division of the Budget, "Fiscal Year 2024 Annual Report on New York State Tax Expenditures," 2023, <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>, 143.

³²⁰ Ibid.

³²¹ "Governor Cuomo Announces Alcohol Beverage Production Credit Expanded to Include Wine, Spirits and Cider Industries", New York State Department of Agriculture and Markets, June 9, 2016, accessed online at <https://agriculture.ny.gov/news/governor-cuomo-announces-alcohol-beverage-production-credit-expanded-include-wine-spirits-and>.

³²² "New York's Craft Beer Sales & Production Statistics, 2022", Brewers Association, 2023, accessed online at <https://www.brewersassociation.org/statistics-and-data/state-craft-beer-stats/?state=NY>.

³²³ Don Cazentre, "New York's Craft Beverage Boom, Illustrated in 9 Charts", New York Upstate, October 25, 2017, accessed online at <https://www.newyorkupstate.com/drinks/2017/10/new-york-states-craft-beer-wine-and-spirits-boom-explained-in-9-charts.html>.



industry. The following compares employment effects from these components for NYS in the time period from 2012 to 2022:

Table 209: New York State Shift-Share Analysis, Alcoholic Beverage Manufacturing Employment, 2012 and 2022

Description	US: Total Private Employment	US: Alcoholic Beverage Manufacturing	NYS: Alcoholic Beverage Manufacturing
2012	110,645,869	82,661	4,113
2022	128,718,060	206,370	10,335
Change in Jobs	18,072,191 (+16.3%)	123,709 (+49.7%)	+6,222 (+51.3%)
Job Change Expected from Overall US Growth			+672
Job Change Expected from US Growth in Industry			+5,484
Job Change Attributable to NYS Industry Growth			+67

Source: PFM analysis of BLS QCEW data for NAICS codes 312120, 312130, and 312140

From this, it can be determined that overall private nonfarm growth in the U.S. economy from 2012 to 2022 was 16.3 percent, while growth in the alcoholic beverage manufacturing industry nationally was 49.7 percent. By contrast, growth in the alcohol manufacturing industry in NYS for that same period was 51.3 percent.

There were 6,222 more jobs in the New York alcoholic beverage industry in 2022 than there were in 2012, of which 672 jobs were attributable to the overall growth in the national economy, 5,484 jobs were attributable to growth in the alcoholic beverage industry nationally, and 67 jobs were attributable to growth of New York's alcoholic beverage industry, indicating that New York's alcoholic beverage production industry demonstrated a small competitive advantage over the period. The finding suggests that the alcoholic beverage tax credit helps to support job growth in excess of national economic and industry averages.

The But-For Test

As noted in the introduction, the 'but for' test is an important step in the process of determining the benefit of an incentive, but it is practically impossible to quantify with any degree of certainty. One way to evaluate the impact of an incentive is to calculate the total benefits that would have to be attributable to the incentive in order for the state to break even on the investment. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the credit to have been beneficial to the state.

In the ROI discussion that follows, the project team compares the state tax revenues generated by the assumed economic activity associated with the awards from the Alcoholic Beverage Production Credit to the amount of awards paid. Based on this analysis, the state does not break even on its investment even in the unlikely event that the incentive is 100% responsible for the tax revenue generated by program participants.

However, in this case, the incented investment is designed as part of an overall package of programs targeted at growing the state's alcoholic beverage industry. This credit's ability to complement and amplify other state investments in the industry may satisfy the 'but for' test even in the absence of quantitative return on investment.



Other Qualitative Economic Benefits

New York State’s Alcoholic Beverage Production Credit program was launched in the same year as other related efforts, and its impact should be considered in this context. One effort was the Farm License, which allows the brewery to open branch offices to sell their product from. Another effort was the elimination of brand label fees for small batch producers. Previously, small producers had to pay \$3,025 in fees to register their product with the state for 36 months. The elimination of this policy in 2016 has benefited the producers. In addition, taxes were eliminated on the alcohol served during tastings at the site of production, as well as on the bottles, bottle caps, and labels used to package the beer.³²⁴ Alcohol producers can benefit from the Production Credit, the flexibility offered by a farm license, and the elimination of the brand label fee. These programs, in combination, likely contributed to the current increase in alcohol producers in New York.

There are other qualitative benefits provided by the Alcoholic Beverage Production Credit. A thriving alcoholic beverage industry attracts tourists interested in culinary experiences and local beverages, creating a potential benefit not only to the producers but also the broader hospitality sector. Additionally, these credits may incentivize producers to invest in innovative products and production techniques, and help to boost local agriculture through the use of locally-based ingredients.

Summary Findings

Whether the program yields a net benefit to the state of New York is a function of several factors, including the state’s foregone revenue from the program and its return on that investment. The state credited \$19.4 million of foregone revenue for the Alcoholic Beverage Production Credit program between 2018 and 2022. For the program to provide a positive net benefit, it must return more than that investment through the taxes associated with the economic activity from that investment or other equally large quantitative and/or qualitative impacts.

Using taxes is a more conservative metric than value added or output, and it reflects whether the program ‘pays for itself.’ Using only state taxes provides the most conservative measure of return to the state itself. For the Alcoholic Beverage Production Credit analysis, the project team also based this analysis only on the taxes generated by the value of the credits.

Table 210: ROI and Assessment of the “But For” ROI Requirement

Total State Costs and Return (2018-2022)	Tax Credits Awarded	Direct Taxes	Total Taxes
State Taxes Only (\$ thousands)	\$19,400.0	\$2,061.1	\$2,299.1
Return on \$1.00 in Foregone Revenue		\$0.11	\$0.12

Source: IMPLAN Economic Impact Analysis by Fourth Economy based on Value of Credits Reported in the Tax Expenditure Reports.

³²⁴ “Governor Cuomo Announces Alcohol Beverage Production Credit Expanded to Include Wine, Spirits and Cider Industries”, New York State Department of Agriculture and Markets, June 9, 2016, accessed online at <https://agriculture.ny.gov/news/governor-cuomo-announces-alcohol-beverage-production-credit-expanded-include-wine-spirits-and->



From the \$19.4 million in foregone revenue, the Alcoholic Beverage Production Credit program generated \$2.1 million in direct state taxes and total state taxes of \$2.3 million. The state's investment provided an overall return of \$0.11 per dollar invested based on direct taxes to the state, and a return of \$0.12 per dollar invested based on total state taxes.

Of course, states make many investments that are meant to benefit the overall quality of life of its residents and businesses. Economic growth, particularly for a nascent industry, can ultimately yield significant economic activity that will outweigh the original investment. In this case, because the tax credit is limited (in terms of the gallons that receive the credit), there is the opportunity for some producers to 'grow out of' the credit, which would increase the economic benefit for the state.

As previously noted, craft beer breweries have exhibited considerable growth in the state and the U.S. Consumer expenditures for these products continues to grow, and they provide unique opportunities for small business start-ups and expansion throughout all regions of the state, which can be a useful community development tool. In addition, a thriving alcoholic beverage industry attracts tourists interested in culinary experiences and local beverages, creating a potential benefit not only to the producers but also the broader hospitality sector. Additionally, these credits may incentivize producers to invest in innovative products and production techniques and help to boost local agriculture through the use of locally based ingredients. These qualitative impacts are not captured in the quantitative side of ROI, but they can be considerable.



Biofuel Production Credit



Executive Summary

Purpose and History

New York State's (NYS) Biofuel Production Credit program, effective in 2006, was meant to grow the NYS biofuel industry.

Design and Administration

The program provided a tax credit that is equal to \$0.15 per gallon of biofuel produced within NYS, after the first 40,000 gallons produced per year are presented to the market. The credit is capped to \$2.5 million per entity per tax year and can be claimed for four consecutive tax years per biofuel plant.³²⁵ Eligibility is determined by whether an individual or business produced biofuel on or after January 1, 2006, and before January 1, 2020, at a biofuel plant located in the state.³²⁶ The program sunset on January 1, 2020 and has not received an extension to offer the credit for production after that date.

Benchmarking

Many states provide production credits for biofuels, with ethanol in particular being an incentive target in many states. Many of these states are located in agricultural states, particularly corn producing states for ethanol. This is logical, because facilities in these states have ready access to raw materials needed for biofuel production.

Usage

Applicants can still claim the credit for production completed prior to the program sunset, but during 2020 no credits were claimed.³²⁷ Annual Biofuel Production Credit utilization never exceeded \$6.1 million (2009), and it consistently underperformed its award forecast. The lack of use for the past decade characterizes an inability to attract interest and drive economic growth, with the lack of credit utilization possibly being attributed to high barriers of entry for businesses.

Return on Investment

There is insufficient data to perform an economic impact and tax revenue analysis for this program due to its de minimis use over the past decade.

Were usage to resume, it would make sense to consider qualitative environmental benefits. The environmental advantages of biofuels in comparison to carbon-based fuels is somewhat unclear. The Environmental Protection Agency has stated that "Depending on the feedstock and production process, biofuels can emit even more greenhouse gases than some fossil fuels on an energy-equivalent basis."³²⁸ In considering future biofuel tax credit programs, the State of New York should consider restricting the

³²⁵ "Biofuel production credit", New York State Department of Taxation and Finance, March 10, 2021, accessed online at <https://www.tax.ny.gov/pit/credits/biofuel.htm>.

³²⁶ "Biofuel production credit", New York State Department of Taxation and Finance, March 10, 2021, accessed online at <https://www.tax.ny.gov/pit/credits/biofuel.htm>.

³²⁷ "Fiscal Year 2024 Annual Report on New York State Tax Expenditures", New York State Division of the Budget, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.

³²⁸ "Biofuels and the Environment", United States Environmental Protection Agency, December 12, 2023, accessed online at <https://www.epa.gov/risk/biofuels-and-environment>.



incentive to types of biofuel production that are carbon-neutral consistent with the state's ambitious climate goals, targeting being powered by carbon-free electricity by 2040 and a net-zero economy by 2050.³²⁹

While quantitative data was not available for any other state biofuel programs, states with comparative programs offer differences in structure that may help alleviate some of obstacles faced by the Biofuel Tax Credit should the State wish to reimagine this tax incentive in another form.

Background

Incentive Purpose

The Biofuel Production Credit provided incentives to grow and develop the production of biofuels within New York State (NYS).

Legislative History

The Biofuel Production Credit is effective for tax years beginning on or after 2006 and before January 1, 2020. Note: The last tax year this credit may be claimed was 2019 (Sunset date has passed).

Incentive Design³³⁰

Program eligibility was determined by whether an individual or business produced biofuel on or after January 1, 2006, and before January 1, 2020, at a biofuel plant located in New York State.³³¹ The program has not received an extension to offer the credit for production after the January 1, 2020, sunset date. Applicants can still claim the credit for production completed prior to that date, but during 2020 no credits were claimed.³³²

Incentive Benefits¹

New York State's Biofuel Production Credit program incentivized biofuel production in New York by providing a tax credit that was equal to \$0.15 per gallon of biofuel produced within the state. Businesses could receive this credit after the production of the first 40,000 gallons per year presented to the market. Finally, the credit was capped at \$2.5 million per entity per tax year and could be claimed for four consecutive tax years per biofuel plant.³³³

³²⁹ David Roberts, "New York just passed the most ambitious climate target in the country", Vox, July 22, 2019, accessed online at <https://www.vox.com/energy-and-environment/2019/6/20/18691058/new-york-green-new-deal-climate-change-cuomo>.

³³⁰ "Consolidated Laws of New York, Chapter 60 (TAX), Article 1, Section 28: Empire state commercial production credit", The New York State Senate, May 12, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/28>.

³³¹ "Biofuel production credit", New York State Department of Taxation and Finance, March 10, 2021, accessed online at <https://www.tax.ny.gov/pit/credits/biofuel.htm>.

³³² "Fiscal Year 2024 Annual Report on New York State Tax Expenditures", New York State Division of the Budget, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.

³³³ "Biofuel production credit", New York State Department of Taxation and Finance, March 10, 2021, accessed online at <https://www.tax.ny.gov/pit/credits/biofuel.htm>.



Incentive Requirements

In order to claim this refundable credit, a taxpayer must have produced biofuel on or after January 1, 2006, and before January 1, 2020, at a biofuel plant located in New York State.

"Biofuel" means a fuel which includes biodiesel and ethanol. The term "biodiesel" is a fuel comprised exclusively of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, which meets the specifications of American Society of Testing and Materials designation D 6751-02. The term "ethanol" means ethyl alcohol manufactured in the United States and its territories and sold (i) for fuel use and which has been rendered unfit for beverage use in a manner and which is produced at a facility approved by the federal bureau of alcohol, tobacco and firearms for the production of ethanol for fuel, or (ii) as denatured ethanol used by blenders and refiners which has been rendered unfit for beverage use. The term "biofuel" may also include any other standard approved by the New York state energy and research development authority.

Incentive Use

At the direction of the Department of Taxation and Finance, the project team used the Fiscal Year 2024 Annual Report on New York State Tax Expenditures to determine expenditure data and the New York State Open Data site do determine the number of taxpayers utilizing the credit. In both cases, the most recent available data including both personal and corporate tax was for tax year 2019.

The total expenditures associated with the Biofuel Production Credit Program were consistent during the period of 2015 through 2019 at less than \$100,000 annually. The program sunset in 2020, and de minimis additional expenditures are expected through 2023.

Table 211: Total Actual Tax Expenditures (Dollars in Millions)³³⁴

Tax Year	Personal Income Tax (PIT)	Corporate Franchise Tax (CFT)	Total (PIT & CFT)
2015	Less than \$.1 million	\$0	Less than \$0.1 million
2016	Less than \$.1 million	\$0	Less than \$0.1 million
2017	Less than \$.1 million	\$0	Less than \$0.1 million
2018	Less than \$.1 million	\$0	Less than \$0.1 million
2019	Less than \$.1 million	\$0	Less than \$0.1 million
2020	\$0	*Less than \$.1 million	*Less than \$.1 million
2021	*Less than \$.1 million	*Less than \$.1 million	*Less than \$.1 million
2022	*Less than \$.1 million	*Less than \$.1 million	*Less than \$.1 million
2023	* Less than \$.1 million	*Less than \$0.1 million	*Less than \$0.1 million

Source: Fiscal Year Annual Reports on New York State Tax Expenditures, Table 8

*Forecasts based on FY21-FY24 Tax Expenditure Reports

Over the period of 2016 through 2019, the number of taxpayers utilizing the credit never exceeded three. Due to disclosure regulations, if the number of taxpayers utilizing the credit is below three in a given tax

³³⁴ "New York State Tax Expenditure Report", New York State Department of Taxation and Finance, accessed online at <https://www.tax.ny.gov/research/stats/statistics/annual-tax-expenditures.htm>.



year, the amount of credit utilized by the taxpayers cannot be disclosed. This results in the undisclosed amounts are presented in Table 217 below.

For tax years in which the number of taxpayers utilizing the credit was three, the amount of credit utilized by those taxpayers was below \$5,000. There was no utilization of the program by corporate franchise tax taxpayers for tax years 2016 to 2019.

Table 212: Personal Income Tax Credit Detail

Tax Year	Number of Taxpayers	Amount of Credit
2016	3	\$841
2017	Less than 3	Undisclosed
2018	Less than 3	Undisclosed
2019	3	\$4,238

Source: DATA.NY.GOV, New York State Economic Incentive Tax Credit Utilization: Beginning Tax Year 2016, Credit Name "Biofuel Production Credit"

Benchmarking

States employ a wide array of tax incentives to incentivize biofuel production.³³⁵ Some provide tax incentives related to sales and use taxable purchases, others provide property tax exemptions or rate reductions. It is also common for biofuels to pay a reduced motor fuel tax. It is notable that many of these programs are in the western half of the U.S., as corn and other crops are raised there and often the source of biofuels.

Table 213: New York Offers an Industry Targeted Relative to Its Peers

State/ Program	Operational Years	Funding Type	Firms Eligible to Receive Benefit
New York: Biofuel Production Credit program	2006-2020	Production Tax Credit	Biofuel plants
Virginia: Biodiesel and Green Fuels Producer Credit	2008*	Producer Tax Credit	Biofuel producers
Maine: Biofuel Production and Commercial Use Tax Credit	2004-2015	Production Tax Credit	Biofuel producers
Alabama: Biofuel Production Jobs Tax Credit	1990*	Production Tax Credit	Biofuel plants
Kentucky Ethanol Tax Credit	2005*	Production Tax Credit	Biofuel plants

³³⁵ A detailed listing of each state's tax and other incentives for the biofuels industry was done recently by Michael Bruce for the John Locke Foundation, "In the Tank: Grading State Biofuel Incentives and Mandates," August 14, 2023, accessed online at <https://www.johnlocke.org/research/in-the-tank/>.



State/ Program	Operational Years	Funding Type	Firms Eligible to Receive Benefit
Montana Ethanol Production Incentive	2022*	Production Tax Credit	Biofuel producers
North Dakota Ethanol Production Incentive	**2002	Producer Tax Credit	Biofuel producers

* Is a currently running with no current scheduled sunset date.

** Is only in effect when ethanol prices are abnormally low and corn prices are abnormally high

Alabama Biofuel Production Jobs Tax Credit

- Credit of up to 3 percent of the previous year’s annual employee wages when investing in the development of a biofuel production facility.
- Claimable against utility gross receipts and utility service taxes for up to 10 years
- May be eligible for an income, insurance premium or financial institution excise tax of 1.5 percent of qualified capital investment annually for 10 years.

Iowa: Biodiesel Production Tax Credit

- Qualified producers are eligible for a tax credit of \$0.04 per gallon of biodiesel produced.
- Producers may claim the credit for up to 250,000 gallons of biodiesel.
- The tax credit expires January 1, 2028

Kentucky Ethanol Tax Credit

- Nonrefundable credit applied against individual or corporate income taxes
- Credit is \$1.00 per ethanol gallon produced
- Cap of \$5,000,000, which is pro-rated if claims exceed the cap.

Montana Ethanol Production Incentive

- Montana-based ethanol producers may receive a \$0.20 per gallon tax incentive
- Must be produced solely from Montana agricultural products or from non-Montana products when Montana products are not available.
- If uses non-Montana products, the incentive is reduced proportionally to the percentage of non-Montana agricultural products used.

North Dakota Ethanol Production Incentive

- Counter-cyclical credit that producers can receive when corn prices are above average and/or ethanol prices are below average
- Formula is established in statute
- Incentive for each producer in any year is capped at \$1.6 million
- Payouts are only made when there is sufficient resources available in the incentive fund.
- No producer may receive more than \$10.0 million in incentive payments over the life of the production facility or for longer than 10 years.

Virginia: Biodiesel and Green Diesel Fuels Producers Tax Credit

- The program is designed to incentivize the production of alternative fuels in Virginia.
- Firms that produce 2 million gallons or less of biodiesel or green diesel, per year, can claim this credit over the first three years of production.



- The credit is equal to \$0.01 per gallon produced with a maximum credit set at the lesser of \$5,000 or the relevant tax liability. Credit may be carried over for three years and is also transferrable.
- Firms must apply to be certified and issued a certificate to receive the credit.
- Data on utilization was not publicly available.

Maine: Biofuel Production and Commercial Use Tax Credit

- This program is designed to incentivize the production and use of biofuels in Maine.
- Taxpayers must apply to the Commissioner of Environmental Protection regarding the specific biofuel being produced, the quantity produced, and the inputs used in the process.
- The credit is equal to \$0.05 per gallon of biofuel produced. Maine also allows for “blended” fuels to qualify – meaning the credit would be equal to the proportion of the fuel blend that is biofuel as opposed to fossil fuels.
- While there is no cap on individual awards, the credit cannot exceed the relevant tax liability for that tax year. Any unused credit may be carried forward for up to ten years.

Benchmarking Summary

The Biofuels Tax Credit supports a fast-growing industry that offers living wage jobs to New Yorkers. Over the length of the program, 2006-2020, the biofuels industry employment grew by 25 percent. The jobs brought on by this growth are, on average, above living wage jobs, offering a wage of at least \$21.46 an hour.³³⁶ These jobs provide occupations to New Yorkers that allow them to support themselves. The average hourly wage for this industry was \$58.98 an hour, well above the living wage for New York State.³³⁷

However, the program has experienced low utilization in the years leading up to its sunset. Even in the year with the most credits utilized (2009), the program never exceeded \$6.1 million on an annual basis and consistently underperformed in its award forecast. While the exact cause of this underutilization is unknown, the uptick followed by a steady fall in use shows that the incentive failed to attract the interest of individuals and businesses in the state, and thereby failed to be a driving force of impact.

An additional challenge was that the incentive to increase biofuel production was potentially counter to the environmental goals of New York State, lacking restrictions on production process and biofuel type, which potentially incentivizes production that releases additional greenhouse gases into the air. New York has some of the most ambitious climate goals in the country, with the state targeting to be powered by carbon-free electricity by 2040 and have a net-zero economy by 2050.³³⁸

The program’s climate impact benefits could potentially be maximized by targeting its benefits to specific types of biofuel production, such as cellulosic or other advanced biofuel production methods. The environmental protection agency has stated that “Depending on the feedstock and production process,

³³⁶ “Living Wage Calculation for New York”, Massachusetts Institute of Technology Living Wage, accessed online at <https://livingwage.mit.edu/states/36>.

³³⁷ Estimates created from Lightcast Regional Industry Data, assumes 260 working days at an average 8 hours per day.

³³⁸ David Roberts, “New York just passed the most ambitious climate target in the country”, Vox, July 22, 2019, accessed online at <https://www.vox.com/energy-and-environment/2019/6/20/18691058/new-york-green-new-deal-climate-change-cuomo>.



biofuels can emit even more GHGs than some fossil fuels on an energy-equivalent basis.³³⁹ This variety in the efficiency and impact that biofuels have on greenhouse gas emissions is documented in independent research as well.³⁴⁰ Since the credit did restrict those receiving the credit by production type, there is no guarantee that businesses and individuals utilizing the credit are using a carbon neutral production process. Without confirmation of these production practices, the Biofuels Production Credit as structured had the potential to incentivize modes of biofuel production that detract rather than further New York's green energy goals.

Relative to New York, states with comparative programs offer programs different in structure that help alleviate some of obstacles faced by the Biofuels Tax Credit should the State wish to reimagine this tax incentive in another form.

Return on Investment

There is insufficient data to perform an economic impact analysis for this program. However, qualitative impacts like environmental impact and sustainability should be considered.

The Biofuel Production Tax Credit has not been utilized in a significant way since 2012, when use was \$5 million. 2012 was the last year that claimed credits exceeded \$100,000.³⁴¹ Use reached an all-time low for the program in 2020, where no credits were claimed in the year the program sunset.³⁴² There was a continued and persistent lack of utilization by businesses in the state over the past decade, supporting the conclusion that the program's barriers may have been too high, and indicating that the program was appropriately sunset.

Summary Findings

This program did not really gain traction. While biofuels are considered to be part of the 'green' movement away from carbon-based fuel, it may well be that other locations have a comparative advantage that even a tax credit cannot outweigh. With limited resources and a need to target sectors, focusing attention elsewhere seems a rational policy decision.

³³⁹ "Biofuels and the Environment", United States Environmental Protection Agency, December 12, 2023, accessed online at <https://www.epa.gov/risk/biofuels-and-environment>.

³⁴⁰ Keisuke Hanaki and Joana Portugal-Pereira, "Chapter 6: The Effect of Biofuel Production on Greenhouse Gas Emission Reductions", Science for Sustainable Societies, 2019, accessed online at <https://library.oapen.org/bitstream/handle/20.500.12657/23282/1006873.pdf?sequence=1#page=56>.

³⁴¹ "FY 2016 Annual Report on New York State Tax Expenditures", New York State Division of the Budget, accessed online at <https://www.budget.ny.gov/pubs/archive/fy1516archive/eBudget1516/fy1516ter/TaxExpenditure2015-16.pdf>; "Fiscal Year 2024 Annual Report on New York State Tax Expenditures", New York State Division of the Budget, accessed online at <https://www.budget.ny.gov/pubs/archive/fy24/ex/ter/fy24ter.pdf>.



New York City Unincorporated Business Tax Credit



Executive Summary

Purpose and History

The New York City (NYC) Unincorporated Business Tax (UBT) Credit, created in 1997, is intended to provide relief to individual NYC residents who are subject to the UBT.

Design and Administration

Eligible residents may claim a credit against their NYC Personal Income Tax for a portion of the UBT payments made as sole proprietors. It provides a credit on income for both full and part-year residents, businessowners, and beneficiaries of an estate or trust in the amount of:

- 100 percent of the UBT imposed on a city resident or part-year resident with city taxable income of \$42,000 or less;
- Gradual decrease from 100 to 23 percent of the UBT for a resident with a city taxable income between \$42,000 and \$142,000; and
- 23 percent of the UBT imposed on a resident with a city taxable income of \$142,000 or more.

The credit allowed cannot exceed the NYC personal income tax and can only reduce NYC tax liability to zero, with any unused credit unable to be refunded or carried over.

The credit is taken against NYC taxes. New York State (NYS) administers the program on behalf of NYC. This credit is administered by the state, but the credit is against New York City taxes. Therefore, the state has no direct investment. While the costs to the state of administering the program on behalf of New York City are not determinable, it is reasonable to assume that they are minimal in comparison to the state-level taxes generated by the program.

Benchmarking

There are very few UBT credits at either the local or state level. With Connecticut repealing the final aspects of their non-programmatic UBT credit law in 2003, Washington, D.C. remains the only other government with a UBT credit. However, there is no quantitative data available for the D.C. credit because it is non-programmatic.

Use

During the period 2011 through 2020, The total dollar value of this credit ranged from \$123.2 million (2020) to \$180.9 million (2017), with an average of \$143.8 million. The number of filers ranged from 19,718 (2020) to 24,375 (2019), with an average of 22,272. The average value of credit per filer ranged from \$5,903 to \$7,778.

There was a significant decrease in both the number of filers and the total dollar value of the credit in 2020, likely due to the impact of the COVID-19 pandemic.

Return on Investment

Based on estimates generated by the IMPLAN model, the NYC UBT Credit Program supported a total of 54,100 total jobs in the state between 2016 and 2020, with an average labor income per employee of \$106,000. From NYS's perspective, The NYC UBT Credit program generated \$182.2 million in direct state taxes and total state taxes of \$275.4 million during the five-year period 2016-2020, an average of \$55.1 million in total state taxes a year. Even if these benefits are not fully attributable to the program, the credit clearly provides a net benefit to the state.



Although NYC's UBT credit appears to be unique, the qualitative aspects of this type of credit include encouraging entrepreneurship by making it more financially viable to start and operate a business and promoting economic development within the city.

Background

Incentive Purpose

This tax credit prevents double taxation on New York City (NYC) residents who own or have an interest in a business subject to the City's Unincorporated Business Tax (UBT).

Legislative History

The NYC UBT Credit is effective for tax years beginning on or after January 1, 1997.

Incentive Design

To claim this credit, a taxpayer must be a resident individual, estate or trust, or a part-year resident individual or trust of NYC for the tax year, and must be:

- The owner of a business,
- A beneficiary of an estate or trust, or
- A partner in a partnership; whose business, estate or trust, or partnership is subject to the NYC UBT.

The credit is claimed against NYC Personal Income Tax. New York State (NYS) administers the program.

Incentive Benefits³⁴³

The amount of credit allowed to a NYC resident or part-year resident with city taxable income of \$42,000 or less is 100 percent of the UBT imposed. The credit decreases gradually from 100 percent to 23 percent for taxpayers with city taxable incomes more than \$42,000 but less than \$142,000. For taxpayers with city taxable incomes of \$142,000 or more, the credit is 23 percent of the UBT imposed. However, the credit allowed cannot exceed the NYC personal income tax owed. Any unused credit cannot be refunded or carried over.

Incentive Requirements

In order to claim this credit, a taxpayer must:

³⁴³ "Consolidated Laws of New York, Chapter 60 (TAX), Article 30, Section 1310: Credits against tax", The New York State Senate, April 29, 2022, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/1310>.



- Complete NYS Form IT-219 using the information obtained from their NYC UBT return, with the associated schedules and worksheets (if applicable);
- Transfer the credit computed on Form IT-219 to the NYS tax return
- Submit Form IT-219 with the NYS return.

Incentive Use

During the period of 2011 through 2020:

- The total dollar value of this credit ranged from \$123.2 million (2020) to \$180.9 million (2017), with an average of \$143.8 million.
- The number of filers ranged from 19,718 (2020) to 24,375 (2019), with an average of 22,272.
- The average value of credit per filer ranged from \$5,903 to \$7,778, with an overall average for the period of \$6,454.

Table 214: Total Value of Credit and Number of Filers

Tax Year	Total Value of Credit	Number of Filers	Average Value per Filer
2011	\$130,422,641	20,073	\$6,497
2012	\$132,625,363	20,682	\$6,413
2013	\$135,846,618	21,602	\$6,289
2014	\$150,920,521	22,746	\$6,635
2015	\$153,695,944	23,197	\$6,626
2016	\$140,367,464	23,049	\$6,090
2017	\$180,923,368	23,261	\$7,778
2018	\$145,658,499	24,021	\$6,064
2019	\$143,877,191	24,375	\$5,903
2020	\$123,210,062	19,718	\$6,249
Average	\$143,754,767	22,272	\$6,454

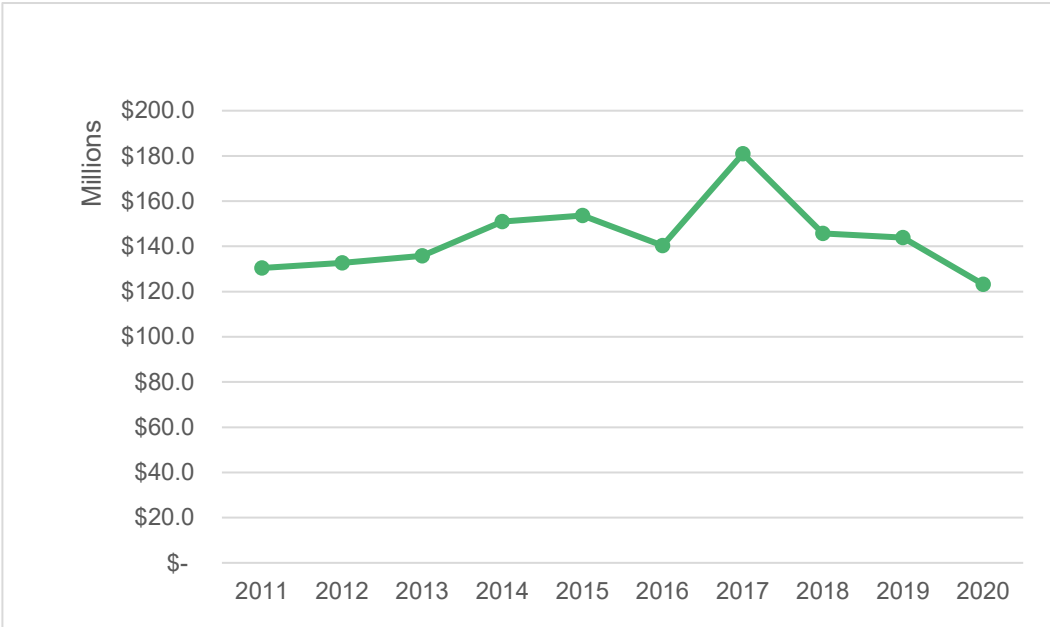
Source: New York City Annual Reports on Tax Expenditures, 2011 through 2020³⁴⁴

Figure 34 illustrates the total dollar value of the UBT credit in years 2011-2020. The total dollar value of this credit per tax year is generally consistent year-over-year, with 2017 representing an above-average year.

³⁴⁴ "Annual Report on Tax Expenditures", New York City Department of Finance, accessed online at <https://www.nyc.gov/site/finance/taxes/annual-report-on-tax-expenditures.page>.



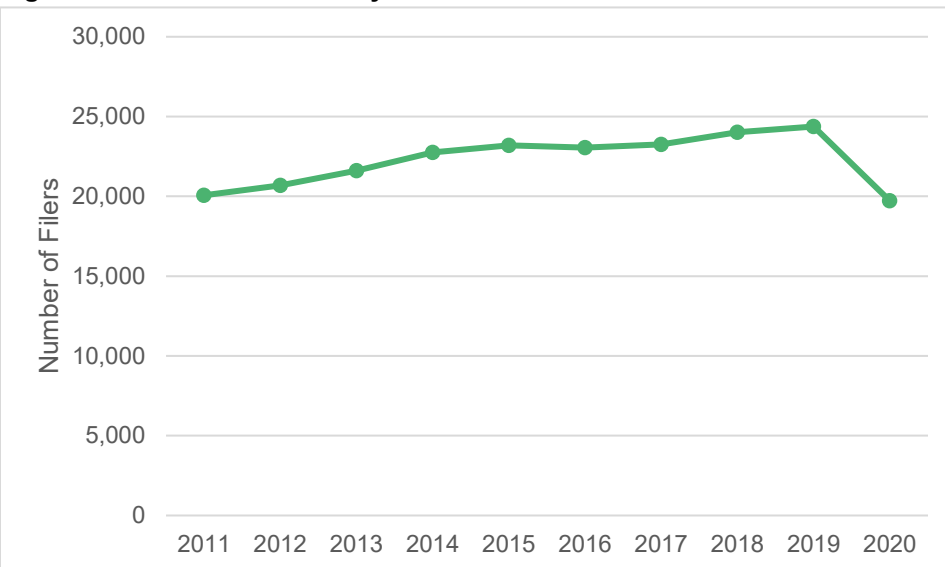
Figure 34: Total Amount of Credit by Tax Year



Source: *New York City Annual Report on Tax Expenditures, 2014-2023*

As illustrated by Figure 35, the number of filers per tax year steadily increased year over year with minor variation over the period. However, in 2020 there was a marked decrease in the number of filers, possibly attributed to business closures during the COVID-19 pandemic.

Figure 35: Number of Filers by Tax Year



Source: *New York City Annual Reports on Tax Expenditures, 2014-2023*



Benchmarking

To better understand the efficacy of the New York City UBT Credit, this section compares this program with a similar incentive program offered by Washington D.C.

Table 215: Comparative Programs

State/ Program	Operational Years	Funding Type	Unincorporated Entities Eligible to Receive Benefit
New York: New York City UBT Credit	1997*	Tax Credit	Businessowners, estates, trusts, and partnerships
Washington D.C.: Tax Credit on Unincorporated Businesses	1988*	Tax Credit	Any trade or business that is an individual, partnership, estate, trust, or other fiduciary

*D.C.: Tax Credit on Unincorporated Businesses*³⁴⁵

While the tax itself is similar in description and purpose as New York, there is no specified program for credits administered by the D.C. Office of Tax and Revenue and therefore quantitative data on the use of the credit is not available.

- Referenced in section 47–1808.07 of D.C. code, tax credits may apply to any unincorporated trade or business, conducted, or engaged in by any resident or nonresident individual, partnership, estate, trust, and any other fiduciary.
- Like the New York City program, tax credits include those for wages to qualified employees. Additionally, insurance premiums, income that includes rent charged to licensed, nonprofit child development centers, and employer-assisted home purchases qualify.

Benchmarking Summary

There are few UBT credits at both the local and state level. Connecticut had a non-programmatic credit on the UBT, but the last remnants of the law were repealed in 2003. D.C. remains the only other easily identifiable area with a UBT credit. Whether the two major metro areas are innovators, or it is a sign that the category of credit is not as relevant in today's incentives climate, is difficult to determine without data.

- There are not many unincorporated tax credits. Other programs like New York's appear to have been discontinued.
- The NYC and D.C. programs are very similar in structure and purpose. Both are relatively older programs that appear to broadly apply to an array of unincorporated businesses.
- The comparison program is non-programmatic. The unincorporated tax is eligible for credits across different claims, rather than set as a specific program.

³⁴⁵ "Subchapter VIII. Tax on Unincorporated Businesses § 47–1808", Council of the District of Columbia, accessed online at <https://code.dccouncil.gov/us/dc/council/code/titles/47/chapters/18/subchapters/VIII>.



Return on Investment

Data Limitations

This tax incentive is administered by the New York City Department of Taxation and Finance. The project team requested data from the Department to evaluate use of the tax incentive and was informed that the data for this incentive is maintained by the City of New York. The project team utilized data from the New York City Department of Finance Annual Reports on Tax Expenditures, available on the New York City website, for the analysis.

Economic Impact Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for New York City.³⁴⁶ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the following data:

- Number and value of credits earned and claimed by year.
- Locations and industries or sectors associated with participating companies.
- Impacts such as employment, payroll, and leveraged investment.
- Location (city, county) of companies claiming exemptions.

The data reported only the number of filers and the value of the credits. In order to analyze the data in IMPLAN, the project team allocated the 2023 adjusted dollars into industry sectors based on the distribution of revenue in non-employer firms in the five New York counties that are coextensive with New York City (Bronx County, Kings County, Queens County, Richmond County, and New York County) using

³⁴⁶ Further explanation of the IMPLAN model is contained in Appendix A.



data from the Census of Non-employer Statistics (NES)³⁴⁷. The project team aggregated industries into sectors that correspond to the reported value of credits by sector.

Table 216: Reported Value of Credits Impacts, 2016 to 2020

Year	Number of Filers	Average	Total Value of Credit	Adjusted 2023 Dollars
2016	23,049	\$6,089.96	\$140,367,464	\$177,136,445
2017	23,261	\$7,777.97	\$180,923,368	\$223,553,943
2018	24,021	\$6,063.80	\$145,658,499	\$175,688,356
2019	24,375	\$5,902.65	\$143,877,191	\$170,450,875
2020	19,718	\$6,248.61	\$123,210,062	\$144,187,910
Total	114,424		\$734,036,584	\$891,017,529

Source: New York City Annual Reports on Tax Expenditures, 2014-2023

The project team used the exact numbers as reported in the model but rounded the resulting impacts for reporting the results. Based on the IMPLAN model, the New York City UBT Credit program supported a total of 54,100 total (direct, indirect, and induced) jobs in the state of New York between 2016 and 2020.

Table 217: Total Job Impacts in New York State, 2016 to 2020

	Direct	Indirect	Induced	Total
Total	36,500	7,700	9,900	54,100

Source: Economic Impact Analysis by Fourth Economy based on Value of Credits Reported by the City of New York. The estimates have been rounded to the nearest hundred.

Impact on Revenues for New York State and its Municipalities

Table 218: Estimated Taxes in New York State, Total for 2016 to 2020 (Dollars in Millions)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$307.6	\$76.8	\$94.0	u
County	\$0.0	\$0.0	\$0.0	\$0.0
State	\$182.2	\$45.2	\$48.0	\$275.4
Total State, County, Local	\$489.9	\$122.0	\$142.0	\$753.8

Source: Economic Impact Analysis by Fourth Economy based on Value of Credits Reported by Empire State Development Corporation.

Table 219: Total Taxes, Total for 2016 to 2020 (Dollars in Millions)

Total Taxes (\$ Millions)	Direct	Indirect	Induced	Total
State, County, Local	\$489.9	\$122.0	\$142.0	\$753.8
Federal	\$697.0	\$171.9	\$145.3	\$1,014.1

³⁴⁷ U.S. Census Bureau, 2023. Nonemployer Statistics. Washington, D.C. U.S. Department of Commerce, accessed online at <https://www.census.gov/programs-surveys/nonemployer-statistics.html>.



Total Taxes (\$ Millions)	Direct	Indirect	Induced	Total
Total Taxes	\$1,186.8	\$293.9	\$287.2	\$1,767.9

Source: Economic Impact Analysis by Fourth Economy based on Value of Credits Reported by New York City.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g. wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 220: Labor Income, 2016 to 2020 (Dollars in Millions)

	Direct	Indirect	Induced	Total
Total	\$3,952.3	\$949.6	\$848.2	\$5,750.0

Source: Economic Impact Analysis by Fourth Economy based on Value of Credits Reported by New York City

Table 221: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$108,000	\$123,000	\$86,000	\$106,000

Source: Economic Impact Analysis by Fourth Economy based on Value of Credits Reported by New York City

The But-For Test

Since the “true” level of the New York City Unincorporated Business tax credit’s influence is unknowable, in the following sections the project team has calculated the total benefits that would have to be attributable to the incentive in order for the state to break even on its investment. That is, the state tax revenues generated by the assumed economic activity associated with the awards are compared with the amount of awards paid. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the tax credit to have been beneficial to the state.

Because there is no state-level investment in this program, and assuming that the costs to administer the program are de minimis, as discussed in the ROI Discussion section below, the ROI is best represented by the state taxes generated by the credit, which were \$275.4 million over the period 2016-2020, or an average of approximately \$55.1 million a year. Even if these benefits are not fully attributable to the program, the credit clearly provides a net benefit to the state.

Qualitative Impacts

Although New York City’s UBT credit appears to be unique, the qualitative aspects of such a credit include encouraging entrepreneurship by making it more financially viable to start and operate a business and promoting economic development within the city.



Summary Findings

Whether the program yields a net benefit to the state of New York is a function of the state's investment in the program and its return on that investment. For the program to provide a positive net benefit, it must return more than that investment through the taxes associated with the economic activity or other quantitative or qualitative impacts that are connected to that investment. The state of New York administers this program, but the credit is against New York City taxes. Therefore, the state has no direct investment in this program.

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the New York City Unincorporated Business analysis, the project team also based this analysis only on the taxes generated by the value of the credits.

Table 222: ROI and Assessment of the “But For” ROI Requirement

Total State Costs and Return (2016-2020)	State Tax Credits Awarded	Direct Taxes	Total Taxes
State of New York Taxes (\$M)	\$0	\$182.2	\$275.4
Return on \$1 of State Investment		N/A	N/A

Source: Economic Impact Analysis by Fourth Economy based on Value of Credits Reported by ESD.

The New York City UBT Credit program generated \$182.2 million in direct state taxes and total state taxes of \$275.4 million. These taxes represent a net benefit to New York State. While the costs to the state of administering the program on behalf of New York City are not determinable, it is reasonable to assume that they are minimal in comparison to the state-level taxes generated by the program. Based on this analysis, the New York City UBT Credit generates a positive Return on Investment for the State of New York.



Qualified Emerging Technology Company (QETC) Capital Tax Credit



Executive Summary

Purpose and history

New York State's Qualified Emerging Technology Company (QETC) Capital Tax Credit, which began in 1999, is intended to help boost growing industries across New York.

Program design and administration

This provides a credit in the amount of 10 percent for qualified investments in certified QETC's with a useful life of four years, and 20 percent of qualified investments in certified QETC's with a useful life of nine years. The program targets specific industries for the credit. New York's Emerging Technology Industries expanded 18 percent between 2001 and 2022. This expansion couples with occupational growth for jobs which offer, on average, living wages. In 2022, the average wage for these industries was \$74.00 an hour, which is well above one commonly cited living wage estimate for New York State, \$21.46 an hour, for that same time period.

The aggregate limits for all years are \$150,000 for the 10 percent credit and \$300,000 for the 20 percent credit, with the amount of credit deducted not to exceed 50 percent of the tax due before any credits are applied.

Usage

While the program has experienced some growth since 2013, it has never exceeded \$5 million in annual credits awarded and can be considered underutilized with limited reach. In 2019, the year with the most recent complete actual data, the program awarded \$1.7 million in credits. These levels of utilization are lower than those of comparative programs in other regions, on average.

Benchmarking

Other QETC programs with higher levels of utilization have relatively streamlined credit processes and removed ambiguity for potential business applicants. Programmatic design may be a driver for differences in utilization levels between New York's program and its comparatives.

Return on Investment

Based on estimates from the IMPLAN model, the QETC Capital Tax Credit supported 54 total jobs in New York State for the period of 2018 through 2022, with an average labor income per employee of \$158,087. With an investment of \$9.6 million in this program from 2018 through 2022, the output generated \$226,100 in direct state taxes and \$428,300 in total state taxes. This represents an overall return of \$0.02 per dollar invested based on direct taxes to the state and a return of \$0.04 per dollar invested based on total state taxes.

There are additional quantitative impacts that suggest the IMPLAN model does not tell the entire story of this tax credit. As with other programs, incentives that target capital investment in emerging technologies and industries have great promise for creating additional jobs and economic activity, and IMPLAN cannot necessarily reflect that in its modeling. Further, the high wage rates associated with the incentive support the view that these are high value-added occupations with a significant likelihood of additional economic activity.

The incented investment is designed to create a stable source of capital for these emerging businesses. This can reduce the risk associated with investments which may satisfy the 'but for' test even in the absence of quantitative return on investment.



Background

Incentive Purpose

The Qualified Emerging Technology Company (QETC) Capital Tax Credit is designed to encourage investment into New York State companies in emerging technology industries.

Legislative History

The QETC Capital Tax Credit is effective for tax years beginning on or after January 1, 1999, is non-refundable, and can be carried forward. Taxpayers that make a qualified investment in a certified QETC can receive a credit that varies depending on how long the investment is held.

Incentive Design

The QETC Capital Tax Credit incentivizes investment in emerging technology industries. This credit intends to grow New York's emerging technology industry and expand industries that, on average, provide living wage employment. There are revenue limits for qualifying companies, which helps narrow the scope to likely benefit smaller firms, businesses with less than 100 employees, in the technology space and help to restrict its use by larger, more established firms.

Incentive Benefits³⁴⁸

The QETC Capital Tax Credit is computed on each qualified investment made during the tax year in a certified QETC and is equal to the sum of:

- 10 percent of qualified investments in certified QETCs, if the taxpayer certifies at the time the credit is claimed that the qualified investment will not be sold, transferred, traded, or disposed of within four years from the close of the tax year in which the QETC capital tax credit is first claimed; or
- 20 percent of qualified investments in certified QETCs if the taxpayer certifies at the time the credit is claimed that the qualified investment will not be sold, transferred, traded, or disposed of within nine years from the close of the tax year in which the QETC capital tax credit is first claimed.

If the property is sold, transferred, or disposed of prior to the end of the holding period, the taxpayer must repay a portion of the credit. The aggregate limits for all years are \$150,000 for the 10 percent credit, and \$300,000 for the 20 percent credit. The amount of credit deducted may not exceed 50 percent of the tax due before any credits.

³⁴⁸ "Consolidated Laws of New York, Chapter 60 (Tax), Article 9-A, Section 210-B: Credits", The New York State Senate, August 18, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/210-B>.



Incentive Requirements

QETC Capital Tax Credits provide a tax credit based on qualified investments to businesses that are either a QETC that hires employees or a company that invests in a QETC. A QETC is a company located in New York State with total annual product sales of \$10 million or less, and meets either of the following criteria:³⁴⁹

- Its primary products or services are classified as emerging technologies under section 3102-e(1)(b) of the PAL.
- It has research and development (R&D) activities in New York State, and its ratio of R&D funds to net sales equals or exceeds the National Science Foundation (NSF) average ratio for all surveyed companies classified.

A taxpayer is entitled to this nonrefundable credit if it made a qualified investment in a certified qualified emerging technology company (QETC). Qualified investment means:

- The contribution of property to a corporation in exchange for original issue capital stock or other ownership interest,
- The contribution of property to a partnership in exchange for an interest in the partnership, **and**
- Similar contributions to a business entity not in corporate or partnership form in exchange for an ownership interest in the entity.

Incentive Use

At the direction of the Department of Taxation and Finance, which administers the credit, the project team used the Annual Reports on New York State Tax Expenditures to determine the total dollar amount of tax expenditures and the New York State Open Data site to determine the number of taxpayers utilizing the credit. Actual expenditure and taxpayer data is available through 2020 for personal income tax and 2019 for corporate franchise tax. Estimates of total expenditures are available thereafter through 2023. No estimated taxpayer data is available.

The total annual tax expenditures associated with this program remained relatively consistent during the period 2015 to 2023, never less than \$1.0 million and never more than \$3.1 million.

Table 223: Total Tax Expenditures for QETC Capital Tax Credit by Tax Year
(Dollars in Millions)³⁵⁰

Tax Year	Personal Income Tax (PIT)	Corporate Franchise Tax (CFT)	Total (PIT & CFT)
2015	\$1.9	Less than \$0.1	\$1.9
2016	\$1.0	Less than \$0.1	\$1.0
2017	\$0.9	\$0.3	\$1.2
2018	\$2.5	\$0.6	\$3.1
2019	\$1.4	\$0.3	\$1.7

³⁴⁹ "QETC Employment Credit", New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/getc_employment.htm

³⁵⁰ "New York State Tax Expenditure Report", New York State Department of Taxation and Finance, accessed online at <https://www.tax.ny.gov/research/stats/statistics/annual-tax-expenditures.htm>.

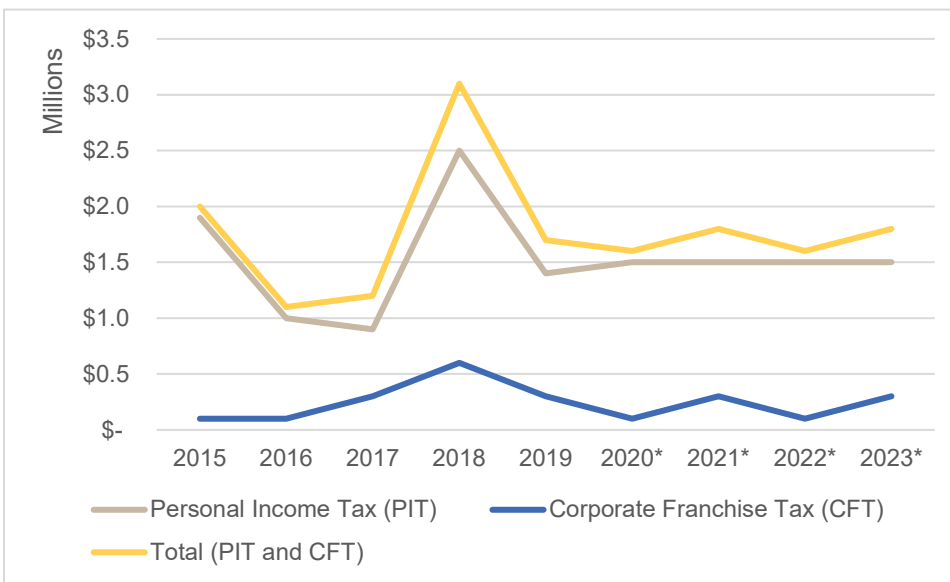


Tax Year	Personal Income Tax (PIT)	Corporate Franchise Tax (CFT)	Total (PIT & CFT)
2020	\$1.5	*Less than \$0.1	*\$1.5
2021	*\$1.5	*\$0.3	*\$1.8
2022	*\$1.5	*Less than \$0.1	*\$1.5
2023	*\$1.5	*\$0.3	*\$1.8

Source: Fiscal Year 2024 Annual Report on New York State Tax Expenditures, Table 8
 *Forecasts based on FY21- FY 24 Tax Expenditure Reports

Figure 35 illustrates the total dollar amount (of QETC Capital Tax Credit PIT & CFT in tax years 2015 to 2023.

Figure 35: Total Amount of QETC Capital Tax Credit per Year

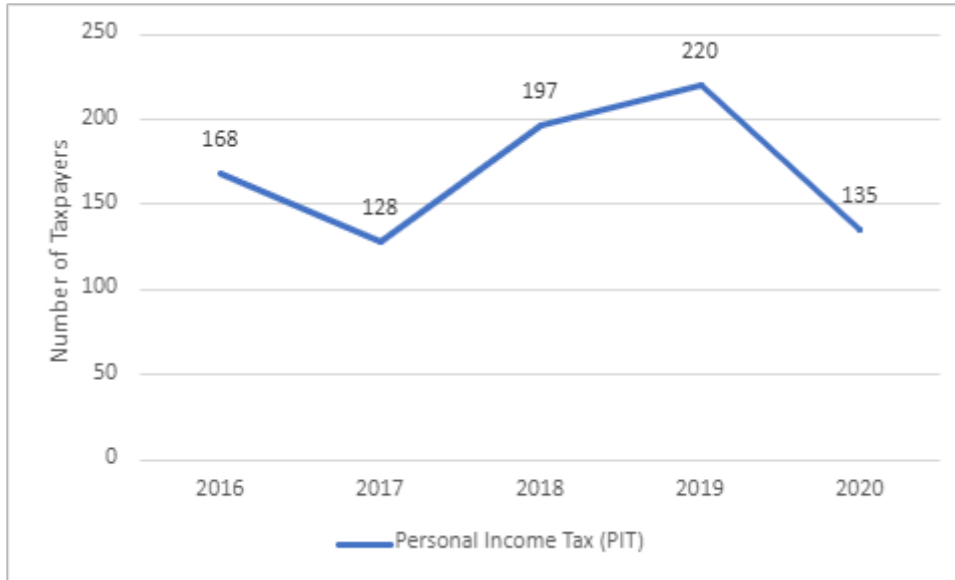


Source: Fiscal Year 2024 Annual Report on New York State Tax Expenditures, Table 8.
 *Forecasted Data from FY21-FY24 Tax Expenditure Reports

Figure 36 illustrates that the number of personal income taxpayers using the QETC Capital Tax Credit between 2016 and 2020. Note that corporate franchise taxpayers were not included within the graph as utilization did not exceed three taxpayers in any of the years listed below.



Figure 36: Number of Taxpayers Using QETC Capital Tax Credit per Tax Year, Personal Income Tax



Source:

Data.NY.Gov, *New York State Economic Incentive Tax Credit Utilization: Beginning Tax Year 2016*, search for “QETC Capital Tax Credit”

The average QETC Capital Tax Credit from tax years 2016 to 2020 was \$8,782 for personal income taxpayers. An average is not calculable for corporate income taxpayers’ due to the data being suppressed, because fewer than three corporate taxpayers took advantage of the credit in several of the years within the study period.

The current metrics available through public reporting suggest an underutilized program. QETC credits are claimed by a small number of taxpayers. The program’s underutilization was noted in a 2013 recommendation from the “New York State Business Tax Credits: Analysis and Evaluation” report.³⁵¹ While the program has experienced annual growth in its credit impact since the publication of the 2013 report, it has never exceeded \$5 million in awarded credits.

Benchmarking

To better understand the efficacy of New York State’s QETC Capital Tax Credit, this section benchmarks the reach and impact data of the QETC Capital Tax Credit against that of similar incentive programs. Specifically, the section compares each program’s value of credits claimed, number of claimants, and eligibility requirements as indicators of reach and impact. The benchmark programs have been selected

³⁵¹ Marilyn M. Rubin and Donald J. Boyd, “New York State Business Tax Credits: Analysis and Evaluation”, New York State Tax Reform and Fairness Commission, November 2013, accessed online at <https://reinventalbany.org/wp-content/uploads/2014/09/2013-Business-Tax-Credit-Report-McCall-Solomon.pdf>.



based on proximity, size, and eligibility of programs using CREC’s State Business Incentive Database, with special focus given to states considered primary competitors with New York for attracting business.

Table 224 compares the reach and impact metrics of comparable state incentive programs to that of the QETC Capital Tax Credit. Because the data availability years are different for each program, the metrics were compared on an “average annual” basis. This methodology makes comparing the programs across different data years possible.

Table 224: Comparative Programs

State/ Program	Operational Years	Data Years	Average Annual Number of Claimants	Average Annual Value of Credit Claimed
New York: Qualified Emerging Technology Company Capital Tax Credit	1999-*	2015-2019	Not Reported	\$1.7 million
District of Columbia: QHTC	2001-*	2013-2015	153	\$27.0 million
Massachusetts: Emerging Technology Fund	1998-*	1998-2020	3	\$4.2 million

* Is currently running with no current scheduled sunset date.

District of Columbia: Qualified High Technology Companies (QHTC)

The District of Columbia (DC) has provided a variety of tax benefits to Qualified High Technology Companies (QHTC) with the goal of supporting the industry. QHTCs can claim tax benefits to support their growth in the District of Columbia (DC). QHTC benefits originally included include a reduced capital gains tax rate, a new hire wage tax credit, a new hire retraining tax credit, and a five-year freeze on real property taxes for office improvements. In 2020, the capital gains reduced rate was eliminated for 2020-2024, and the new hire retraining tax credit and freeze on real property taxes were eliminated. At present, only a credit against business tax liability equal to five percent of the wages paid during the first 24 calendar months of a qualified employee remains in place.

- The reduced capital gains tax rate was 3 percent for qualifying investments in QHTCs. DC taxes capital gains at the same marginal rates as for ordinary income; those rates vary from 4.0 percent for the first \$10,000 of income to \$91,525, plus 10.75 percent for income over \$1.0 million. The programmatic design differs from New York by simplifying and narrowing the qualifying businesses. Rather than a long list of eligible industries as defined by state statute, DC limits industries eligible for the credit to select specific activities that a company conducts. This effectively streamlines the process and helps remove ambiguity for any business potentially looking to apply for the credit.

Massachusetts: Emerging Technology Fund

The Emerging Technology Fund (ETF) provides loans and guarantees for facilities and specialized equipment for technology companies for acquisition, expansion, working capital, or equipment purchases. MassDevelopment works with companies located in or relocating to Massachusetts that have strong management teams, demonstrated technical developments, shown market demand for their products, and proven financial records.

- As of September 30, 2020, the ETF has made loans and guarantees to 55 companies totaling \$92.4 million. Annually, this equates to an average value of credits claimed equal to \$4.2 million.
 - This level of financial impact is considerably higher than that of New York’s program. While there is a lack of publicly available data on the width of this impact, derived from the



- number of claimants per year, the available financial data paints the picture that programmatic differences between the two programs have resulted in differences in reach.
- To qualify for the ETF program, an eligible business must be a technology company that is considering launching or expanding manufacturing operations in Massachusetts, seeks financing for the purchase, expansion, or improvement of real estate; the purchase of equipment; or working capital for growth, will receive financing from two parties other than the ETF, and can ensure the financial investment benefits the Massachusetts economy.
 - This presents a different approach to developing emerging technology industries, which targets providing benefits targeted at tangible investments rather than benefiting capital investment.
 - Eligible Technology Industries include Advanced Materials, Communications, Defense / Homeland Security, Electronics, Environmental, Information Technology, Medical Devices, Nanotechnology, Plastics / Polymers
 - Massachusetts streamlines its process by making this list available on the program website. Rather than utilizing a more generic definition of emerging industry, the industries targeted by this fund are clearly defined.
 - Rather than a tax credit approach, Massachusetts uses a loans and guarantees system.
 - This approach reduces the program cost to the state relative to a tax credit, as there is an expectation that the loan will eventually be repaid.

Benchmarking Comparisons

- The QETC Capital Tax Credit can be considered underutilized with limited reach.
 - The program has never exceeded an impact larger than \$5 million. In 2019, the program only awarded \$1.7 million in credits.
 - These levels of utilization are on average lower than its comparative programs in other regions.
- Programmatic design appears to be the primary driver for differences in utilization levels between New York's program and its comparatives.
 - Other QETC programs with higher levels of utilization have relatively streamlined credit processes and removed ambiguity for any business potentially looking to apply for the credit compared to New York.

Return on Investment

Data Sources

As previously noted, the project team used data from New York State's Open Data portal and the Annual Reports on New York State Tax Expenditures for this analysis. The open data portal provided data on the number of taxpayers utilizing the credit for the period 2016 to 2019 for corporate tax payers and 2016 to 2020 for personal tax. As a result of minimal utilization of corporate tax credits throughout the study period (fewer than three recipients in each of the reported years), information about corporate tax credits was suppressed to preserve taxpayer confidentiality. This analysis therefore primarily focuses on personal income tax credits.

The tax expenditure reports provided aggregated expenditure data for personal taxpayers through 2020 and corporate taxpayers through 2019, and estimated data for subsequent years through 2023.



For purposes of the economic impact analysis, the project team used the actual total credit used from the relevant Annual Reports on New York State Tax Expenditures for tax years 2018 and 2019, and the estimated total credit used for tax years 2020 through 2022.

Economic Impact Model Methodology and Definitions

For the impact analysis, the project team used an IMPLAN model for NYS.³⁵² IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the number and value of credits earned and claimed by year. The only available data on the QETC Capital Tax Credit came from the Tax Expenditure Reports which provided the actual and forecast credits for 2018 to 2022.

Table 225 presents the actual and forecast credit amounts modeled in IMPLAN as a financial investment activity and grouped by year to account for any inflation effects.

Table 225: Reported Investment in QETC Capital Tax Credits, 2018 to 2022

Fiscal Year	NY State Investment (\$ Millions)	
2018	*Actual	\$3.1
2019		\$1.7
2020	**Forecast	\$1.5
2021		\$1.8
2022		\$1.5
Total		\$9.6

**Actual tax credits utilized by taxpayers from Annual Reports on New York State Tax Expenditures*

³⁵² Additional information on the IMPLAN model is provided in Appendix A.



***Forecasted tax credits projected to be used by taxpayers from Annual Reports on New York State Tax Expenditures.*

Based on the IMPLAN model, the QETC Capital Tax Credit program supported a total of 54 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022, as shown in Table 226.

Table 226: Total Job Impacts in New York State, 2018 to 2022

Year	Direct	Indirect	Induced	Total
2018	7	4	7	18
2019	4	2	4	10
2020	3	2	3	8
2021	4	2	4	10
2022	3	2	3	8
Total	21	12	21	54
Annual Average	4	2	4	11

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports.

Impact on Revenues for New York State and its Municipalities

Table 227: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Thousands)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$177.2	\$76.8	\$189.3	\$443.3
County	\$25.8	\$12.7	\$36.5	\$75.0
State	\$226.1	\$71.7	\$130.5	\$428.3
Total State, County, Local	\$429.1	\$161.2	\$356.3	\$946.6

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in Annual Reports on Tax Expenditures

Table 228: Total Taxes, Total for 2018 to 2022 (Dollars in Thousands)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$429.1	\$161.2	\$356.3	\$946.6
Federal	\$1,092.7	\$273.8	\$323.5	\$1,689.9
Total Taxes	\$1,521.9	\$435.0	\$679.7	\$2,636.6

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in Annual Reports on Tax Expenditures

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.



Table 229: Labor Income, 2018 to 2022 (Dollars in Millions)

Year	Direct	Indirect	Induced	Total
2018	\$1,827.5	\$444.6	\$572.9	\$2,845.0
2019	\$979.4	\$238.3	\$307.0	\$1,524.7
2020	\$834.7	\$203.1	\$261.7	\$1,299.4
2021	\$984.6	\$239.5	\$308.7	\$1,532.8
2022	\$806.6	\$196.2	\$252.8	\$1,255.6
Annual Average	\$1,086.6	\$264.3	\$340.6	\$1,691.5

Source: *Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Annual Reports on Tax Expenditures.*

Table 230: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$263,986	\$119,615	\$77,872	\$158,087

Source: *Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Annual Reports on Tax Expenditures*

Other Qualitative Economic Benefits

Industries that are targeted by the QETC Capital Tax Credit include advanced manufacturing, engineering, production, and defense technologies, electronic and photonic devices and component manufacturing, information and communication technologies, equipment, and systems, biotechnologies, and remanufacturing technologies. These industries comprise of high-skilled occupations that offer a living wage. New York’s Emerging Technology Industries expanded 18 percent between 2001 and 2022.³⁵³ This expansion couples with occupational growth for jobs which offer, on average, living wages. In 2022, the average wage for these industries was \$74 an hour³⁵⁴ This is well above the living wage estimate for NYS, \$21.46 an hour, for that same time period.³⁵⁵

The But-For Test

One way to evaluate the impact of an incentive is to calculate the total benefits that would have to be attributable to the incentive in order for the state to break even on the investment. A low break-even point suggests that the tax credit does not have to strongly influence the business decision in order for the tax credit to have been beneficial to the state. By contrast, a high break-even point indicates that one would have to assume that the incentive is largely responsible for the business decision and accompanying benefits in order for the credit to have been beneficial to the state.

In the following section the project team compares the state tax revenues generated by the assumed economic activity associated with the awards from the QETC Capital Tax Credit to the amount of awards

³⁵³ Employment data derived from Lightcast utilizing NAICS codes 325, 335, 518, and 541 for estimation and analysis.

³⁵⁴ Estimates created from Lightcast Regional Industry Data, assumes 260 working days at an average 8hrs per day.

³⁵⁵ “Living Wage Calculation for New York”, Massachusetts Institute of Technology Living Wage, accessed online at <https://livingwage.mit.edu/states/36>.



paid. Based on this analysis, the state does not break even on its investment even in the unlikely event that the incentive is 100% responsible for the tax revenue generated by program participants.

However, in this case, the incented investment is designed to create a stable source of capital for these emerging businesses. This can reduce the risk associated with investments which may satisfy the 'but for' test even in the absence of quantitative return on investment.

Summary Findings

NYS had \$9.6 million in foregone revenue that resulted from the QETC Capital Tax Credit program between 2018 and 2022. A starting point for determining whether the program provided a positive net benefit is to determine whether it returned more than that investment through the taxes associated with the economic activity from that investment.

Using taxes is a more conservative metric than value added or output, and it reflects whether by this measure alone the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. The project team based the QETC Capital Tax Credit analysis on the value of the estimated credits between 2018 and 2022.

Table 231: Fiscal Return on Investment to New York State, 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State Taxes Only (\$ thousands)	\$9,600.0	\$226.1	\$428.3
Return on \$1.00 in Foregone Revenue		\$0.02	\$0.04

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Annual Tax Expenditure Reports

Clearly, the investment of \$9.6 million for the QETC Capital Tax Credit program did not generate a significant amount of direct and total state taxes, with an overall return of \$0.02 based on direct taxes to the state, and an overall return of \$0.04 per dollar invested based on total state taxes. However, that is not the entirety of the discussion around ROI. As noted, the jobs that are created are good paying and are in emerging industries that are of value to the state economy.

Given the strong wage levels and its targeting emerging technology, this investment should not be dismissed solely on its low ROI related to state tax revenue generated. It is likely that a longer-range view of the impacts of the program, including whether the firms are still in business many years after the investment and whether their workforce levels continue to grow will be necessary for a fuller determination of ROI. That said, the economic impact of the program, expressed in tax revenue returned to the state, is very small.



Qualified Emerging Technology Company (QETC) Employment Tax Credit



Executive Summary

Purpose and History

New York State's Qualified Emerging Technology Company (QETC) Employment Credit, which began in 1999, is intended to help boost growing industries across New York.

Design and Administration

The incentive provides QETC's with a tax credit equal to their average number of full-time employees in New York State for the current year, minus their base year employment number, multiplied by \$1,000. This credit is available to QETC's for three consecutive years. There are specific industries that are targeted by this credit.

New York's Emerging Technology Industries grew by 18 percent between 2001 and 2022,³⁵⁶ with job opportunities in these industries offering above average wages. In 2022, the average wage for this industry was \$74.00 an hour³⁵⁷, while a living wage estimate for New York State was \$21.46 an hour for that same period.³⁵⁸

Use

Between 2012 and 2019, 72 percent of QETC Employment Tax Credits were used by establishments in Professional, Scientific, and Technical Services while the remaining 28 percent of credits were used by firms in the Information Sector. QETC Employment Tax Credits are claimed by a small number of taxpayers. An average of 101 taxpayers claimed the credit annually from tax years 2016 to 2019.

Benchmarking

Compared to NYS, other QETC programs, with higher levels of utilization, have streamlined the credit application processes and removed ambiguity for any business potentially looking to apply for the credit. Program design appears to be the primary driver for differences in utilization levels between New York's program and its comparatives.

Return on Investment

Based on estimates of economic impact from the IMPLAN model, the QETC Employment Credit supported 103 total jobs in New York State for the period of 2018 through 2022, with an average labor income per employee of \$110,000. With an investment of \$14.3 million in this program from 2018-2022, the output generated amounts to \$261,700 in direct state taxes and \$603,000 in total state taxes. This translates to an overall return of \$0.02 per dollar invested on direct taxes to the state and a return of \$0.04 per dollar invested based on total state taxes.

The incented investment is designed to create a stable source of capital for these emerging businesses. This can reduce the risk associated with investments which may satisfy the 'but for' test even in the absence of quantitative return on investment.

³⁵⁶ Employment data derived from Lightcast utilizing NAICS codes 325, 335, 518, and 541 for estimation and analysis.

³⁵⁷ Estimates created from Lightcast Regional Industry Data, assumes 260 working days at an average 8hrs per day.

³⁵⁸ "Living Wage Calculation for New York", Massachusetts Institute of Technology Living Wage, accessed online at <https://livingwage.mit.edu/states/36>.



Occupations related to the industries targeted by this tax credit such as marketing researchers/specialists, software developers, and operational managers, grew by a significant amount during the time period of this credit. These occupations require proficiency and knowledge in highly technical skills, and as a result of this significant growth within these areas, the QETC employment credit is likely to have contributed to employee development and job creation.

Despite the minimal quantitative ROI, given the strong wage levels and its targeting emerging technology, this investment should not be dismissed solely on its low ROI related to state tax revenue generated. It is likely that a longer-range view of the impacts of the program, including whether the firms are still in business many years after the investment and whether their workforce levels continue to grow will be necessary for a more full determination of ROI.

Background

Incentive Purpose

The Qualified Emerging Technology Company (QETC) Employment Tax Credit encourages growth in employment within Qualified Emerging Technology Companies that operate in targeted industries.

Legislative History

The QETC Employment Tax Credit is effective for tax years beginning on or after January 1, 1999. There is no set end date for the program.

Incentive Design

The QETC Employment Tax Credit is offered to offset hiring costs and to incentivize the hiring of employees in emerging technology industries. This credit also intends to ensure that these jobs provide living wages while developing a skilled workforce within New York State. There are revenue limits for qualifying companies, which narrows the eligibility for this incentive to smaller emerging firms in the technology space and restricts its use by larger, more established firms. Through this credit, smaller firms are incentivized to continue the development of a healthy, diverse, and competitive QETC space in the state.

Incentive Benefits³⁵⁹

The QETC Employment Tax Credit provides tax relief to businesses with employees that qualifies as a QETC. The amount of the credit is equal to the QETC's average number of full-time employees in New York State for the current tax year, minus the QETC's base year employment number, multiplied by \$1,000. This credit is available for three consecutive years. The credit is refundable.

³⁵⁹ "Consolidated Laws of New York, Chapter 60 (TAX), Article 9-A, Section 210-B: Credits", The New York State Senate, August 18, 2023, accessed online at <https://www.nysenate.gov/legislation/laws/TAX/210-B>.



Incentive Requirements³⁶⁰

In order to receive the credit, the individual or business must meet the following criteria:

- Be a qualified emerging technology company (QETC), **and**
- The average number of individuals employed full-time by the QETC in New York State during the tax year is at least 101 percent of the QETC's base year employment number.

A *qualified emerging technology company*³⁶¹ is a company located in NYS that has total annual product sales of \$10 million or less, and meets **either** of the following criteria:

- Its primary products or services are classified as emerging technologies under section 3102-e(1)(b) of the PAL.
- It has research and development (R&D) activities in NSY, and its ratio of R&D funds to net sales equals or exceeds the National Science Foundation (NSF) average ratio for all surveyed companies classified.

There are two average ratios for all surveyed companies classified on the NSF's survey. One average ratio is for companies doing R&D funded by the federal government; the other is for companies doing R&D without funding from the federal government. The NSF average ratio for all surveyed companies classified is deemed to be the lesser of these ratios, as reflected in the following table.

Table 232: Ratios by Certification Period³⁶²

If the certification period begins on or after:	And	If the certification period begins on or before	Use this percentage
1/1/2014		12/31/2014	2.6%
1/1/2015		12/31/2015	2.7%
1/1/2016		12/31/2016	2.9%
1/1/2017		12/31/2017	3.3%
1/1/2018		12/31/2018	3.5%
1/1/2019		12/31/2019	3.5%
1/1/2020		12/31/2020	3.5%
1/1/2021		12/31/2021	3.8%
1/1/2022		12/31/2022	4.1%

Source: Tax.NY.Gov., Credit name "QETC Employment Credit"

³⁶⁰ "QETC Employment Credit", New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/getc_employment.htm.

³⁶¹ A qualified emerging technology company is defined in Section 3102-e of the Public Authorities Law (PAL). "QETC Employment Credit", New York State Department of Taxation and Finance.

³⁶² "QETC Employment Credit", New York State Department of Taxation and Finance, accessed online at https://www.tax.ny.gov/pit/credits/getc_employment.htm.



Incentive Use

At the direction of the Department of Taxation and Finance, which administers the credit, the project team used the Annual Reports on New York State Tax Expenditures to determine the total dollar amount of tax expenditures and the New York State Open Data site to determine the number of taxpayers taking the credit. Actual expenditure and taxpayer data is available through 2020 for personal income tax and 2019 for corporate franchise tax. Estimates of total expenditures are available thereafter through 2023. No estimated taxpayer data is available.

The total tax expenditures associated with this program experienced overall growth in 2015-2019. The program has never exceeded \$5 million in annual expenditures and is not estimated to do so through 2023.

Table 233: Total Actual Tax Expenditures (Dollars in Millions)³⁶³

Tax Year	Personal Income Tax (PIT)	Corporate Franchise Tax (CFT)	Total (PIT & CFT)
2015	\$0.3	\$1.4	\$1.7
2016	\$0.3	\$2.8	\$3.1
2017	\$0.1	\$2.0	\$2.1
2018	\$0.2	\$2.9	\$3.1
2019	\$0.3	\$4.3	\$4.6
2020	\$0.1	\$1.0*	\$1.1*
2021	\$0.2*	\$2.0*	\$2.2*
2022	\$0.2*	\$3.0*	\$3.2*
2023	\$0.2*	\$3.0*	\$3.2*

Source: Fiscal Year Annual Reports on New York State Tax Expenditures, Table 8

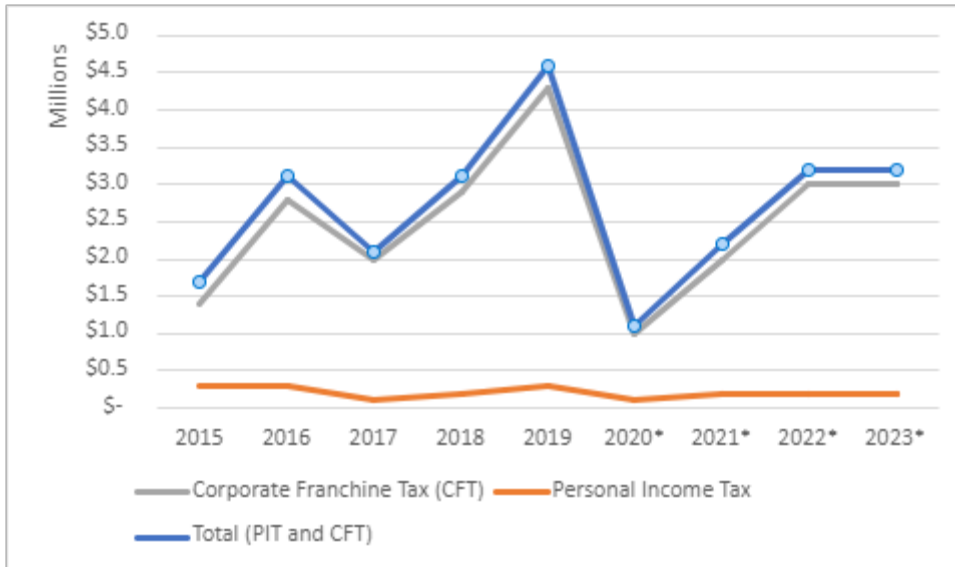
*Forecasts based on FY21- FY 24 Tax Expenditure Reports

Figure 37 illustrates the total dollar amount of QETC Employment Tax Credit taken against the personal and corporate income tax, and total combined amount in tax years 2015 to 2023. Overall, personal income taxpayers account for less than 10 percent of the credit activity. Although 2020 information is estimated, the sharp reduction in the total credit coincides with the pandemic.

³⁶³ "New York State Tax Expenditure Report", New York State Department of Taxation and Finance, accessed online at <https://www.tax.ny.gov/research/stats/statistics/annual-tax-expenditures.htm>.



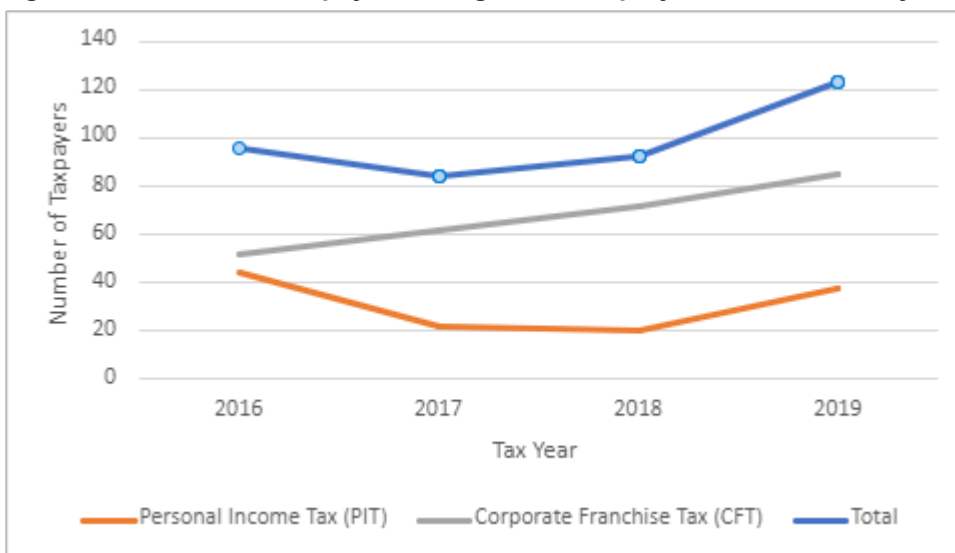
Figure 37: Total Annual Dollar Amount of QETC Employment Tax Credit by Tax Year and Tax Type



Source: Fiscal Year Annual Reports on New York State Tax Expenditures, Table 8
 *Forecasts based on FY21-FY24 Tax Expenditure Reports

As Figure 38 illustrates, the utilization pattern of personal and corporate taxpayers has been different, with the number of corporations using the credit steadily increasing from 2016 to 2019, with variability in personal tax utilization over this period. While personal income taxpayers represent less than 10 percent of the total credit dollars, they represent over 30 percent of the number of credits over the period 2016 to 2019. The utilization of this credit is limited, with an average of average of 101 taxpayers claiming the credit annually from tax years 2016 to 2019.

Figure 38: Number of Taxpayers Using QETC Employment Tax Credit by Tax Year and Tax Type





Source: DATA.NY.GOV, *New York State Economic Incentive Tax Credit Utilization: Beginning Tax Year 2016, Search for “QETC Employment Tax Credit”*

With enhanced reporting and oversight, the ability to understand if participants are meeting their claimed employment targets could be better assessed. The current metrics available through public reporting suggest an underutilized program. QETC employment credits are claimed by a small number of taxpayers. The program’s underutilization was noted in a 2013 recommendation from the “New York State Business Tax Credits: Analysis and Evaluation” report.³⁶⁴ In the time after the report, low usage has continued to be an issue. The program has never exceeded \$5 million in awarded credits. In the year with the most recent actual data, 2019, the program reported \$4.6 million in credits awarded, with estimated annual credits from 2020 to 2023 expected to be less than that.

Benchmarking

To better understand the efficacy of New York State’s QETC Employment credit program this section benchmarks the reach and impact of the QETC Employment credit against a similar incentive program within the region. The benchmarking analysis provides both quantitative data and a qualitative analysis of each program’s intent and eligibility requirements.

Table 234: Comparative Programs

State/ Program	Operational Years	Funding Type
New York: QETC Employment Credit	2001-*	Tax Credit
District of Columbia: Qualified High Technology Companies (QHTC)	2000-*	Tax Rate Reduction, Tax Credit, Tax Freeze

* Is a currently running with no current scheduled sunset date.

Other State Program

District of Columbia: Qualified High Technology Companies (QHTC)

The District of Columbia (DC) has provided a variety of tax benefits to Qualified High Technology Companies (QHTC) with the goal of supporting industry growth. QHTC benefits originally included a reduced capital gains tax rate, a new hire wage tax credit, a new hire retraining tax credit, and a five-year freeze on real property taxes for office improvements. In 2020, the capital gains reduced rate was eliminated for 2020-2024, and the new hire retraining tax credit and freeze on real property taxes were eliminated. At present, only a credit against business tax liability equal to five percent of the wages paid during the first 24 calendar months of a qualified employee remains in place.

- The program design differs from New York by simplifying and narrowing the qualifying businesses. Rather than a long list of eligible industries as defined by state statute, DC limits industries eligible for the credit to select specific activities that a company conducts. This effectively:
 - Streamlines the process and helps remove ambiguity for any business potentially looking to apply for credit; and

³⁶⁴ Marilyn M. Rubin and Donald J. Boyd, “New York State Business Tax Credits: Analysis and Evaluation”, New York State Tax Reform and Fairness Commission, November 2013, accessed online at <https://reinventalbany.org/wp-content/uploads/2014/09/2013-Business-Tax-Credit-Report-McCall-Solomon.pdf>.



- Provides a clearer framework for the benefit a business receives, relative to New York’s calculated credit that relies on differences from the average QETC and an annual calculation of the NSF R&D ratio.
- On average from 2001 to 2015 most firms claiming DC’s QHTC credit received smaller amounts of credit, often less than \$100,000, while a selection of large firms claimed the bulk of the total credits each year. In the most recent year with data, 2020, 150 companies were certified as QHTCs, while 54 claimed \$12.8 million in total QHTC credits, some of which may have been credits carried forward from previous years. In total, 40 firms claimed 1,158 employees as the basis of the wage credits reported.³⁶⁵
- Despite this apparent concentration of claimants, the data concerning claimants and credit amount reflects that DC’s QHTC program experiences much higher levels of utilization relative to the QETC Employment credit offered by New York.

The variation in outcome most likely derives from differences in programmatic design, with the QHTC program offering a wider range of incentives and a more streamlined and more defined set of eligibility parameters making it easier for participants to both access and understand the benefits offered by the credit.

While the streamlined program eligibility and greater benefits for the DC program are notable, it has been suggested that the program has not been effective in its goal of attracting new companies to DC, and that was cited by the council member that introduced the budget amendment that led to the program benefit reductions. It has also been suggested that a number of QHTC program beneficiaries would have located in DC without the program, because of proximity to its federal government clients.³⁶⁶

Benchmarking Summary

- The QETC Employment Credit offers a programmatic design that is intended to help boost growing highly skilled living wage jobs across New York.
 - New York’s Emerging Technology Industries expanded 18 percent between 2001 and 2022.
 - In 2022, the average wage for jobs in these industries was \$74 an hour, which is well above the living wage estimate for New York State of \$21.46 an hour.
 - Occupations with the largest levels of growth grew by a combined 60,000 jobs since 2001, growing from 4 percent of all jobs in the Emerging Technology Industries to 10 percent of all jobs in those industries.
- While the program has likely increased in its impact over time, QETC employment credit can still be considered underutilized with limited reach.
 - The program has never exceeded an impact larger than \$5 million. In 2015, the program only awarded \$1.7 million in credits.
 - These levels of utilization are lower, historically, than the comparative program in Washington DC.
- Programmatic design appears to be the primary driver for differences in utilization levels between New York’s program and its comparatives.
 - Compared to New York, other QETC programs with higher levels of utilization have relatively streamlined credit processes and removed ambiguity for any business potentially looking to apply for the credit.

³⁶⁵ “District of Columbia Tax Expenditure Report,” Chief Financial Officer’s Office of Revenue Analysis, September 2022, pp. 226-227, accessed online at <https://ora-cfo.dc.gov/node/1616786>.

³⁶⁶ “DC Council Eliminates Most QHTC Tax Incentives,” Aprio, August 31, 2020, accessed online at <https://www.aprio.com/d-c-council-eliminates-most-qhtc-tax-incentives/>.



Return on Investment

Relevant Data

As previously noted, the project team used data from New York State's Open Data portal and the Annual Reports on New York State Tax Expenditures for this analysis. The open data portal provided data on the number of taxpayers utilizing the credit for the period 2016 to 2019 for corporate tax and 2016 to 2020 for personal tax.

The tax expenditure reports provided aggregated expenditure data for personal taxpayers through 2020 and corporate taxpayers through 2019, and estimated data for subsequent years through 2023.

For purposes of the economic impact analysis, the project team used the actual total credit used from the relevant Annual Reports on New York State Tax Expenditures for tax years 2018 and 2019, and the estimated total credit used for tax years 2020 through 2022, in addition to an Open Data dataset that provided information about usage of this credit by industry.

Model Methodology and Definitions

The project team used the IMPLAN model to estimate economic impact.³⁶⁷ IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include "non-market" transactions. Examples of these transactions include taxes and unemployment benefits.

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Economic Impact Analysis quantifies the economic ripples through the economy of the following impacts:

- Direct – Associated with the recipient activity.
- Indirect – Supply chain effects.
- Induced – Spending by employees of direct and indirect firms.

Job Creation, Temporary Hires, Number of Jobs Retained

For the analysis of the return on investment and the input-output analysis of program activities, the project team used the number and value of credits earned and claimed by year.

For the impact analysis, the project team used an IMPLAN model for New York State. The only available data on the QETC Employment Tax Credit came from the Tax Expenditure Reports which provided the

³⁶⁷ More information on the IMPLAN model is contained in Appendix A.



actual and forecast credits for 2018 to 2022, and an Open Data New York report,³⁶⁸ tax credits by major industry provided the amount of tax credits by industry for 2012 to 2019. The project team used the average distribution by industry to allocate the credits to sectors for 2018 to 2022.

Table 235 presents the actual and forecast credit amounts modeled in IMPLAN and grouped by year to account for any inflation effects.

Table 235: Reported Investment in QETC Employment Tax Credits, 2018 to 2022

Fiscal Year		NY State Investment (\$ Millions)
2018	*Actual	\$3.1
2019		\$4.6
2020	**Forecast	\$1.2
2021		\$2.2
2022		\$3.2
Total		\$14.3

*Actual tax credits utilized by taxpayers from Annual Reports on New York State Tax Expenditures

**Forecasted tax credits projected to be used by taxpayers from Annual Reports on New York State Tax Expenditures

Between 2012 and 2019, 28 percent of the QETC Employment Tax Credits used went to the Information Sector and the remaining 72 percent of credits were used by establishments in Professional, Scientific, and Technical Services.

Table 236: QETC Employment Tax Credit Utilization by Industry and Tax Year (\$ in millions)

	2018	2019	2020	2021	2022	Total
Information Sector	\$0.9	\$1.3	\$0.3	\$0.6	\$0.9	\$4.0
Professional, Scientific, and Technical Services	\$2.2	\$3.3	\$0.9	\$1.6	\$2.3	\$10.3
Total	\$3.1	\$4.6	\$1.2	\$2.2	\$3.2	\$14.3

Source: Annual Reports on Tax Expenditures (2018-2022). Allocated using the [New York State Corporate Tax Credits by Major Industry Group: Beginning Tax Year 2001](#) (2012-2019).

Based on the IMPLAN model, the QETC Employment Tax Credit program supported a total of 103 total (direct, indirect, and induced) jobs in the state of New York between 2018 and 2022.

Table 237: Total Job Impacts in New York State, 2018 to 2022

Year	Direct	Indirect	Induced	Total
2018	10	6	7	23
2019	15	9	10	33
2020	4	2	2	8

³⁶⁸ "New York State Corporate Tax Credits by Major Industry Group: Beginning Tax Year 2001", New York State Data.NY. Gov, November 20, 2023, accessed online at https://data.ny.gov/Government-Finance/New-York-State-Corporate-Tax-Credits-by-Major-Indu/84qh-f5nv/about_data.



Year	Direct	Indirect	Induced	Total
2021	7	4	5	16
2022	10	6	7	23
Total	46	27	31	103
Annual Average	9	5	6	21

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports.

Impact on Revenues for New York State and its Municipalities

Table 238: Estimated Taxes in New York State, Total for 2018 to 2022 (Dollars in Thousands)

Taxes in New York State	Direct	Indirect	Induced	Total
Local Governments	\$205.4	\$183.4	\$259.6	\$648.3
County	\$31.0	\$32.3	\$50.1	\$113.4
State	\$261.7	\$162.3	\$179.0	\$603.0
Total State, County, Local	\$498.1	\$378.0	\$488.6	\$1,364.7

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditures Reports.

Table 239: Total Taxes, Total for 2018 to 2022 (Dollars in Thousands)

Total Taxes	Direct	Indirect	Induced	Total
State, County, Local	\$498.1	\$378.0	\$488.6	\$1,364.7
Federal	\$1,230.0	\$576.8	\$444.1	\$2,250.9
Total Taxes	\$1,728.1	\$954.8	\$932.7	\$3,615.7

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Tax Expenditure Reports.

Other Quantifiable Economic Benefits

Labor Income includes the total compensation for employees (wages and benefits) plus income for proprietors. It reflects the combined costs paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners in the economy.

Table 240: Labor Income, 2018 to 2022 (Dollars in Thousands)

Year	Direct	Indirect	Induced	Total
2018	\$1,352.6	\$638.5	\$519.3	\$2,510.4
2019	\$1,978.8	\$937.5	\$760.5	\$3,676.8
2020	\$500.9	\$238.3	\$192.7	\$932.0
2021	\$917.3	\$436.1	\$352.9	\$1,706.2
2022	\$1,332.7	\$633.1	\$512.6	\$2,478.3
Annual Average	\$1,216.4	\$576.7	\$467.6	\$2,260.8



Source: *Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Annual Reports on Tax Expenditures.*

Table 241: Average Labor Income

Year	Direct	Indirect	Induced	Overall
Average per Employee	\$132,000	\$108,000	\$78,000	\$110,000

Source: *Economic Impact Analysis by Fourth Economy based on based on actual and forecast credits reported in the Annual Reports on Tax Expenditures.*

The But-For Test

In the following section the project team compares the state tax revenues generated by the assumed economic activity associated with the awards from the QETC Employment Tax Credit to the amount of awards paid. Based on this analysis, the state does not break even on its investment even in the unlikely event that the incentive is 100% responsible for the tax revenue generated by program participants.

However, in this case, the incented investment is designed to create a stable source of capital for these emerging businesses. This can reduce the risk associated with investments which may satisfy the 'but for' test even in the absence of quantitative return on investment.

Other Qualitative Economic Benefits

Industries that are targeted by the credit include advanced manufacturing, engineering, production, and defense technologies, electronic and photonic devices and component manufacturing, information and communication technologies, equipment, and systems, biotechnologies, and remanufacturing technologies. These industries are comprised of high-skilled occupations that offer a living wage. New York's Emerging Technology Industries expanded 18 percent between 2001 and 2022.³⁶⁹ The job opportunities that came along with this growth offered, on average, living wages. In 2022, the average wage for this industry was \$74 an hour.³⁷⁰ This is well above the living wage estimate for New York State, which is \$21.46 an hour. for that same time period.³⁷¹

There has been a shift in job roles included in these industries, especially for occupations that play a role in the production process. Occupations that are relevant to industries targeted by this tax credit, which grew the most between 2001 and 2022, were Market Research Analysts and Marketing Specialists, Software Developers, and General and Operational Managers. These occupations had a combined growth of 60,000 jobs, growing from 4 percent of all jobs in the advanced manufacturing industry to 10 percent of all jobs. Software Developers, the occupation that experienced the second largest growth in the state, require knowledge in highly technical skills such as database management, user interface, and query software, object or component-oriented development software, and web platform development software. These factors show that the QETC employment credit likely contributed to the creation of jobs that require technical skill competencies and offered a living wage.

³⁶⁹ Employment data derived from Lightcast utilizing NAICS codes 325, 335, 518, and 541 for estimation and analysis.

³⁷⁰ Estimates created from Lightcast Regional Industry Data, assumes 260 working days at an average 8hrs per day.

³⁷¹ "Living Wage Calculation for New York", Massachusetts Institute of Technology Living Wage, accessed online at <https://livingwage.mit.edu/states/36>.



Summary Findings

As it relates to this tax incentive, NYS had \$14.3 million in foregone revenue that resulted from the QETC Employment Tax Credit program between 2018 and 2022. A starting point for determining whether the program provided a positive net benefit, should be to determine whether it returned more than that investment through the taxes associated with the economic activity from that investment.

Table 242: Estimated QETC Employment Tax Credits, 2018 to 2022 (\$ in millions)

	2018	2019	2020	2021	2022	Total
Information Sector	\$0.9	\$1.3	\$0.3	\$0.6	\$0.9	\$4.0
Professional, Scientific, and Technical Services	\$2.2	\$3.3	\$0.9	\$1.6	\$2.3	\$10.3
Total	\$3.1	\$4.6	\$1.2	\$2.2	\$3.2	\$14.3

Source: Credits Reported on the Tax Expenditure Report (2018-2022). Allocated using the [New York State Corporate Tax Credits by Major Industry Group: Beginning Tax Year 2001](#) (2012-2019).

Using taxes is a more conservative metric than value added or output, and it reflects whether the program pays for itself. Using only state taxes provides the most conservative measure of return to the state itself. For the QETC Employment Tax Credit analysis, the project team also based this analysis only on the value of the estimated credits to each sector between 2018 and 2022.

Table 243: Fiscal Return on Investment to New York State, 2018 to 2022

Total State Costs and Return (2018-2022)	Total Credits Awarded	Direct Taxes Returned	Total Taxes Returned
State of New York Taxes (\$ thousands)	\$14,300.0	\$261.7	\$603.0
Return on \$1.00 of Foregone Revenue		\$0.02	\$0.04

Source: Economic Impact Analysis by Fourth Economy based on actual and forecast credits reported in the Annual Reports on Tax Expenditures.

From the investment of \$14.3 million, the QETC Employment Tax Credit program did not generate a significant amount of direct and total state taxes, with an overall return of \$0.02 per dollar invested based on direct state taxes, and an overall return of \$0.04 per dollar invested for based on overall total state taxes. However, that is not the entirety of the discussion around ROI. As noted, the jobs that are created are good paying and are in emerging industries that are of value to the state economy.

Given the strong wage levels and its targeting emerging technology, this investment should not be dismissed solely on its low ROI related to state tax revenue generated. It is likely that a longer-range view of the impacts of the program, including whether workforce and employment levels continue to grow, and whether the firms are still in business many years after the investment will be necessary for a fuller determination of ROI.



APPENDICES



Appendix A: The IMPLAN Economic Impact Model

The economic impact software used to determine the multiplier effects is IMPLAN (**IM**ppact Analysis for **PLAN**ning), a proprietary model; PFM has obtained a license for use of the IMPLAN model for these evaluations.

Overview

IMPLAN uses Social Accounting Matrices (SAMs) to capture the actual dollar amounts of all business transactions taking place in a regional economy, as reported each year by businesses and government agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts, because they include “non-market” transactions. Examples of these transactions include taxes and unemployment benefits.

Multiplier Models

SAMs can be constructed to show the effects of a given change on the economy. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region’s unique structure and trade situation.

Multiplier Models are the framework for building impact analysis questions. Derived mathematically, these models estimate the magnitude and distribution of economic impacts, and measure three types of effects within the economy: direct, indirect, and induced.

- **Direct effects** are one or more production changes or expenditures made by producers/consumers as a result of an activity or policy.
- **Indirect effects** are the business-to-business purchases in the supply chain taking place in the region that stem from the initial industry input purchases. Typically, they are additional purchases to produce additional output.

Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. The induced effects are generated by the spending of the employees within the business’ supply chain.



Each of these steps takes into consideration leakage from the economic study region spent on purchases outside of the defined area. Eventually, these leakages will stop the cycle.

Fiscal Impacts

The IMPLAN tax report identifies all tax revenue in the study area, across all levels of government that exist in that study area, for the specific industries and institutions affected by an event or group of events. Tax Impact results are based on the collected and reported taxes within the region for the given data year. IMPLAN taxes shown (and collected) are industry and geographically specific.



The IMPLAN tax impact report splits the tax impacts into the various tax categories based on the region's economy. There is no industry-specific profile for taxes paid by tax category, so the distribution across tax categories is an all-industry average. While this is a limitation of the IMPLAN fiscal reporting, the IMPLAN tax report serves as an appropriate measure of jurisdictional tax results in the aggregate. Tax results cannot be added to any summary or detailed results, as they are already included as a portion of Output. State taxes do not include taxes or district assessments levied by federal, county, sub-county, city or township governments.

Taxes paid include payments from businesses and households. Personal income and employment taxes paid by the employer are included in the tax results and allocated according to the taxing jurisdiction. In detailed IMPLAN analyses, all payroll taxes typically paid at the place of employment are shown as household payments. Property tax and personal property tax reflect a combination of property and personal property taxes paid by both businesses and households.



Appendix B: State Evaluations of Entertainment Industry Tax Incentives

The following evaluations are contained within the database maintained by the National Conference of State Legislatures, accessed electronically at <https://www.ncsl.org/fiscal/state-tax-incentive-evaluations-database>

Alaska, “ALASKA FILM PRODUCTION TAX INCENTIVE PROGRAM SELECT PERFORMANCE ISSUES,” August 8, 2012.

Alabama, “Evaluation of Alabama’s Entertainment Industry Incentive Program,” March 9, 2017

California, “The 2023-24 Budget: California’s Film Tax Credit,” February 2023.

California, “California’s First Film Tax Credit Program,” 2016.

Connecticut, “An Assessment of Connecticut’s Tax Credit and Abatement Programs,” September 2014.

Florida, “Florida Economic Development Program Evaluations – Year 2,” January 1, 2015.

Florida, “Florida Economic Development Program Evaluations – Year 5,” December 27, 2017

Florida, “Return on Investment for the Entertainment Industry Incentive Programs,” January 1, 2018.

Florida, “Florida Economic Development Program Evaluations– Year 8,” December 2020.

Florida, “Return on Investment for the Entertainment Industry Incentive Programs,” January 2021.

Georgia, “Administration of the Georgia Film Tax Credit: Generous tax credit and insufficient controls incentivize misuse,” January 2020.

Georgia, “Administration of the Georgia Film Tax Credit: Controls over credit administration have been strengthened,” July 2022.

Georgia, “Impact of the Georgia Film Tax Credit: Credit’s impact on economy, jobs is less than reported,” January 2020.

Georgia, “Impact of the Georgia Film Tax Credit: Information reported has improved, but credit has not been capped,” October 2022.

Louisiana, “Act 191 of 2013 Annual Report,” March 1, 2014.

Louisiana, “Act 191 of 2013 Annual Report,” March 1, 2016.

Louisiana, “The Economic Impact of Louisiana’s Entertainment Tax Credit Programs for Film, Live Performance, and Sound Recording, April 2017.

Louisiana, “MOTION PICTURE INVESTOR TAX CREDIT,” May 8, 2023.

Massachusetts, “Biennial Report of the Tax Expenditure Review Commission,” March 2021.

Massachusetts, “Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2013,” April 20, 2016.

Massachusetts, “Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2014,” December 30, 2016.

Massachusetts, “Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2016,” February 20, 2020.

Maryland, “Evaluation of the Maryland Film Production Activity Tax Credit,” September 2015.



- Michigan**, "FILM INCENTIVES IN MICHIGAN," September 2010.
- Mississippi**, "An Evaluation of the Effectiveness of the Mississippi Film Office," December 15, 2015.
- North Carolina**, "Film Tax Credits Memorandum," April 9, 2013.
- New Mexico**, "Job Creation Incentives," August 23, 2012.
- New Mexico**, "New Mexico Film Production Phase 1 Tax Incentive Study," July 21, 2014.
- New Mexico**, "Film Production Phase 2 Tax Incentive Study, October 2015.
- New Mexico**, "Film Production Phase 3 Tax Incentive Study, July 2016.
- New York**, "NEW YORK STATE BUSINESS TAX CREDITS: ANALYSIS AND EVALUATION," November 2013.
- Oklahoma**, "Tax Incentive Evaluation Report," December 15, 2016.
- Oklahoma**, "Tax Incentive Evaluation Report," December 15, 2020.
- Pennsylvania**, "Entertainment Economic Enhancement Program Tax Credit," March 2021.
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