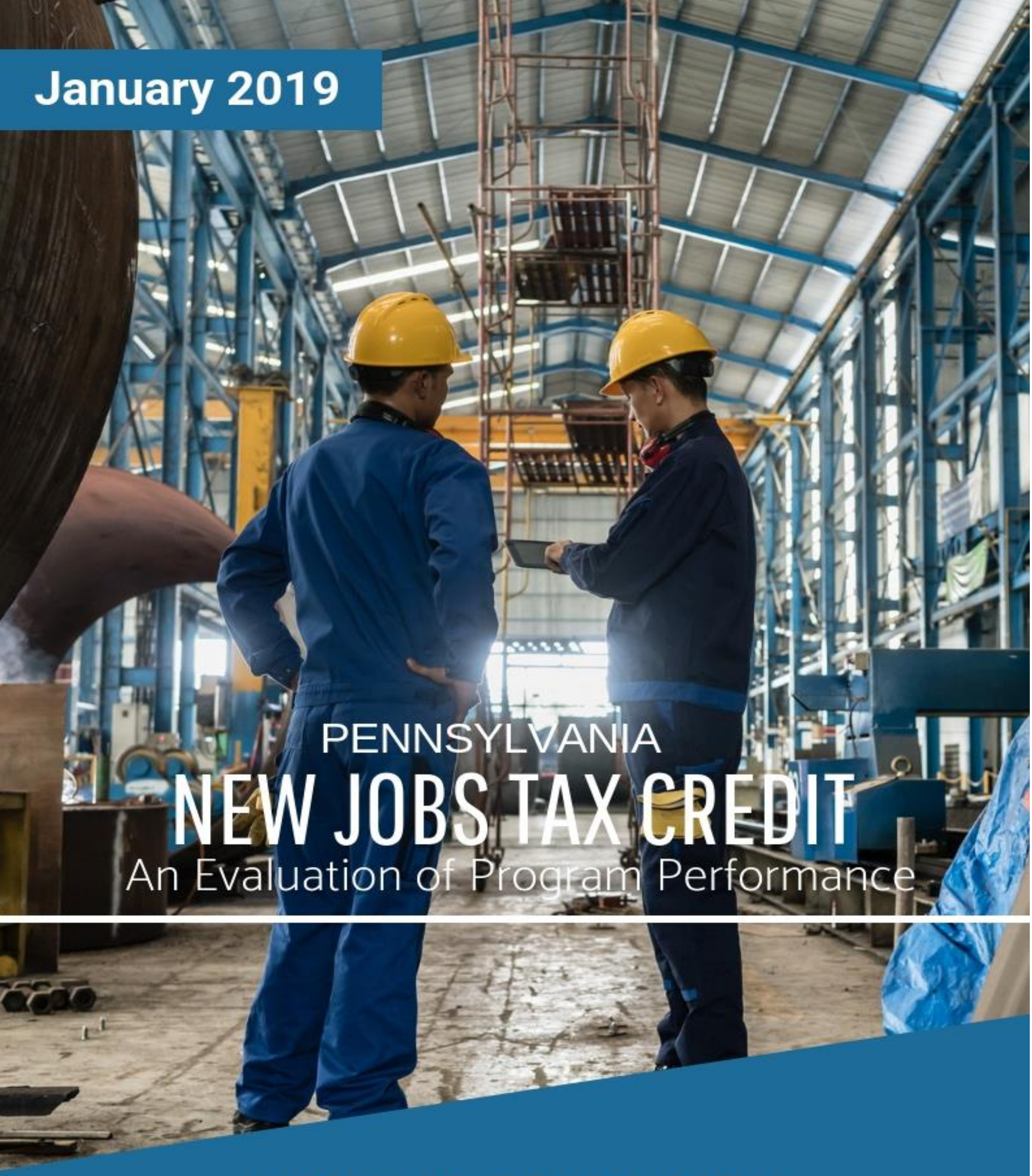

January 2019

PENNSYLVANIA NEW JOBS TAX CREDIT

An Evaluation of Program Performance

INDEPENDENT FISCAL OFFICE

IFO

About the Independent Fiscal Office

The Independent Fiscal Office (IFO) provides revenue projections for use in the state budget process along with impartial and timely analysis of fiscal, economic and budgetary issues to assist Commonwealth residents and the General Assembly in their evaluation of policy decisions. In that capacity, the IFO does not support or oppose any policies it analyzes, and will disclose the methodologies, data sources and assumptions used in published reports and estimates.

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The Independent Fiscal Office was created
by the Act of Nov. 23, 2010 (P.L.1269, No.120).

INDEPENDENT FISCAL OFFICE

January 14, 2019

The Honorable Members of the Performance-Based Budget Board and Chairs of the House and Senate Finance Committees:

Act 48 of 2017 requires the Independent Fiscal Office (IFO) to review various state tax credits over a five-year period. For the first year, the IFO reviewed three tax credits: the Historic Preservation, Film Production and Jobs Creation tax credits. The act requires the IFO to submit tax credit reviews to the Performance-Based Budget Board and the Chairs of the House and Senate Finance Committees and to make reports available to the public on the IFO website.

This report contains the tax credit review for the Job Creation Tax Credit (JCTC), formally known as the New Jobs Tax Credit. The IFO reviewed numerous studies on state JCTCs, held discussions with various stakeholders and met with agency staff who administer the tax credit. Based on that research, the IFO submits this report to fulfill the requirements contained in Act 48.

Currently, 25 states offer some version of a broad-based program to incentivize job creation. Most states provide a non-refundable credit equal to (1) a specified amount per job, or (2) a share of payroll (or withholding) associated with the newly created jobs. Pennsylvania offers $10.1 million in annual non-refundable credits, at a rate of $1,000 per job for up to three years. The economic impact of any job creation program is largely dependent on whether the jobs associated with the program would have been created in the absence of the credit. Put another way, how much job creation does the program actually incentivize? This analysis examines this and other issues that affect the net economic return of the Pennsylvania JCTC.

The IFO welcomes all questions and comments on the contents of this report. Questions and comments can be sent to contact@ifo.state.pa.us.

Sincerely,

MATTHEW J. KNITTEL
Director

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General Findings and Recommendations

Enacted in July 1996, the Job Creation Tax Credit (JCTC, formally known as the New Jobs Tax Credit) provides tax credits to firms that create Pennsylvania jobs within three years of a designated start date.[1] Credits range from $1,000 to $2,500 per job and are awarded for a period of one to three years upon approval by the Department of Community and Economic Development (DCED). The tax credit seeks to promote economic development by attracting and retaining jobs to the state. The annual cap on tax credits is currently $10.1 million, but DCED may also issue recaptured or unissued credits from prior years.

The **general findings** of this report are as follows:

- The current tax credit is insufficient to incentivize job creation. A $1,000 tax credit represents no more than 3.4 percent of the cost of adding an additional full-time employee.
- The annual credit allocation (25 percent) reserved for small businesses (fewer than 100 employees) could be more efficient if it were transferable or refundable, as these firms often lack sufficient tax liability to utilize the credit.
- Firms do not apply for the higher credit amounts available for hiring veterans or previously unemployed individuals ($2,500) because they don't want to lose the credit if they can't find qualified unemployed individuals or veterans to fill the position(s).
- The net economic impact of the credit is too small to model formally. Research finds that roughly 95 percent of the jobs created under the program would also be created in absence of the credit. Using that parameter, the analysis finds that the jobs tax credit has a negative net economic impact.

The **recommendations** of this report are as follows. A more complete discussion of these points can be found in the final section of this report:

- The tax credit should be refundable and transferable.
- The tax credit should require a specified level of capital investment to qualify.
- Recipients should have the option to convert the higher credit amount for veterans or previously unemployed individuals ($2,500) to a standard credit ($1,000), if the company is unable to fill a position with a qualified veteran or previously unemployed applicant.
- If retained, policymakers should consider significant program revisions, reprogram funds to a more effective economic development program or convert JCTC to a grant program.

[1] Article XVIII-B of the Tax Reform Code of 1971 (P.L. 6, No. 2), as amended.

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Section 1: Introduction

Act 48 of 2017 requires the Independent Fiscal Office (IFO) to review various state tax credits over a five-year period.[2] For the first year, the IFO reviewed three tax credits: the Historic Preservation, Film Production and Jobs Creation Tax Credits. The act requires the IFO to submit tax credit reviews to the Performance-Based Budget Board and the Chairs of the House and Senate Finance Committees and to make reports available to the public on the IFO website.

The act specifies that tax credit reviews shall contain the following content:

- The purpose for which the tax credit was created.
- Whether the tax credit is accomplishing its legislative intent.
- Whether the tax credit could be more efficiently implemented through other methods.
- Any alternative methods which would make the tax credit more efficient.
- The costs to provide the tax credit, including the administrative costs to the Commonwealth and local government entities within this Commonwealth.

The act also specifies that the IFO shall develop a tax credit plan for all tax credits subject to review. The plans should include performance measures, and where applicable, the measures should reflect outcome-based measures (including efficiency measures), measures of status improvements of recipient populations, and economic outcomes or performance benchmarks against similar state programs or similar programs of other states or jurisdictions. The IFO submits this report to fulfill these requirements.

This review contains five main sections. Section 2 discusses how the tax credit is administered and presents historical data. Section 3 presents relevant data for states that offer a broad-based job creation tax incentive program. Section 4 contains a discussion of factors that affect the economic return of the tax credit and provides a simplified economic analysis. Section 5 concludes with the tax credit plan, as required by Act 48. A complete list of reports, studies and data sources used for this report can be found in the Appendix. If submitted, written comments provided by stakeholders and affected agencies are also included in the Appendix.

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[2] Act 48 of 2017 is also known as the Performance-Based Budgeting and Tax Credit Efficiency Act. See the Appendix for the Tax Credit Review Schedule.

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Section 2: Overview of the JCTC

Act 67 of 1996 created the Job Creation Tax Credit (JCTC). The JCTC program provides tax credits for approved firms that create a predetermined number of jobs within three years of a designated start date. The credit amount offered is $1,000 per job, but a credit of $2,500 per job is available if the firm commits to filling the job with a veteran or previously unemployed individual. Credits can be awarded for a period of one to three years at the discretion of the Department of Community and Economic Development (DCED). The annual cap on available tax credits is currently $10.1 million, but DCED may also issue recaptured or unissued credits from prior fiscal years. Twenty-five percent of the total credits authorized in any fiscal year are initially reserved for small businesses (those with fewer than 100 employees), but are available for any firm if not committed by April 30 of the fiscal year.

To qualify for the JCTC, a firm must agree to create at least 25 full-time jobs or increase employment by 20 percent within a three-year period. (A small business must agree to increase employment by at least 10 percent in the same period.) The average hourly wage (excluding benefits) for each newly-created job must be at least 150 percent of the Federal minimum wage (currently $7.25 per hour) which equals $10.88 per hour.

The JCTC is one of 22 credits subject to review by the Independent Fiscal Office (IFO).[3] This section begins the analysis with a general description of the purpose and goals of the tax credit. It then discusses the administration of the tax credit and presents program data from fiscal year (FY) 2013-14 to FY 2017-18 (the most recent five fiscal years).

Purpose and Goals

Act 48 of 2017 requires that all tax credit review reports published by the IFO discuss (1) the purpose for which the tax credit was created and (2) whether the tax credit is accomplishing its legislative intent. For the JCTC, the IFO reviewed the stated intent of the authorizing legislation and interviewed DCED staff regarding their understanding of the program purpose. For this review, the IFO has established the purpose and the goals of the JCTC program as follows:

Purpose

- To incentivize economic development through the expansion of existing Pennsylvania firms and the attraction of new economic development opportunities to the state.

Goals

- Provide incentives to enhance business development within Pennsylvania.
- Attract new firms to the Commonwealth and secure the preservation or expansion of existing industries within the state.

[3] For the tax credit review schedule, see the Appendix.

- Work within a comprehensive strategy (consisting of other economic development programs and incentives) to increase job creation and economic development within the state.

Administration and Implementation

DCED administers the tax credit and reviews applications.[4] The text that follows is a summary of the more detailed explanation of the application process contained in the Program Guidelines for the Job Creation Tax Credit published by DCED:[5]

To apply for the JCTC program, an applicant must complete an online application (DCED's Single Application for Assistance) and include a written narrative that provides the following information:

- A description of how the firm exhibits leadership of leading technologies in its primary business processes.
- A description and amount of investment that the firm will make in order to create the new jobs.
- The desired program start date.
- Specified financial statements for the preceding three years.
- An employment affidavit attesting to employment levels for the preceding three years (for the purpose of establishing base employment).

Applications received are evaluated based on a number of criteria including:

- Program eligibility.
- Number of full-time jobs to be created.
- Amount of private investment.
- Financial stability.
- Average hourly wage paid to employees.
- Extent to which the firm develops or deploys leading technologies.
- Synergies with other DCED initiatives.

Upon approval, DCED issues a commitment letter that contains: (1) a description of the project, (2) the number of jobs to be created, (3) the specified timeline for the creation of jobs, (4) the required amount of capital investment, (5) the maximum amount of JCTC that may be claimed and the period over which it may be claimed, and (6) a statement that the firm intends to operate in the Commonwealth for at least five years after the start date. The commitment letter must be signed and returned to DCED within 60 days. Throughout the job creation period, the firm must file quarterly employment affidavits with DCED.

Base employment is calculated by averaging employment over the three years preceding the firm's program start date, or the firm's employment at the start date, whichever number is larger. Job creation for year one is calculated by averaging the four quarterly employment affidavits for that year and subtracting base employment. Job creation for year two is calculated by averaging the four quarterly employment affidavits for that year and subtracting year one employment (average of the first four quarters). DCED issues tax

[4] The Department of Revenue performs compliance checks on applicants and ensures that approved tax credits are used appropriately.

[5] See "Job Creation Tax Credit: Program Guidelines," Department of Community and Economic Development (January 2018).

credit certificates for all new jobs created. Certificates are submitted to the Department of Revenue for redemption.

Any firm that receives a tax credit must maintain substantially the same level of operations for a period of five years. A firm that receives a tax credit and does not maintain the specified level of operations or fails to create the approved number of new jobs will have its tax credit rescinded. DCED may waive this penalty if it determines that the firm did not meet the requirements due to circumstances beyond the firm's control.

Tax credits may be used to offset up to 100 percent of the firm's corporate net income, capital stock and franchise, insurance premiums, gross receipts, bank shares, mutual thrift or personal income tax liabilities. The credit must be utilized within five years of receipt. Credits may not be carried back, refunded, transferred or sold.

The agencies provided estimates for staff time and annual costs to administer and enforce the tax credit:

- For DCED, less than one full-time equivalent (FTE) staff person ($52,000).
- For the Department of Revenue (DOR), less than one FTE staff person ($48,000).

A detailed explanation of DOR's administration, enforcement and compliance efforts can be found in the Appendix.

Historical JCTC Data

This review compiled data on JCTC awards for the five most recently completed fiscal years (FY 2013-14 through FY 2017-18). During this period, $55.0 million was awarded (some from prior year credit allocations) related to the creation of 26,840 jobs and 215 projects. JCTC applications submitted via the Governor's Action Team (GAT) generally receive multiple year awards for job creation (up to $3,000 total). For the period examined, more than 75 percent of new jobs were associated with the GAT. Applications submitted directly to DCED (non-GAT) receive the standard award of $1,000 per job created.

According to DCED records, firms do not apply for the higher $2,500 per job credit associated with filling a position with a veteran or currently unemployed individual. When a firm applies to the JCTC program, it has no way to know whether a qualified veteran or unemployed individual will apply for the newly created job. If a firm applies for the $2,500 credit and can't fill the position under those specifications, they do not receive a credit for the newly created job. Rather than risk a loss, they apply for the standard credit.

Table 1 displays JCTC awards over the past five years by county. Note that only 42 of the 67 counties in Pennsylvania benefited from the credit. Four counties (Allegheny, Montgomery, Philadelphia and York) received more than 40 percent of all credit awards. Berks, Chester, Lancaster and Luzerne counties benefited from almost 20 percent of awards. The residual 34 counties received the remaining 40 percent of the tax credits.

Table 1
JCTC Awards by County

	FY 2013-14 to FY 2017-18				
County	Amount	Percent	County	Amount	Percent
Allegheny	$3,792	6.9%	Lawrence	$124	0.2%
Beaver	228	0.4	Lebanon	1,670	3.0
Bedford	16	0.0	Lehigh	1,811	3.3
Berks	2,598	4.7	Luzerne	2,644	4.8
Blair	932	1.7	Mercer	883	1.6
Bradford	151	0.3	Mifflin	118	0.2
Bucks	1,914	3.5	Monroe	136	0.2
Butler	333	0.6	Montgomery	5,949	10.8
Chester	2,132	3.9	Northampton	3,943	7.2
Clearfield	60	0.1	Northumberland	42	0.1
Columbia	116	0.2	Philadelphia	8,920	16.2
Cumberland	616	1.1	Pike	400	0.7
Dauphin	368	0.7	Schuylkill	1,092	2.0
Delaware	1,334	2.4	Snyder	180	0.3
Erie	159	0.3	Somerset	25	0.0
Fayette	643	1.2	Union	180	0.3
Franklin	998	1.8	Warren	230	0.4
Huntingdon	62	0.1	Washington	706	1.3
Indiana	200	0.4	Westmoreland	76	0.1
Juniata	492	0.9	York	4,636	8.4
Lackawanna	422	0.8	Multi-County	800	1.5
Lancaster	2,900	5.3	**Grand Total**	**$55,031**	**100.0%**

Note: thousands of dollars.
Source: DCED records.

Table 2 reflects jobs created and tax credit awards by entity type. More than 75 percent of credits over the past five years were awarded to corporations. Limited liability corporations (LLCs) benefited from 20 percent of credit awards. The remaining amount (less than 5 percent) went to other types of firms. Approximately 55 percent of credits were awarded to small businesses (100 or fewer employees).

Table 2
JCTC Awards by Entity Type

	FY 2013-14 to FY 2017-18		
Entity Type	**Jobs**	**Dollar**	**Percent**
Corporation	19,858	$41,972	76.3%
LLC	5,673	10,988	20.0
LLP	147	147	0.3
Partnership	937	1,774	3.2
Sole Proprietorship	225	150	0.3
Grand Total	**26,840**	**$55,031**	**100.0%**

Note: thousands of dollars.
Source: DCED records.

Table 3 displays JCTC awards and jobs created by primary industry of the firm. Almost 70 percent of credit awards (65 percent of jobs created) went to four industries (manufacturing, transportation and warehousing, information, and professional services). The wholesale trade, retail trade, finance and insurance, and health care sectors rounded out the next 20 percent of awards (25 percent of jobs created). The remaining sectors comprised the last 10 percent of credit awards (10 percent of jobs created).

The 26,840 jobs associated with the JCTC program over the past five years implies per annum job creation of roughly 5,400 for the period. According to the latest economic data, the state generated about 45,000 jobs per annum during the same period. Stated another way, the JCTC was associated with approximately 12 percent of all new state jobs. It is unlikely that the tax credit incentivized such a high share of state job creation. (See Section 4 for more information.)

Table 4 reflects JCTC credits currently available for award from each of the last five fiscal years. The "awarded" column is reduced for credits that were initially awarded, but later recaptured. These credits are now available for re-award and appear in the "available" column. The available total of $15.6 million does not include credits that may be available from fiscal years prior to FY 2013-14.

Table 3
JCTC Awards by Industry Code

	FY 2013-14 to FY 2017-18		
NAICS	Industry	Jobs	Credit
11	Agriculture, Forestry, Fishing, and Hunting	580	$1,540
21	Mining, Quarrying and Oil and Gas Extraction	25	25
23	Construction	98	98
31-33	Manufacturing	7,207	15,206
42	Wholesale Trade	1,101	2,284
44-45	Retail Trade	2,795	5,425
48-49	Transportation and Warehousing	3,854	7,275
51	Information	2,382	6,646
52	Finance and Insurance	1,267	2,434
53	Real Estate and Rental and Leasing	115	230
54	Professional, Scientific and Technical Services	3,797	8,858
56	Administrative and Support Services	996	1,542
61	Education Services	128	256
62	Health Care and Social Assistance	2,085	2,315
81	Other Services (except Public Administration)	410	897
Grand Total		**26,840**	**$55,031**

Note: thousands of dollars.
Source: DCED records.

Table 4
JCTC Five-Year Credit Inventory

Fiscal Year	Cap	Awarded	Available
2013-14	$10.1	$5.4	$4.7
2014-15	10.1	5.9	4.2
2015-16	10.1	5.9	4.2
2016-17	10.1	10.0	0.1
2017-18	10.1	7.7	2.4
Total	**$50.5**	**$34.9**	**$15.6**

Note: millions of dollars.
Source: DCED records.

Section 3: State Tax Credit Comparison

Many states offer one or more incentives for job creation, sometimes as part of a larger economic development program. Most of these incentives fall into one of three categories: (1) broad-based job creation programs, (2) programs targeting specific industries or populations (e.g., unemployed, veterans, formerly incarcerated, etc.) or (3) programs targeting blighted, deteriorated or underserved geographic areas of the state. The programs typically offer tax credits equal to (1) a specified amount for each new job created, or (2) a share of the new payroll (or withholding) generated. Tax credits are generally offered annually for a period of one to ten years. In addition to the creation of jobs, some states require a certain level of capital investment as a condition of program eligibility (Kentucky, Delaware, West Virginia and Tennessee) and a few incorporate the level of investment into the credit calculation (Delaware and West Virginia).

About half of the existing job creation programs began in the 1990's, but have been periodically revised, updated and rebranded consistent with shifting state priorities (and administrations). **Table 5** provides key characteristics for the 25 states that currently have a broad-based job creation tax credit program. For purposes of the table, a "broad-based job creation tax credit program" includes those programs limited to small businesses (generally less than 100 employees) and those directed at specified industries, permitted that the eligible industries generally total five or more. Programs limited to specified geographic areas are excluded from the table.

The second column of Table 5 indicates the base used to determine the applicable state tax credit and the number of consecutive years that the tax credit may be awarded for each newly created job. Some states have a project cap or a maximum credit that may be awarded for each newly proposed project. Other states impose a cap on the amount of credit that a business may claim in any one tax year. Both of those limitations are reflected in the third column of Table 5. The last two columns indicate the annual program cap (if applicable) and the annual award for the latest year for which data were available.

Table 5
State Job Creation Credit Programs

State[1]	Base Credit Rate[2]	Project Cap	Annual	
			Cap	Amount[3]
Alabama	$1,000/job	-	-	$0.3
Arizona	$3,000/job annually for 3 yrs	400 new jobs	10,000 new jobs	8.7
Arkansas	1% of payroll for 5 yrs	50% of income tax liability	-	3.8
Colorado	up to 50% of FICA for max of 8 yrs	-	-	134.4[4]
Delaware	$500/job for 9 yrs	65% of employee withholding	-	4.0
Georgia	$2,500/job for 5 yrs	-	-	109.0
Idaho	$1,500/job	62.5% of taxpayer liability	-	0.1
Illinois	50% of with for 10 yrs	100% of taxpayer liability	-	76.7
Indiana[5]	share of with for 10 yrs	100% of new withholding	-	86.0
Iowa	6% of taxable wages	$1,836 per new employee	-	3.4
Kansas[5]	up to 95% of with up to 10 yrs	-	-	0.0
Kentucky	up to 3% of gross wages up to 10 yrs	-	-	6.1
Louisiana[6]	4% of payroll	36% of state CNIT liability	-	53.3
Maryland	$3,000/job	$1 million per year	$4.0	0.6
Mississippi	2.5% of payroll for 5 yrs	50% of state liability	-	10.0
Missouri[7]	100% of with for 3 yrs	-	$80.0	n.a.
New Mexico[5]	10% of wages & benefits for 4 yrs	$12,000 per year per job	-	30.0
New York[5]	6.85% of gross wages for 10 yrs	-	$183.0[4]	29.0[4]
Ohio[5]	variable share of payroll	-	-	117.3
Oklahoma[6]	up to 5% of taxable payroll for 10 yrs	-	-	82.3
Pennsylvania	$1,000/job for 3 yrs	-	$10.1	10.1
South Carolina	$1,500/job for 5 yrs	50% of taxpayer liability	-	0.3
Tennessee	$4,500/job	50% of franchise & excise tax liability	-	52.6
Virginia	$1,000/job	100% of taxpayer liability	-	6.8
West Virginia	$3,000/job for 5 yrs	80% of CNIT & PIT liability	-	5.0[4]

Sources: CCH, National Conference of State Legislatures and various state agency websites.
Note: millions of dollars.
[1] Only includes states that currently have a broad-based job creation tax credit program. Includes those targeted to small businesses or a wide range of industries.
[2] "Base Credit Rate" reflects the lowest credit amount offered for a new full-time job. Many states allow higher amounts for new jobs meeting specific conditions.
[3] Most recent credit amounts (in millions of dollars) reported by the Institute on Taxation and Economic Policy. Some data pertain to credits claimed, while others pertain to credits issued.
[4] Amount is applicable to a larger economic development program which includes the jobs tax credit.
[5] Tax credit is refundable.
[6] Louisiana and Oklahoma offer rebate programs.
[7] Tax credit is refundable and transferrable.

Section 4: Economic Analysis

This section presents the economic analysis of the Pennsylvania JCTC and contains three subsections. The first subsection provides an overview of the key assumption that drives the economic impact for the JCTC. The second subsection estimates the direct spending incentivized by the tax credit and applies multipliers to arrive at a projected economic impact. The last section provides a sensitivity analysis that calculates the impact of the credit under two alternate scenarios (high and low).

Key Assumption

There are a number of studies that attempt to quantify the impact of various state job creation tax credit programs. (See Appendix for a list of reports reviewed for this analysis.) These studies come from a variety of sources including government agencies, private for-profit corporations and researchers affiliated with colleges or universities. Most studies do not yield results that lend themselves to direct comparison, as each makes different assumptions and adjustments based on the size of the incentive offered and the standard used to measure job creation.

The primary assumption that drives the economic analysis of the JCTC program is the share of jobs that were actually incentivized by the credit. Often, it is difficult to estimate the number of jobs that were directly created by a particular program because the impact of the program cannot be isolated from the impact of other economic conditions or policies. Studies have approached this question in a number of ways, including (1) surveys of executive decision-makers, (2) comparing employment data for affected states, industries, geographic areas or firms with a similar unaffected control group over time, or (3) expressing the incentive as a share of the cost of the newly created job and applying an appropriate employment elasticity. Some of the findings from those studies are discussed below.

A 2010 study interviewed executives for firms receiving North Carolina economic development tax incentives (including those for job creation) and determined that leaders largely viewed these incentives as an "accounting function" and not a basis for making decisions regarding business operation or relocation.[6] Other studies found that in some cases, firms that created program eligible jobs did not apply for credits, presumably because they felt the administrative costs outweighed the modest benefits. IFO discussions with Pennsylvania stakeholders yielded similar comments from small business owners that felt the effort was generally not worth the return.

A 2016 report by Anderson Economic Group and commissioned by the state of Tennessee evaluated business tax credits using data from 2010 through 2015. Overall, they found evidence that firms tend to "cluster" hiring in the years that they are eligible for incentives, but hire fewer employees in the following years.[7]

A 2016 study of the Maryland Job Creation Tax Credit found that the credit is "unlikely to increase employment unless a firm believes there is sufficient demand for their products."[8] The report cited the relatively

[6] "The Limitations of State Economic Development Tax Credits," G. Jason Jolley and E. Brent Lane (2010).
[7] "The Economic Impact of Business Tax Credits in Tennessee," Anderson Economic Group, LLC (December 26, 2016).
[8] "Evaluation of the Job Creation Tax Credit," Maryland Department of Legislative Services (November 2016).

low value of the incentive in comparison to the cost to hire an additional employee as the likely reason for this outcome. The report also noted that decision-making is likely based on confidence about the future and not just the availability of current incentives.

Although the reports utilized various data, methodologies and state program parameters, most studies reviewed for this report find that state JCTC programs do not have a significant impact on the creation of jobs. Findings regarding the number of new jobs created that would not have occurred in the absence of the program generally range from 2 to 8 percent. One study estimated the incentivized share at roughly 25 percent, but the total number of jobs generated by the program reviewed for that study was small.[9] Several studies note that if all of the job creation would have occurred regardless of the credit, then JCTC spending actually results in a negative economic impact, as the state could have spent the funds in another more efficient manner (e.g., other more efficient economic development programs, infrastructure, education, etc.)[10].

Most recently, a 2018 study by the Upjohn Institute examined 34 separate "but for" estimates that used statistical analyses across many state incentive programs. The "but for" estimate is the share of jobs or expansions that are actually incentivized by an economic development incentive, such as a jobs tax credit. The report found that 23 studies had a positive bias (i.e., the methodology caused the "but for" assumption to be overstated), four had a negative bias and seven used an unbiased methodology. For those seven studies, the share of location expansion / job creation incentivized by the economic development incentive was 3.4 percent (median result) and 6.7 percent (average result). The study also notes that smaller incentive packages (like Pennsylvania) will "tend to have effects on the low end."[11]

For Pennsylvania, the $1,000 credit represents a very small share of the annual cost of the new employee. Assuming an average salary of $55,000 plus 30 percent in benefit costs, or $71,500, the credit offsets roughly 1.4 percent of the total cost. Alternatively, at 150 percent of the Federal minimum wage ($10.88 per hour) and 30 percent in benefit costs, or $29,400 per year, the credit offsets 3.4 percent of the cost of the new employee. At this level, it is unlikely that the incentive is sufficient to drive hiring decisions. Due to this minimal impact and the research cited above, this analysis assumes that only 5 percent of the jobs created under the JCTC program are a direct result of the credit (i.e., 95 percent of jobs would have been created regardless).

[9] "Evaluation of the Job Creation Tax Credit," Maryland Department of Legislative Services, Office of Policy Analysis (November 2016).

[10] "Quality Jobs Program, 2009 Report," Louisiana Department of Economic Development (December 2010) and "Evaluation of the Job Creation Tax Credit," Maryland Department of Legislative Services (November 2016).

[11] "But For" Percentages for Economic Development Incentives: What percentage estimates are plausible based on research literature?" Timothy Bartik, W.E. Upjohn Institute, Working Paper 18-289 (July 2018), pp. 8-10.

Economic Impact

This subsection computes a simplified economic impact for the tax credit.[12] For ease of analysis, the computation assumes that all tax credits available for authorization are awarded and claimed in the same year. Adjusting for actual delays between authorizations, awards and utilizations would not change the overall results of this analysis.

Table 6 presents the computation and the following text describes the adjustments based on line number:

Line 1 The analysis assumes that $10.1 million of tax credits are authorized, awarded and utilized.

Line 2 The analysis assumes that only 5 percent of the jobs associated with the JCTC program would not occur in absence of the credit (are incentivized).

Line 3 The product of lines 1 and 2: the portion of credits that leverage new employment.

Line 4 The annual JCTC award per new job.

Line 5 Line 3 divided by line 4: the number of new jobs leveraged by the credit.

Line 6 Assumed average annual wage associated with the new jobs.

Line 7 The product of lines 5 and 6: leveraged annual wages.

Line 8 The credit funds only a small portion of the new employee wages. The remaining share comes from the firm and some portion of that spending would have been used for other Pennsylvania purposes (e.g., new equipment, raises or overtime for existing employees, etc.). The analysis assumes that 50 percent of this spending would have occurred in Pennsylvania even in the absence of the credit. [13]

Line 9 New Pennsylvania spending leveraged by the credit.

Line 10 Due to the balanced budget requirement, states must reduce spending or raise taxes to provide resources for the tax credit. If that offset is not taken into account, then the net economic impact of the credit will be overstated. This analysis assumes that discretionary spending would be reduced and those monies would have been spent on education, healthcare and infrastructure. For the purpose of this analysis, an $8.6 million offset is used.[14] It is assumed that the $8.6 million generates the same economic impact whether it is spent by the state for another purpose, or distributed in the form of tax credits.

Line 11 Line 9 less line 10: Represents the net incremental (direct) spending generated by the credit.

Line 12 For the purpose of this simplified analysis, a basic economic multiplier of 2.0 is applied to the net

[12] The small amount of induced activity generated by the JCTC lent itself to this simplified economic analysis rather than an analysis using the IMPLAN model.
[13] As stated previously, approximately 55 percent of JCTC jobs are created by small businesses. It is likely that the majority of that spending would have occurred in Pennsylvania even in the absence of the credit. For larger firms, less spending would have otherwise occurred in Pennsylvania. This analysis assumes 50 percent as an overall weighted average for both types of firms.
[14] The analysis assumes that $10.1 million is spent on tax credits. Alternatively, if the state used those monies for discretionary spending, that amount should be reduced to reflect the fact that the portion used to pay state employee compensation includes pension contributions and employer payroll taxes which do not have immediate implications for the state economy. Therefore, the analysis reduces the balanced budget multiplier by 15 percent to reflect those impacts and deducts $10.1 * 0.85 = $8.6 million.

incremental state spending.[15] This multiplier implies that every $1.00 of new spending attributable to the tax credit would increase total output or sales by $2.00 in the state, as the original spending moves through the economy (is respent).

Line 13 The product of lines 11 and 12: the total economic impact (loss) associated with the credit.

Line 14 The Pennsylvania Personal Income Tax (PIT) rate of 3.07 percent multiplied by the sum of the direct impact (line 11) and 35 percent of the indirect/induced impact (line 13 less line 11). The calculation assumes that no portion of the new wages are subject to SP parameters and that wages comprise 35 percent of the indirect/induced impact.

Line 15 The Pennsylvania Sales and Use Tax (SUT) rate of 6 percent multiplied by 30 percent of the new wages (direct, indirect and induced). Assumes that 30 percent of the new income is spent on purchases subject to the state's SUT.

Line 16 Combined impact on state tax revenue. This is often referred to as the return on investment (ROI) for the state spending.

Table 6
Economic Analysis of Pennsylvania JCTC

	Spending Category or Adjustment	Amount or Percentage
1	Tax Credits Awarded and Used	$10,100,000
2	Incentivized Share	5.0%
3	Leveraged Credits	$505,000
4	Annual Credit per Job	$1,000
5	Leveraged Jobs	505
6	Average Annual Wage Per Employee	$30,000
7	Leveraged Wages	$15,150,000
8	Share Diverted From Other PA Purposes	50.0%
9	New PA Spending	$7,575,000
10	Less Balanced Budget Adjustment	-$8,600,000
11	Net Incremental Spending	-$1,025,000
12	Multiplier	2.0
13	**Economic Impact (Spending)**	**-$2,050,000**
14	PIT	-$42,500
15	SUT	-$24,900
16	Increased/Reduced Tax Revenue	-$67,400

Source: Computations by the IFO.

[15] Common multipliers are 1.27 for households (induced effects only), 1.97 for amusements, 2.00 for general merchandise, 2.13 for educational services, 2.17 for food and drinking places and 2.26 for the apparel industry.

Sensitivity Analysis

Since there is some uncertainty regarding the actual number of jobs that would have been created in the absence of Pennsylvania's JCTC program, this subsection of the report provides the previous calculation of the economic impact under both a low and high scenario. The "low" scenario assumes that all jobs would have been created regardless of the JCTC credit. The "high" scenario assumes that 10 percent of the created jobs are incentivized by the program. See **Table 7**.

The low scenario represents the "worst case", in that the program generates no real jobs and yields a negative impact of roughly $17.2 million. In this case, the original funds ($10.1 million) could have been spent for an alternative purpose (e.g., education, infrastructure, healthcare, etc.) that would have motivated new spending and generated a positive economic return. The high scenario generates an economic impact of $13.1 million and an estimated $0.4 million in new tax revenue.

Table 7
Sensitivity Analysis

		Scenario	
	Spending Category or Adjustment	Low	High
1	Tax Credits Awarded and Used	$10,100,000	$10,100,000
2	Incentivized Share	0.0%	10.0%
3	Leveraged Credits	$0	$1,010,000
4	Annual Credit Per Job	$1,000	$1,000
5	Leveraged Jobs	0	1,010
6	Average Annual Wage Per Employee	$30,000	$30,000
7	Leveraged Wages	$0	$30,300,000
10	Share Diverted From Other PA Purposes	50.0%	50.0%
11	New PA Spending	$0	$15,150,000
12	Less Balanced Budget Adjustment	-$8,600,000	-$8,600,000
13	Net Incremental Spending	-$8,600,000	$6,550,000
14	Multiplier	2.0	2.0
15	**Economic Impact**	**-$17,200,000**	**$13,100,000**
16	PIT	-$356,400	$271,500
17	SUT	-$209,000	$159,200
18	Increased/Reduced Tax Revenue	-$565,400	$430,700

Source: Computations by the IFO.

Other Possible Impacts Associated with JCTC

The reports reviewed for this analysis occasionally reference other ancillary impacts associated with JCTC programs that are difficult to quantify:

- Increased Population – Individuals moving to Pennsylvania from out-of-state to fill newly created jobs increase the state's population and can generate additional state and local tax revenue. However, they likewise create new demand for state and local services.
- Higher Average Salaries – Most JCTC programs require payment of wages in excess of the state or federal minimum. This can drive wages for non-JCTC jobs upward.
- Increased Training/Educational Attainment of Workforce – Some states include training incentives as part of their JCTC program. These incentives can result in a more well-trained workforce.

For Pennsylvania, three-quarters of all JCTC awards are granted by the Governor's Action Team (GAT). In those cases, the credits may be awarded as part of a larger economic development package to entice Pennsylvania firms to expand, or to motivate non-Pennsylvania firms to move to, or expand in, the state. It is unclear what impact the credits have within this larger framework, or what share of those projects would move forward regardless of the JCTC award.

Additionally, the Pennsylvania JCTC application requires firms to indicate the anticipated capital investment associated with the proposed job creation project. The economic impact of this investment cannot be determined because the actual investment amount is not reported or audited. However, there is likely some undetermined positive economic impact that results from this spending.

Section 5: Tax Credit Plan

Act 48 of 2017 directs the IFO to review tax credits and develop a tax credit plan for all tax credits subject to review. The act states that tax credit plans should include performance metrics for each credit. The act does not specify any other elements of the tax credit plan. For this review, the IFO has defined the tax credit plan more broadly to include the following elements: (1) the general findings of the review, (2) specific recommendations, including performance metrics and (3) key decision points for policymakers to consider.

General Findings

For the purpose of this report, the IFO reviewed numerous tax credit studies and spoke with multiple stakeholders, as well as the agencies that administer the tax credit. The following bullet points summarize the main findings of this research:

- The current tax credit is insufficient to incentivize job creation. A $1,000 tax credit represents no more than 3.4 percent of the cost of adding an additional employee (assuming wages of 150 percent of the Federal minimum and 30 percent in benefits). At this rate an employer is unlikely to create new jobs unless they know there is sufficient demand for the firm's services to support the expenditure and therefore, would have likely created the job anyway.
- The portion of the annual credit allocation (25 percent) reserved for small businesses (fewer than 100 employees) may be inefficient, as the credit may not be sold or refunded and these firms often lack sufficient tax liability to utilize the credit. Stakeholders referenced the lack of refundability as an obstacle to credit utilization.
- Firms don't apply for the higher credit amounts ($2,500) available for hiring veterans or previously unemployed individuals because they don't want to lose the credit if they can't find qualified unemployed individuals or veterans to fill the position. In the past five years, there have been no requests for credits under either provision.
- It is unlikely that the current JCTC program has a significant impact on job creation. Research finds that at least 95 percent of the jobs created under the program would be created in absence of the credit.

Specific Recommendations

Based on the general findings, the IFO submits the following recommendations to enhance the efficiency of the tax credit and improve its ability to achieve its purpose and goals.

The tax credit should be made transferable and refundable.

Most other tax credits administered by DCED are transferable (i.e., may be sold to an unaffiliated entity). However, the sale of these credits allows leakage of the JCTC benefits to firms that did not engage in new job creation and to third party facilitators. Allowing the credit to be refundable (even at a rate of $0.95 on the dollar) would provide assistance to small businesses or new firms that may not have sufficient tax liability to offset the credit.

A specified amount of capital investment should be required to qualify for the tax credit.

Some JCTC programs in other states (Kentucky's Business Investment Program, Delaware's New Jobs Creation and Tennessee's Job Tax Credit) require a minimum level of capital investment to qualify for the credit. Pennsylvania currently requires some private investment and the amount of the investment is considered by DCED as part of the application process, but no minimum level of investment is required. Incentivizing the dedication of resources beyond the creation of jobs increases the economic impact of the projects and makes it more likely that the firm will remain in Pennsylvania.

Recipients should have the option to convert the higher credit amount for veterans or previously unemployed individuals ($2,500) to a standard credit ($1,000) if the company is unable to fill a position with a qualified veteran or previously unemployed applicant.

Firms currently do not apply for the higher $2,500 per job credit associated with filling a newly created position with a veteran or unemployed individual, because they risk losing the credit if they can't find a qualified veteran or unemployed person to fill the position. Allowing the firm to convert a certain number of $2,500 credits to a standard $1,000 credit after the application is approved would further incentivize firms to hire veterans/unemployed individuals because it would eliminate the risk of losing the credit entirely. The hiring of an unemployed Pennsylvania resident is particularly beneficial as it may reduce state expenditures for unemployment compensation and other benefits.

Policymakers should consider significant program revisions, reprogram the JCTC funding to benefit another more efficient economic development program or convert to a job creation grant program.

The findings of this report indicate that the Pennsylvania JCTC program is unlikely to incentivize job creation in its current form. If the tax credit is retained, policymakers should consider increasing the per job incentive (significantly higher dollar amount per job or a share of wages paid), as well as the program cap. Alternatively, policymakers could roll the funding from the JCTC program into another DCED economic development program that produces better economic results. The JCTC could also be converted to a grant program, where DCED awards larger amounts to a smaller number of firms.

If the credit is retained, DCED should track performance metrics.

Agencies that administer the tax credit are best positioned to track credit performance. If the JCTC is retained, performance metrics should be collected and potential metrics could include the following:

- New jobs filled by residents versus non-residents.
- Annual income paid to new hires.
- Employer cost of benefits provided to new hires.
- Number of new jobs retained at three years and at five years.
- JCTC (amount and jobs created) awarded as part of a larger economic development package.
- Average time from JCTC application to commitment letter.
- Whether the new hire had been previously unemployed and length of the unemployment.
- Whether new hires receive formal job training.
- Identify firms that had no presence in Pennsylvania prior to the JCTC award.

Key Decision Points

Policymakers should consider the future of the JCTC program. There are three likely alternatives to the current program:

- Enact significant revisions to the current program to promote increased economic outcomes. Potential changes include: (1) increased total credit allocation to allow higher funding amounts per job created, (2) refundability of tax credits, (3) flexible incentives for the hiring of in-state residents, unemployed individuals and veterans and (4) a minimum required capital investment.
- Reprogram the current JCTC funding to a more effective Pennsylvania economic development program.
- Convert the current credit program to a more broadly administered grant program that promotes economic development and job creation.

Conclusion

Act 48 of 2017 requires that the IFO make a determination regarding whether the tax credit has achieved its purpose and goals. Based on the legislative intent indicated in the JCTC's authorizing legislation and DCED's program guidelines, the IFO establishes the program purpose as:

- To secure job-creating economic development opportunities through the expansion of existing Pennsylvania firms and the attraction of new economic development projects to the state.

The analysis establishes the following goals to achieve that purpose:

- Provide incentives to enhance business development within Pennsylvania.
- Attract new firms to the Commonwealth and secure the expansion or preservation of existing industries within the state.
- Work within a comprehensive strategy (consisting of other economic development programs and incentives) to increase job creation and economic development within the state.

Based on existing research, conversations with stakeholders and reasonable assumptions, this review finds that it is unlikely the current JCTC program has achieved its intended purpose. The General Assembly should consider the substantial program revisions discussed in the recommendation section of this report, the reprogramming of JCTC funding to an economic development program that produces a greater economic impact or conversion to a grant program that awards larger amounts to a smaller number of firms.

Appendix

Tax Credit Review Mandate

Act 48 of 2017 is the Performance-Based Budgeting and Tax Credit Efficiency Act. The act requires the Independent Fiscal Office (IFO) to review tax credits based on a five-year schedule determined jointly by the Secretary of the Budget and the Director of the IFO. The act specifies that the schedule must ensure that tax credits are subject to a review by the IFO at least once every five years. The IFO will submit reviews to the Performance-Based Budgeting (PBB) Board and the Chairs of the House and Senate Finance Committees and make the report available to the public through its website.

The act specifies that reviews shall contain the following content:

- The purpose for which the tax credit was created.
- Whether that tax credit is accomplishing the tax credit's legislative intent.
- Whether the tax credit could be more efficiently implemented through alternative methods.
- Any alternative methods which will make the tax credit more efficient if necessary.
- The costs of providing the tax credit, including the administrative costs to the Commonwealth and local government entities within this Commonwealth.

The act also specifies that the IFO shall develop a tax credit plan for all tax credits subject to a review. The plans should include performance measures, and where applicable, the measures should reflect outcome-based measures (including efficiency measures), measures of status improvements of recipient populations, and economic outcomes or performance benchmarks against similar State programs or similar programs of other states or jurisdictions.

Performance-Based Budgeting and Tax Credit Review Schedule

Performance-Based Budgeting and Tax Credit Review Schedule

Year	Performance-Based Budgets					
1	Corrections	Board of Probation and Parole	PA Commission on Crime & Delinquency	Juvenile Court Judges' Commission	Banking and Securities	General Services
2	Economic & Community Development	Human Services – Part 1	Health	Environmental Protection	PA Emergency Management Agency	State
3	PennDOT	Human Services – Part 2	State Police	Military & Veterans Affairs	State Civil Service Commission	
4	Education	Human Services – Part 3	Aging	PA Historical & Museum Commission	Agriculture	Labor and Industry
5	Drug and Alcohol Programs	Insurance	Revenue	Executive Offices	Environmental Hearing Board	Conservation and Natural Resources
Year	**Tax Credits**					
1	Film Production	New Jobs	Historic Preservation Incentive			
2	Research and Development	Keystone Innovation Zones	Mobile Telecom and Broadband	Organ and Bone Marrow		
3	Neighborhood Assistance	Resource Enhancement and Protections (REAP)	Entertainment & Economic Enhancement	Video Game Production	Keystone Special Development Zones	
4	Educational Tax Credits	Coal Refuse and Reclamation	Mixed Use	Community-Based Services		
5	Resource Manufacturing	Brewers'	Computer Data Center	Manufacturing and Investment	Waterfront Development	Rural Jobs and Investment

IFO Independent Fiscal Office

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DOR Administration, Enforcement and Compliance Efforts for the JCTC

The text that follows was submitted by the Department of Revenue (DOR) and describes the agency's administration, enforcement and compliance efforts related to the tax credit. The estimated cost of those efforts was included in the main body of this review.

Program Administrator(s)
DCED – Program Administrator
DOR – Credit Utilization, Fiscal Tracking and Compliance

Guidelines, Forms, Bulletins, IT changes

The Department of Revenue ("Revenue") is responsible for providing the Department of Community and Economic Development ("DCED") with credit utilization language within the program guidelines, tax credit award letter and claim form. These documents are reevaluated annually with the program administrator's office.

Tax Returns, Credit Schedules and tax bulletins are revised annually to provide direction and guidance on the use of the credits under the tax types through which the credit may be utilized against a qualified tax liability.

Revenue is responsible for ensuring that tax credits are recorded within the tax system for utilization against qualified liabilities according to the defined business rules through which the credit may be claimed by taxpayers. These business rules regulate clearing by the tax systems to ensure that all credit use can be verified and tracked by Revenue. In addition, Revenue maintains secondary record systems to record transaction level data between Bureaus.

Consultation Time with DCED

Revenue provides guidance to the program office and Governor's Action Team upon request. When consulted upon, Revenue may be asked to interact with new or existing businesses to analyze the tax structure of the business to determine the value or limitations on the use of awarded or requested credits. The Office of Economic Development generally performs this service on behalf of Revenue.

Pre-Award Application Review and Compliance Review

Recent changes in state law authorize Revenue to perform state tax clearances on applicants participating in tax incentive programs. Revenue, acting under the provisions in Act 43 of 2017, review applicants' tax history to ensure compliance with the laws and regulations of the Commonwealth of Pennsylvania. The two issues for determination are entity tax compliance and ownership tax compliance for entity owners with a 20% or greater share of ownership. Failure to comply to the satisfaction of the department will result in disqualification from the tax credit program.

Revenue has a dedicated unit within the Bureau of Compliance for tax clearances on applicants participating in tax incentive programs. Applicants deemed non-compliant have an opportunity to achieve tax compliance by working with the staff in this unit. Applicants deemed compliant are communicated back to DCED for credit awarding.

Credit Use by Awardee including Pass-Throughs

Applicants are required to file the credit claim form received with the DCED award letter to claim the credit. Generally, approved credits are the first applied to a taxpayer's liability. Complying with this rule will insure maximum utilization of the credit within the taxpayer's account. It also provides for any "cash" paid into the period to be available for transfer or refund.

The Bureau of Corporation Taxes, Bureau of Individual Taxes, and Pass Through Business Office are responsible for ensuring credits claimed by awardees are in accordance to the utilization rules for the credit and that the use of the credit is recorded against the balance held by the awardee for the duration of its lifecycle. Post reviews for all transactions are conducted by the Office of Economic Development.

Assignments
The tax credit for new jobs program only permits the assignment of credits to an affiliate. Applications to assign the credit are pre-screened by the Revenue Office of Economic Development to determine if the affiliate is part of the same "affiliated group" as defined by section 1504(a)(1) of the Internal Revenue Code of 1986 (P.L. 99-514, 26 U.S.C. § 1504(a)(1)). If deemed satisfactory, the Bureau of Corporation Taxes reassigns the credits to the affiliate account.

Credit Use Assignee including Pass-Throughs
The Bureau of Corporation Taxes, Bureau of Individual Taxes, and Pass Through Business Office are responsible for ensuring credits claimed by assignees are in accordance to the utilization rules for the credit and that the use of the credit is recorded against the balance held by the assignee for the duration of its lifecycle. Post reviews for all transactions are conducted by the Office of Economic Development.

Credit Reconciliation and Post Accounting BTS/ Credit Databases
Revenue routinely performs post accounting adjustments to taxpayer accounts and adjustments to the credit databases to ensure that all credits are reconciled in the tax system. The Bureau of Corporation Taxes and Office of Economic Development are responsible for interacting with taxpayers through which reconciliations were requested or adjustments were made to accounts pertaining to the credits.

Post Reporting (GASB77 and Governors Budget Book)
Revenue is responsible to providing the Governor's Office of the Budget information on tax credit programs for awarded and utilized credits. The Bureau of Research is primarily responsible for preparing this information.