

PENNSYLVANIA

KEYSTONE INNOVATION ZONE TAX CREDIT

An Evaluation of Program Performance



January 2020

**COMMONWEALTH OF PENNSYLVANIA
INDEPENDENT FISCAL OFFICE**

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 policy it analyzes, and will disclose the methodologies, data sources and assumptions used in published reports and estimates.

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INDEPENDENT FISCAL OFFICE

January 21, 2020

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 second year, the IFO reviewed four tax credits: the Research and Development, Keystone Innovation Zone, Mobile Telecommunications Broadband Investment and Organ and Bone Marrow Donation 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 the reports available to the public on the IFO website.

This report contains the tax credit review for the Keystone Innovation Zone (KIZ) Tax Credit. The IFO reviewed available studies for related initiatives in other states, 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.

The KIZ Tax Credit is unique to Pennsylvania, and only Maryland's RISE program, which promotes economic and community development around qualified institutions, is somewhat comparable. Other states offer programs with similar goals and objectives, but requirements are generally unique to each state. The economic impact of these programs can be measured by determining the amount of direct capital investment incentivized and calculating the impact on the state economy. The KIZ Tax Credit generates additional impacts because the program incubates qualified high-tech firms and requires that they locate or cluster around institutions of higher learning. Research finds that clustering of high-tech research and development firms around colleges and universities facilitates the exchange of ideas and increases innovation, which can further stimulate the state economy. This analysis examines these and other issues that affect the net economic return of the Pennsylvania KIZ Tax Credit.

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

Established in 2004, the Keystone Innovation Zone (KIZ) program provides tax credits for qualified for-profit firms located within a KIZ that have been in operation for less than eight years and produce proprietary technology within a targeted industry sector.¹ The credit is equal to 50 percent of the increase in gross revenue over the base year and may not exceed \$100,000 annually. If a firm's tax liability is insufficient to utilize the tax credit, the unused portion can be carried forward for up to four years, transferred or sold. The credit may not be refunded or carried back. The annual program cap is \$15 million.

There are currently 28 zones located throughout the state. Each zone is a fixed geographic area with a zone coordinator and is affiliated with a KIZ partnership. The partnership consists of supporting economic development partners and must include at least one institution of higher education.

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

- Act 84 of 2016 reduced the KIZ Tax Credit cap from \$25 million to \$15 million and the program has been oversubscribed in every year since the change.
- Most program participants lack sufficient tax liability to utilize the credits. Approximately 80-90 percent of tax credits are sold or transferred for an average of 92 cents for each dollar award. An average commission of five percent of the tax credit sale is typically paid to a broker or facilitator.
- The local KIZ coordinator plays a key role in the administration of the zone but receives no state remuneration for their efforts.
- Research finds that the clustering of high-tech research and development firms around labs and institutions of higher learning facilitates the exchange of ideas and increases innovation.
- The fiscal gross return on investment (ROI) is 32 cents per tax credit dollar while the net ROI is 27 cents. The gross ROI does not reflect the alternative use of the tax credit funds.

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 could be made refundable for 95 cents on the dollar to eliminate tax credit brokers and facilitators and simplify administration. This may also enhance appeal to small firms.
- Some KIZ coordinators could be remunerated with state funds, particularly in larger KIZs. If compensated, coordinators might also serve the role of tax credit facilitators.
- The statutory program deadlines should be revisited to facilitate a firm's ability to include supporting documents with the application and to allow for a more thorough application review.
- The lack of reliable data make it very difficult to quantify the economic impact of the tax credit. Additional data are required and data should be verified and not simply self-reported.
- Many KIZ firms likely receive other state incentives such as R&D tax credits and economic development grants. The amount of these other incentives is unknown and should be reported.

¹ Article XIX-F 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 second year, the IFO reviewed four tax credits: the Keystone Innovation Zone, Mobile Telecommunications Broadband Investment, Organ and Bone Marrow Donation and Research and Development 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 four additional sections. **Section 2** discusses the administration of the tax credit and presents historical data. **Section 3** presents relevant data for states that offer programs similar to the KIZ Tax Credit. **Section 4** contains a discussion of the factors that affect the economic return of the tax credit and an economic impact 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 review can be found in the Appendix. The Appendix also includes a synopsis of the Grand Jury recommendations related to recent fraudulent activity and agency responses. If submitted, written comments provided by stakeholders and affected agencies are also included in the Appendix.

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 KIZ Tax Credit

Act 12 of 2004 created the Keystone Innovation Zone (KIZ) Tax Credit. The program provides tax credits to qualified for-profit businesses that meet the following criteria: (1) located within the geographic boundaries of a KIZ, (2) in operation for less than eight years and (3) produces or cultivates unique proprietary technology within a targeted industry sector.³ A KIZ firm is eligible for a credit equal to 50 percent of the increase in gross revenues over a base year, up to an annual maximum of \$100,000.⁴ The credit may be applied against personal income tax (PIT) or corporate net income tax (CNIT) liabilities. If the firm's liability is insufficient to utilize the credit, the unused portion can be carried forward for up to four tax years, transferred or sold. The recipient of a KIZ tax credit must claim the credit in the tax year that the transfer or purchase is made. The credit may not be refunded or carried back. The annual program cap is \$15 million.⁵

There are currently 28 KIZs located throughout Pennsylvania. Each zone is a fixed geographic area with a zone coordinator and is affiliated with a KIZ partnership. The partnership consists of supporting economic development partners (EDPs) and must include at least one institution of higher education. EDPs may assist KIZ firms with legal, financial or technological services and provide networking opportunities. Each KIZ is also overseen by a partnership board consisting of representatives from the EDPs.

A firm must be growing (i.e., annual revenue gains) to be eligible for the program and must reapply each year. KIZ firms age out of the program once they have been in operation for eight years. For the purpose of calculating the KIZ credit, gross revenues include sales of goods and services from activities in a KIZ targeted industry, sales from other operations transacted within the KIZ, grants, licensing fees from the applicant's intellectual property and cash awards from business competitions or incubator programs that appear on an applicant's tax return. Gross revenues exclude rents, sales of tax credits, loans and funds from investors. Revenues for multi-location or out-of-state firms are apportioned to the KIZ based on a property and payroll factor.⁶

This section contains an overview of the goals and purpose of the KIZ Tax Credit. It then discusses the administration of the tax credit and presents program data from fiscal year (FY) 2014-15 to FY 2018-19.

Goals and Purpose

Act 48 of 2017 requires that all tax credit reviews published by the IFO shall discuss (1) the purpose for which the tax credit was created and (2) whether the tax credit is accomplishing its legislative intent. For this credit, the IFO reviewed the stated intent of the authorizing legislation and solicited input from Department of Revenue (DOR) and DCED staff. Based on that input, the IFO determined the goals and purpose of the KIZ Tax Credit as follows:

³ Targeted sectors include advanced materials or diversified manufacturing, life sciences, business services and high technology.

⁴ Gross revenues are limited to revenue generated from activity within the zone.

⁵ Act 84 of 2016 reduced the program cap from \$25 million to \$15 million.

⁶ DCED notes that a very small number of KIZ firms are subject to apportionment.

Goals

- Incentivize research and development “clusters” in targeted industry sectors that are supported by higher education partners.
- Provide early infusion of capital, mentorship and support for young high-tech companies.
- Encourage the creation of high-paying, high-tech jobs that appeal to recent college graduates.
- Foster innovation and facilitate commercialization of newly developed technology.

Purpose Increase entrepreneurial activity to generate more output and employment in targeted, high-tech sectors in geographic zones across the state.

Administration

When a firm begins operations in a KIZ, they are connected to the zone coordinator. The coordinator assists the firm with reporting semi-annual metrics (employees, payroll, revenue, etc.) in the KIZ reporting system.⁷ After the firm has documented revenue growth within the KIZ, the firm is eligible to apply for a KIZ tax credit in the following year. DCED reviews applications and administers the credit (including the sale and transfer of unused credits).⁸

KIZ applicants must file through DCED’s Electronic Single Application (ESA) and submit all supporting documents electronically. Required documentation includes:⁹

- Completed KIZ Tax Credit Excel Worksheet – Includes the KIZ Tax Credit calculation and the requested credit amount. Supporting documentation (e.g., RCT 101, RCT 106, financial statements) is required.
- Signed KIZ Coordinator’s Certificate – Documents that the firm (1) is located within a zone, (2) engages in activity within a targeted industry sector, (3) submits semi-annual metrics, (4) works with a zone coordinator and (5) the coordinator has conducted a site visit.
- First page and signed pages of the applicant’s federal tax returns for the base year and comparable tax years.
- DOR issued Tax Compliance Form.
- Tax Credit Sale and Assignment Documentation – Provides documentation for KIZ tax credits that were previously sold, or if not applicable, a signed affidavit indicating that is the case.

A firm must file for the credit on or before September 15 of each year and DCED provides notification of credit awards by December 15. If the credit is oversubscribed, awards are pro-rated proportionally.

⁷ These data are self-reported and are not audited or verified.

⁸ DOR performs tax compliance checks on applicants and ensures approved tax credits are appropriately applied.

⁹ See “Keystone Innovation Zone (KIZ) Tax Credit Program: Program Guidelines,” Department of Community and Economic Development (July 2019).

The local KIZ coordinator has a key role in the administration of the zone. The coordinator conducts annual site visits, answers questions, coordinates activities and provides general support to each KIZ participating firm. Coordinators noted that their work grows proportionally relative to the number of firms located in the zone. They may also face pressure from local government officials and real estate developers to expand or modify existing zones. Coordinators are not DCED employees and do not receive state compensation for their efforts.

DOR and DCED provided estimates for staff time and annual cost to administer and enforce the KIZ Tax Credit. For DOR, the estimates are:

- The cost to administer the tax credit is \$232,000 annually.
- Administration of the credit requires input from five different bureaus or offices throughout DOR, with roughly 5,100 hours attributable to 25 employees. The full-time equivalent (FTE) is roughly three staff persons (1,950 hours per employee).

For DCED, the estimates are:

- The cost to administer the tax credit is \$86,000 annually.
- Less than one FTE staff person.

Historical Data

Table 2.1 presents historical data on KIZ awards and utilizations for the five most recently completed fiscal years (FY 2014-15 to FY 2018-19). Data show that about 250 firms are awarded credits annually and that the request for credits peaked at \$20.8 million in FY 2016-17. For that same year, the annual cap on credits was reduced from \$25 million to \$15 million. As a result, the credit has been oversubscribed by roughly \$4 million in each of the past two fiscal years.

By definition, KIZ firms are high-tech companies in the early stage of development. Some firms that the IFO interviewed for this report were still in the research development phase and had never generated a Pennsylvania tax liability. These firms are often financially constrained and require capital to fund on-going operations to develop and market technological advancements. As a result, approximately 80-90 percent of KIZ tax credits are sold or transferred for an average of 92 cents per dollar of credit award. A facilitator or broker fee roughly equal to 5 cents per dollar of credit sold is also paid on the transaction. Hence, for most credits, approximately 10 to 12 cents per dollar awarded does not stimulate technological development. In dollar terms, that is equivalent to nearly \$1.5 to \$1.8 million of the total \$15 million annual award.

Table 2.1
KIZ Tax Credit Data

	Fiscal Year (\$ millions)					Total
	2014-15	2015-16	2016-17	2017-18	2018-19	
# Applicants	226	237	263	273	251	1,250
Total Credits Requested	\$17.0	\$17.8	\$20.8	\$19.4	\$19.0	\$93.9
Total Credits Awarded ¹	\$16.9	\$17.8	\$15.0	\$15.0	\$14.7	\$79.4
Credits Sold/Transferred	\$15.2	\$15.7	\$12.5	\$11.4	n.a.	n.a.
% Sold/Transferred	89.2%	87.2%	83.2%	76.1%	n.a.	n.a.

1 Several firms received a tentative award for FY 2018-19, but ultimately lost the award because they were unable to attain tax compliance within the allotted time frame. These credits are not available for re-award to other firms.

Source: PA Department of Community and Economic Development and PA Department of Revenue.

Table 2.2 displays KIZ awards for FY 2018-19 by entity type.¹⁰ The data show that approximately 50 percent of awards and a similar share of credits were awarded to Limited Liability Corporations (LLCs). The average award across all groups is roughly \$59,000. The maximum award after proration of the credit for the \$15 million cap was \$84,182 and 112 firms received the maximum amount. (Prior to proration, the maximum award is \$100,000.)

Table 2.2
KIZ Tax Credit Data by Entity Type

Entity Type	Fiscal Year 2018-19				
	Firms	Share	Award ¹	Share	Avg. Award
C Corporation	55	21.9%	\$3.25	22.0%	\$59,022
Limited Liability Corporation	128	51.0%	\$7.05	47.8%	\$55,074
S Corporation	45	17.9%	\$3.12	21.2%	\$69,363
Other ²	<u>23</u>	<u>9.2%</u>	<u>\$1.32</u>	<u>9.0%</u>	<u>\$57,524</u>
Total	251	100.0%	\$14.74	100.0%	\$58,725

1 Millions of dollars.

2 Other category includes Partnerships, Limited Liability Partnerships and Sole Proprietorships.

Source: PA Department of Community and Economic Development.

¹⁰ These data have remained relatively stable over the most recent five-year period.

Table 2.3 displays KIZ tax credit awards by industry code for three recent fiscal years. More than 50 percent of the credits were awarded to firms in the Professional, Scientific and Technical Services sector (NAICS 54). Combined with awards to firms in Manufacturing (NAICS 31-33) and Information (NAICS 51), credits to firms in those three industry groups comprised about 90 percent of KIZ awards.

Table 2.3
KIZ Tax Credit Awards by Industry Code

NAICS	Industry	Fiscal Year (\$ millions)		
		2014-15	2016-17	2018-19
11	Agriculture, Forestry, Fishing and Hunting	\$0.1	\$0.0	\$0.0
23	Construction	0.1	0.1	0.1
31-33	Manufacturing	2.8	2.4	2.5
42	Wholesale Trade	0.3	0.1	0.3
44-45	Retail Trade	0.2	0.2	0.4
51	Information	2.2	2.5	3.0
53	Real Estate and Rental and Leasing	0.1	0.0	0.1
54	Professional, Scientific and Technical Services	10.5	8.8	7.5
56	Administrative & Support & Waste Management	0.2	0.3	0.2
61	Educational Services	0.0	0.2	0.2
62	Health Care and Social Assistance	0.3	0.3	0.2
	Other	<u>0.1</u>	<u>0.0</u>	<u>0.2</u>
Total		16.9	15.0	14.7

Note: Other Category includes the following industries: Mining, Quarrying and Oil and Gas Extraction; Utilities; Transportation and Warehousing; Finance and Insurance; Arts, Entertainment and Recreation; Accommodation and Food Services and Other Services (except Public Administration).

Source: PA Department of Community and Economic Development.

Table 2.4 displays KIZ credit awards by zone from FY 2014-15 through FY 2018-19. Over the past five years, the three zones awarded the most credits were:

- University City - Located in Philadelphia, educational and research partners include: the University of Pennsylvania, Drexel University, Thomas Jefferson University, University of the Sciences, The Wistar Institute, BioAdvance and the University City Science Center.
- i2n-Ideas x Innovation Network - Located in Chester and Delaware counties, educational and research partners include: Penn State-Great Valley, West Chester University, Villanova University, Widener University, Delaware County Community College and the Kutztown Small Business Development Center.
- BioLaunch 611+ - Located in Montgomery, Bucks and Philadelphia counties, educational and research partners include: Children's Hospital of Philadelphia, Penn State, Temple University, Thomas Jefferson University and The Wistar Institute.

Firms in two zones (Waynesburg and Westmoreland) were not awarded any credits during the period. For FY 2018-19, more than 70 percent of KIZ credits were awarded to firms in seven zones.

Table 2.4
KIZ Tax Credit Awards by Zone

Zone	Fiscal Year (\$ millions)					Total
	2014-15	2015-16	2016-17	2017-18	2018-19	
University City	\$1.7	\$1.7	\$2.3	\$2.4	\$2.6	\$10.6
i2n-Ideas x Innovation Network	1.9	2.1	1.0	1.2	1.2	7.5
BioLaunch 611+	2.0	1.9	1.4	1.1	1.2	7.5
Pittsburgh Central	1.2	1.2	1.2	1.4	1.8	6.7
Luzerne County	1.1	1.3	1.4	1.5	1.4	6.6
Lackawanna County	1.2	1.2	1.3	1.1	1.1	5.9
Greater Oakland	0.8	0.9	1.1	1.1	1.1	4.9
I-99 Innovation Corridor	1.1	1.2	0.4	0.7	0.6	3.9
Harrisburg Market	0.7	1.1	0.7	0.8	0.6	3.9
Erie County	0.7	0.9	0.6	0.8	0.6	3.5
Bucks County Biotechnology	1.0	0.7	0.7	0.7	0.3	3.3
Greater Susquehanna	0.3	0.6	0.5	0.4	0.4	2.3
Southside Bethlehem	0.6	0.4	0.5	0.4	0.4	2.4
Huntingdon County	0.4	0.5	0.4	0.4	0.4	2.2
Philadelphia Navy Yard	0.6	0.5	0.3	0.3	0.3	2.0
Greater Johnstown	0.5	0.5	0.2	0.1	0.2	1.5
Pocono Mountains	0.1	0.3	0.3	0.2	0.5	1.5
Williamsport/Lycoming	0.1	0.1	0.1	0.1	0.0	0.6
Northwest Lancaster City	0.1	0.1	0.3	0.1	0.0	0.6
Beaver County	0.4	0.1	0.0	0.0	0.0	0.6
Northwest PA	0.2	0.2	0.1	0.0	0.0	0.5
Greater Reading	0.2	0.0	0.1	0.0	0.1	0.4
York	0.1	0.1	0.0	0.0	0.1	0.3
Tri-County	0.0	0.1	0.0	0.1	0.0	0.2
Fayette/Washington	0.0	0.1	0.0	0.0	0.0	0.1
Indiana County	0.0	0.0	0.0	0.0	0.0	0.0
Total	16.9	17.8	15.0	15.0	14.7	79.4

Note: The Indiana County Zone received a nominal amount of awards. Firms in two zones (Waynesburg and Westmoreland) were not awarded any credits during this period.

Source: PA Department of Community and Economic Development.

DCED compiles certain program metrics for active KIZ firms. Since its inception, DCED reports that the KIZ Tax Credit assisted in the hiring of more than 3,500 recent college graduates, generated over \$275 million in licensing revenue and has been associated with the award of nearly 900 patents. It is noted that these data are self-reported and have not been verified or audited by KIZ coordinators, DCED staff or any third parties.

In theory, economic subsectors targeted by the KIZ Tax Credit should benefit from (1) a higher rate of business formation and (2) a lower rate of business attrition due to financial and technical support received for up to seven years. To compare Pennsylvania to other states, **Table 2.5** uses business data from the U.S. Bureau of Labor Statistics for three specific subsectors that receive significant KIZ awards: computer system design and related services (NAIC 5415), software publishers (5112) and pharmaceutical and med-

icine manufacturing (3254). The rates shown in Table 2.5 represent annual average growth rates for number of firms in these subsectors from 2014 to 2018. It is noted that these are net rates of business formation, and reflect new employer firms and the attrition of existing firms.

For Pennsylvania, the annual average growth rate for number of firms in the three subsectors combined (4.6 percent) is roughly in line with comparable states and just below the average for the United States. However, the Pennsylvania average rate for software publishers (24.8 percent) is second only to New York (30.6 percent) and significantly higher than the United States average (17.9 percent). It is noted that the impact of the KIZ Tax Credit on these growth rates is likely minor because there are only roughly 250 firms enrolled in the program in any given year. Other figures for Pennsylvania include 5.8 percent (pharmaceutical manufacturers) and 3.7 percent (computer design services).

Table 2.5
Average Growth in Number of Business Establishments: 2014 to 2018

State	Pharmaceutical and Medicine Manufacturing	Software Publishers	Computer System Design and Services	Combined
Maryland	8.4%	7.2%	3.3%	3.5%
Michigan	5.0%	1.5%	-0.5%	-0.2%
New Jersey	5.3%	11.7%	0.7%	1.4%
New York	2.1%	30.6%	2.3%	4.0%
Ohio	7.9%	13.0%	4.9%	5.6%
Pennsylvania	5.8%	24.8%	3.7%	4.6%
Virginia	17.7%	17.4%	4.1%	4.6%
United States	7.8%	17.9%	4.1%	5.1%

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Calculations by IFO.

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Section 3: State Tax Credit Comparison

The KIZ Tax Credit is unique to Pennsylvania, and only Maryland offers a comparable program. While other states offer tax credits with similar goals and objectives, qualifying criteria vary significantly so that it precludes a direct comparison to the Pennsylvania KIZ Tax Credit.

Maryland's RISE Zone Tax Credit

Maryland's Regional Institution Strategic Enterprise (RISE) Zone Tax Credit was created in 2014 to promote economic and community development around qualified institutions of higher education, nonprofit organizations affiliated with a federal agency or regional higher education centers. Entities are designated as "qualified" if they demonstrate the intention to invest financially in the geographic area to be designated as a RISE zone, promote economic development within the zone and create jobs. The qualified institution submits a joint application with a county, municipal corporation or an economic development agency of the area to be designated as a RISE zone. The RISE zone designation is effective for five years and can be renewed for an additional five years. Unlike the KIZ Tax Credit, the RISE zone does not target firms in high-tech industry sectors or that develop unique proprietary technology.

A business that newly locates to a designated RISE zone or is already located in a zone but makes a significant capital investment or expansion of its labor force may qualify for tax credits and priority consideration for other state financial programs. Available tax credits under the RISE program include a five-year credit against a portion of the local property taxes imposed on the firm and an income tax credit. The income tax credit is \$1,000 or \$1,500 for an employee that fills a newly created position.¹¹ If an economically disadvantaged employee is hired, the credit increases to \$6,000 or \$9,000 per employee.

The latest report issued (December 2019) on the RISE Tax Credit indicates that there is insufficient data to determine the economic impact of the program or the cost borne by state and local governments.¹²

Other State Programs

Although other states offer programs with goals and objectives similar to the KIZ Tax Credit, the parameters vary considerably. Some states (e.g., Arizona, Arkansas and Maine) offer a Research and Development Tax Credit at a higher rate for research conducted in partnership with an institution of higher education. In most cases the research must be conducted by the institution and is invoiced to (i.e., funded by) the qualifying firm. Other states offer grants for qualified research (Rhode Island), incentives for engaging in academic partnerships with no geographic limitations (New York), provide general assistance to technology-based start-ups (Michigan) or require that the qualifying firm is located in a distressed area (Colorado).

¹¹ Jobs created in certain geographic "focus areas" receive the higher tax credit amount.

¹² "Evaluation of the Regional Institution Strategic Enterprise Zone Tax Credit," Maryland Department of Legislative Services, Office of Policy Analysis (December 2019). See: <http://dls.maryland.gov/pubs/prod/TaxFiscalPlan/Evaluation-of-the-Regional-Institution-Strategic-Enterprise-Zone-Tax-Credit.pdf>.

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Section 4: Economic Analysis

This section presents the economic impact analysis for the KIZ Tax Credit. Compared to the analysis of other tax credits, this analysis contains additional impacts because a specific goal of the credit is to encourage and incentivize entrepreneurial activity through the provision of financial and technical assistance to new or young firms as they mature and develop products, services, markets and supply chains. This support and incubation period should encourage start-up firms and reduce business attrition rates.

Key Assumptions

The economic analysis contains two parts. The first part reflects state and other monies that are funneled to high-tech sectors that would not have occurred without the program. The funds flow to young firms and the analysis assumes they are generally used to pay short-term expenses related to employee compensation, and to a lesser extent, supplies and equipment. For the Research and Development (R&D) Tax Credit review, the analysis assumed that \$1.00 of state tax credit translated into \$1.75 (small firms) or \$1.25 (large firms) of higher R&D spending by recipients.¹³ Those parameters were based on a large number of state and federal R&D tax credit studies. For this analysis, all firms are small and the analysis assumes that \$1.00 of tax credit increases overall private spending by \$2.00. A slightly higher parameter is used due to the extra support that KIZ firms receive. Many of these firms are financially constrained and the additional spending beyond the state tax credit could be attributable to various sources including private investors, loans, federal grants, internal funds and grants from educational institutions.

The second part reflects the technical and other support provided to firms that participate in the program. As noted, KIZ firms are clustered in specific geographic areas near colleges and universities and research finds that “clustering” promotes entrepreneurial and innovative activity. The program should enhance the rate of business formation and provide an incubation period for new firms that should reduce attrition rates.¹⁴ For Pennsylvania, U.S. Census data show that nearly 7.6 percent of employer firms do not survive in any given year.¹⁵ A targeted reduction of the attrition rate through financial, technical and other support should translate into a higher rate of survival, and ultimately higher output and employment.

The analysis assumes that the KIZ Tax Credit increases the rate of business formation and reduces attrition rates for firms in the program. Therefore, the economic analysis assumes that long-term employment in targeted sectors is higher than it would have been otherwise by 500 employees, and the permanent or long-term jobs that are created are included in the economic impact. It is emphasized that this assumption is subject to a high degree of uncertainty because data do not exist to model this longer-term impact. DCED does not compile data regarding the life cycle of firms within the program or their viability upon exit. Without these data, it is not possible to quantify the long-term economic impact of this program in a reliable manner. However, it is appropriate for the economic impact to reflect this long-term outcome.

¹³ “The Research and Development Tax Credit: An Evaluation of Program Performance,” Pennsylvania Independent Fiscal Office (January 2020).

¹⁴ For example, see “The Impact of State-Level R&D Tax Credits on the Quantity and Quality of Entrepreneurship,” Fazio et al., National Bureau of Economic Research, Working Paper 26099 (July 2019).

¹⁵ Average rate from 2012 to 2016 for all employer businesses. Source: U.S. Census Bureau’s Business Dynamics Statistics.

Economic Impact

The analysis of the economic impact of the KIZ Tax Credit can be conceptualized in five general steps. They are as follows:

- Determine the new private spending that is incentivized by the tax credit. The analysis assumes spending will increase by the net tax credit monies (\$1 less the sales discount and transaction fee) plus \$1 of other monies that are leveraged.
- Determine the impact on total spending or output for the economic subsectors that receive awards. The spending will also have a multiplier effect as the new production and spending incentivized by the KIZ credit is respent and circulates through the state economy.
- In addition to the current spending impact, add the longer-term employment impact. As noted, the analysis assumes that employment in certain economic subsectors that receive significant awards is higher by 500 employees due to the program.
- Deduct the impact from the alternative use of the tax credit monies. The tax credit monies could have been used to increase spending or reduce taxes.
- Determine the tax revenues that result from the net increase in economic activity.

Table 4.1 contains the economic impact analysis. The text that follows provides a brief description based on line number in the table. The analysis assumes that credits are used in the same year they are awarded. Timing issues related to award and utilization have minor implications for the analysis because the majority of firms sell the tax credit to generate immediate cash flow.

Line 1 A total of \$15 million of credits are currently awarded on an annual basis.

Line 2 Data show that nearly all tax credits are sold for 90 cents per tax credit dollar. That amount includes both a sales discount and a transaction fee to a broker or facilitator. Amounts lost to brokers as commissions and other firms as discounts do not motivate high-tech spending because the original recipient does not realize any benefit from those monies.¹⁶

Line 3 The net value to firms is \$13.5 million. That net amount incentivizes firm decisions, behavior and the longer-term economic impact.

Line 4 The analysis assumes that each \$1.00 of tax credit increases private spending by \$2.00.

Line 5 Private spending by KIZ firms increases by \$27 million. That amount can be conceptualized as \$13.5 million from the state and \$13.5 million from other sources.

Line 6 The increase in output or sales due to spending attributable to the tax credit only. For small firms (under five employees), the analysis assumes that all funds are spent on employee compensation. For larger firms, the analysis assumes 70 percent is spent on employee compensation and 30 percent is used for equipment and supplies. The funds are split equally across three representative subsectors that are awarded significant KIZ tax credits: scientific research and development (NAIC 5417), computer design

¹⁶ However, the \$1.5 million of leakage from the program would still have economic implications and those impacts are included.

services (5415) and software publishers (5112). In general, the analysis assumes that the tax credit incentivizes employment and production that would not otherwise occur, and that firms sell output and engage suppliers as they would do for regular production that is not incentivized by the tax credit.¹⁷ Based on established relationships for these subsectors as modeled by the IMPLAN input-output model, output or sales would increase by more than \$27 million because labor is only one input used in the production process. Based on the subsectors modeled, total sales of those products and services (also referred to as total output) increase by \$46 million.^{18 19}

Line 7 The increase in output or sales will have multiplier effects (referred to as indirect and induced effects) and those impacts are determined by the IMPLAN model.²⁰ However, the gross sales figure that includes those multiplier effects double counts sales in the supply chain and overstates the net economic impact. Therefore, Line 7 also converts the figure to the impact on state gross domestic product (GDP) of \$52 million. The GDP figure does not double count sales and represents only the value of sales to final consumers.²¹ This figure is also referred to as value-added and is the appropriate figure to use to quantify the impact on the state economy.

Line 8 As noted, the tax credit should also stimulate long-term employment gains that should be counted and attributed to the tax credit. The analysis assumes a net gain of 500 employees split equally across four economic subsectors.²² The analysis assumes that, on average, firms that survive received credits for five years. Therefore, a snapshot of the economic benefit from a single year of credit awards can only include one-fifth of the long-term employment impact.

Line 9 The balanced budget adjustment. The state must increase taxes or cut spending to provide funds for the tax credit. The analysis assumes that state spending is reduced to pay for the credit. Line 9 displays the corresponding impact on state GDP if the tax credit monies had been used generally for education and non-education purposes (equal split).²³ This impact was determined by the IMPLAN model.

¹⁷ For small firms where the analysis assumes the funds are used purely for employee compensation, the analysis did not include indirect effects from a supply chain under the assumption that most of the services provided are research and have limited implications for other firms.

¹⁸ IMPLAN is an economic input-output model that captures the interrelationships between individual sectors of state and local economies. It incorporates the most recent data published by the U.S. Bureau of Economic Analysis on supply chains and economic multipliers. The model produces static impact estimates because various technical parameters (e.g., relative price levels and migration patterns) are assumed constant.

¹⁹ By comparison, total reported gross revenues by KIZ firms was \$234 million in 2016 and \$369 million in 2017.

²⁰ The indirect effect is the impact on firms that supply inputs to the sectors directly affected by the tax credit. The induced effect is the impact from employees that work at the affected firms and business owners that receive additional income. Both will eventually respense most of the income received. The IFO confirmed that the multipliers used by the IMPLAN model are consistent with the multipliers computed and published by the U.S. Bureau of Economic Analysis.

²¹ The impact on state GDP will be smaller than the impact on spending/output because spending/output counts certain spending twice. For example, the sale of a product will be counted multiple times as it is purchased and resold as it moves through the supply chain and the sale of one firm becomes an input for another (e.g., raw materials). By contrast, the GDP amount only counts sales to final consumers, and so avoids double counting.

²² The subsectors include the three noted previously plus pharmaceutical and medicine manufacturing (NAIC 3254).

²³ For this purpose, the analysis used "institutional spending patterns" for state government spending for education and non-education purposes.

Table 4.1
KIZ Tax Credit Economic Impact

	Amount
1 Tax Credits Awarded	15.0
2 Sales Discount and Fees	<u>90.0%</u>
3 Net Value to Firm	13.5
4 Private Spend Multiple	<u>2.00</u>
5 New Private Spending by KIZ Firms	27.0
6 Increase in Output or Sales	45.6
7 Multiplier Effect and Convert to GDP	51.9
8 Include Long-Term Employment	107.9
9 Less: Balanced Budget Adjustment	<u>-18.9</u>
10 Net Impact on GDP	89.1
a Full-Time Equivalent Jobs	542
b All Labor Earnings	52.8
c Annual Wage - Software Developer	93,670
d Annual Wage - Computer Programmer	84,880
e Annual Wage - Biomedical Engineer	76,440
11 Impact on State Tax Revenues	4.0
12 Return on Investment	
a Net Return	0.27
b Gross Return	0.32

Note: Millions of dollars except median annual wage and return on investment.

Line 10 The net impact on state GDP from the tax credit (\$89 million). This increase in GDP is associated with 542 full-time equivalent jobs and \$53 million of labor earnings (includes employee compensation, and the earnings of independent contractors and sole proprietors).²⁴ Median annual wages for typical occupations in subsectors that use the credit include software developer (\$93,670), computer programmer (\$84,880) and biomedical engineer (\$76,440).²⁵ It is noted that these salaries are likely lower for the young firms that participate in the KIZ program. However, data are not collected on the wages and salaries paid by those firms.

Line 11 The total impact on state tax revenues. The tax revenue impact was determined by IMPLAN and includes sales, personal income and other miscellaneous taxes.

Line 12 The **net return on investment (ROI)** to the Commonwealth is 27 cents per dollar and is equal to the tax revenues generated (\$4.0 million) divided by total tax credits awarded (\$15 million). That figure

²⁴ Employee compensation includes all benefits paid to employees such as wages and salaries, healthcare benefits, pensions and also employer payroll taxes. Full-time equivalent jobs include one-fifth of the long-term employment impact across all affected sectors.

²⁵ Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics, Pennsylvania Occupational Wages for 2018.

reflects the alternative use of the tax credit monies. The net ROI exceeds zero, therefore the tax credit generates more tax revenues compared to the assumed alternative use of the funds. The **gross ROI** is 32 cents per dollar. The gross ROI disregards the alternative use of funds and is best used to assess whether the tax credit is self-financed, or pays for itself. If the gross ROI exceeds 1.0, then the tax credit pays for itself. The analysis finds that the tax credit is roughly one-third self-financed.

Analysis Caveats

There are several caveats that should be noted regarding the analysis from Table 4.1. They are as follows:

- The data upon which the analysis is based is limited and speculative. For example, it is not known how long firms remain in the program, outcomes when they leave the program, actual spending patterns and employee compensation paid for firms that receive awards. Therefore, this analysis is best used to conceptualize how the program should operate and the potential economic impact. As noted, except for the tax credit awards and sales data, all data are self-reported by KIZ firms and are not verified or audited.
- Some firms that receive awards do not produce tangible products, but are information providers, suppliers and compilers. For example, many firms are “information technology” firms that develop platforms for others to use or to disseminate information that facilitates marketplace development. It is very difficult to quantify the exact value added from these firms, in addition to their lifespans in a highly competitive environment that evolves constantly. By contrast, the value added by manufacturers is much more easily quantified. This characteristic underscores the critical need for reliable data.
- Inevitably, some tax credit awards will flow to firms that make little economic contribution. Those awards will be used to fund activities that are not economically viable. The tax credit will enable those firms to survive longer than they would have if they were not subsidized. More data are needed to quantify this impact.
- Similar to the R&D Tax Credit, it is noted that there may be non-economic or social benefits that are not included in the analysis. The analysis does not include any estimates for positive externalities or spillover effects from research activities. For example, R&D spending by defense contractors often has unintended benefits for other industries, such as technology firms.
- It is likely that many KIZ firms also benefit from other state programs that support entrepreneurial activity in technology intensive sectors. Two examples are the Ben Franklin Technology Partners (BFTP) and the R&D Tax Credit. The BFTP provides funds (challenge grants) for early-stage, technology-based firms and established manufacturers. Similar to the KIZ Tax Credit, the BFTP also supports firms by facilitating access to business and technical expertise. The R&D Tax Credit is available to eligible firms that incur qualified research expenses (QRE) in Pennsylvania. To the extent that KIZ firms receive multiple state grants or credits, this economic impact analysis will be overstated. However, firms are not required to itemize other state support they receive and those data are not compiled.

- A goal of the KIZ Tax Credit is to incentivize research and development “clusters” in targeted industry sectors that are supported by higher education partners. Research confirms that the clustering of high-technology businesses, institutions of higher education and research facilities in specific geographic areas generates agglomeration and other benefits that are not easily quantified.²⁶
²⁷ Open collaboration between firms, knowledge spillover and the pooling of high-talent workers with specialized skills in one location (often provided by the nearby educational institution) all help to foster innovation at an accelerated rate.
- The KIZ Tax Credit could also enhance economic growth through demographic effects. This could occur if the credit enables retention of recent college graduates who might have otherwise left the state in search of employment opportunities. Even if a KIZ firm ultimately fails, the experience and training received and social connections established for recent graduates may be sufficient to discourage migration to other states.

²⁶ For example, see “Tech Clusters,” Kerr, William R. and Frederic Robert-Nicoud (November 2019), “Local Job Multipliers in the United States: Variation with Local Characteristics and High-Tech Shocks,” Bartik, Timothy and Nathan Sutherland, Upjohn Institute Working Paper 19-301 (March 2019) and “The Effect of High-Tech Clusters on the Productivity of Top Inventors,” Moretti, Enrico, NBER Working Paper No. 26270 (September 2019).

²⁷ Agglomeration effects are cost savings that may occur if firms in a specific economic sector are in close proximity. For example, firms in the same industry may share a single supplier or draw from the same talent pool which is enhanced due to the presence of multiple employers and a college or university.

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 tax credit studies and spoke with stakeholders, as well as the agency that administers the tax credit. The following bullet points summarize the main findings of this research:

- Act 84 of 2016 reduced the KIZ Tax Credit cap from \$25 million to \$15 million and the program has been oversubscribed in every year since the change.
- Most program participants do not have sufficient tax liability to utilize the credits. Approximately 80-90 percent of tax credits are sold or transferred for an average of 92 cents per dollar awarded. An average commission of five percent might also be paid to a broker or facilitator.
- The local KIZ coordinator plays a key role in the administration of the zone but receives no state remuneration for their efforts.
- Research finds that the clustering of high-tech research and development firms around labs and institutions of higher learning facilitates the exchange of ideas and increases innovation.
- In addition to short-run effects, the program likely increases long-term employment. However, insufficient data are available to reliably estimate the impact. This analysis assumed 500 additional full-time jobs in certain economic subsectors that receive significant awards.
- The fiscal gross return on investment (ROI) is 32 cents per tax credit dollar while the net ROI is 27 cents. The gross ROI does not reflect the alternative use of the tax credit funds.
- The time allotted to approve tax credits is short and appears to impact DCED's ability to fully vet tax credit applications.
- On August 26, 2019, the Dauphin County Court of Common Pleas accepted Investigating Grand Jury Report No. 2 on an elaborate scheme to fraudulently obtain state tax credits. The Grand Jury report provided detailed information on the scheme and made six recommendations to reduce future fraud in the KIZ and R&D Tax Credit. See the Appendix for additional information on the Grand Jury recommendations and the changes the agencies have initiated in response to the report.

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 goals and purpose.

The credit could be made refundable for 95 cents on the dollar to eliminate tax credit brokers and facilitators. This would simplify administration of the tax credit and enhance the appeal to small firms.

The data reveal that 80-90 percent of KIZ tax credits are transferred or sold to firms other than the original recipient, with sellers receiving roughly 90 cents on the dollar (after transaction fee), while the entity that facilitates the sale receives an average commission of five percent of the transaction. If KIZ coordinators are remunerated with state funds (next recommendation), they could work with firms to facilitate the credit application. Coordinators might also retain a five percent fee as partial remuneration.

KIZ coordinators should be remunerated with state funds, particularly in larger KIZs where coordinator duties may necessitate a full-time staff person.

The coordinator conducts annual site visits, answers questions, coordinates activities and provides general support to KIZ firms. The zone coordinator is often an employee of one of the KIZ participating partners and undertakes these responsibilities in addition to an existing job. The provision of funds for these coordinators should increase accountability and support coordinator oversight functions.

DCED should collaborate with the Department of Labor and Industry to track firms after they age out of the program.

Firms self-report semi-annual performance metrics to DCED to remain eligible for the KIZ Tax Credit. As noted in the economic analysis, it would be highly informative if DCED tracked firms for at least five years after departure from the program. These data are necessary to determine the long-term economic impact of the KIZ Tax Credit and the viability of firms that no longer receive subsidies and technical assistance. DCED should also track the length of time firms remain in the program.

The statutory program deadlines should be revisited (1) to facilitate the taxpayer's ability to include supporting documents with the tax credit application and (2) to allow for a more thorough evaluation of submitted applications.

Federal extension returns are due October 15 and the corresponding state return is due November 15. Currently, the credit application is due September 15 and DCED has 90 days (September 15 to December 15) to perform a review of 250 KIZ applications (on average) and supporting documentation, determine applicant eligibility and verify compliance with state tax obligations. An application due date after November 15 would allow the applicant to include final copies of their federal and state tax returns. A review period greater than 90 days would provide agencies more time to review applications and supporting documentation.

The number of program metrics reported by KIZ firms should be expanded and verified. To reduce burdens, KIZ firms might report metrics on an annual basis rather than semi-annually.

The audit or verification of program metrics will reduce fraud and give policymakers more data on which to judge whether the tax credit is efficient and cost effective. In addition to the number of employees, firms

should report the types of new jobs created, hourly wage rates or annual salaries, and the amount of any other state economic development incentives received. Without these data, it is not possible to accurately quantify the economic impact of the KIZ Tax Credit.

Policymakers should consider statutory reforms to facilitate administration of the tax credit.

In response to an inquiry by the IFO, DOR recommends that the General Assembly consider the following changes:

- Enable DOR to share confidential tax information with DCED as necessary to validate tax information submitted by KIZ applicants.
- Allow DOR in coordination with DCED, to recapture credits under reasonable circumstances.
- Standardize due process rights to applicants denied tax credits for noncompliance or those subject to recapture.

In response to an inquiry by the IFO, DCED recommends that the General Assembly consider the following changes:

- Modify the statutory definition of a “Keystone Innovation Zone Company” to require that a qualified firm engage in “developing proprietary technology or intellectual property.”
- Modify the statutory definition of a “Keystone Innovation Zone Company” to require that a qualified firm “meet any other requirements specified by DCED.” The technology industry is constantly evolving and it is difficult for the program to evolve with the industry unless DCED has the statutory authority to impose additional program requirements.
- Provide local KIZ grants to support internship opportunities, assist in technology transfer and to host business competitions/networking events.

Policymakers should enact statutory changes to deter fraudulent activity.

For this purpose, the review does not offer specific recommendations but only refers to the Grand Jury recommendations and agency responses included in the Appendix to this review.

Key Decision Points

For FY 2018-19, 251 firms were awarded a KIZ tax credit. Of those, 112 firms were awarded the maximum credit of \$100,000. After pro-ration due to the program cap (\$15 million), the maximum award was \$84,182. The pro-ration of the award reduces the credit for all recipients, even firms that applied for a credit far below the maximum. Therefore, policymakers could consider:

- Is the \$100,000 maximum award the appropriate target amount? Or should the maximum credit be reduced so that total demand for the credits does not exceed the \$15 million cap? Under this scenario, firms that qualify for a smaller award do not have their credit pro-rated.
- For FY 2018-19, total demand for the credit was \$19 million, or \$4 million higher than the current program cap. Should the cap on the KIZ credit be increased to \$20 million, which is sufficient to meet current demand? The program cap was lowered from \$25 million to \$15 million in 2016.

- Similar to the R&D Tax Credit, should an amount be reserved for very small firms? Those firms are more vulnerable to market forces and will use funds for employee compensation. Moreover, should the award for small firms be based on the same criteria as large firms (50 percent of the increase in gross revenues)?

Policymakers should also give consideration to the proper role of KIZ coordinators. Are the demands placed on those individuals reasonable and necessary? If so, what is the appropriate compensation or reimbursement for the role? How would compensation vary across zones with vastly different populations of KIZ firms?

In preparing this report, the IFO spoke with multiple KIZ tax credit recipients. Most recipients worked with a tax credit “facilitator” that assisted the firm in preparation of their tax credit application and the ultimate sale of the tax credit. These facilitators provide services for a fee, generally a portion of the tax credit received. Thought should be given to the role of these facilitators in the tax credit process. Should they be subject to regulation and licensing? Should the KIZ tax credit be made refundable to diminish the role of the facilitator and retain more funding for the KIZ firm?

Conclusion

Act 48 of 2017 requires the IFO to make a determination regarding whether the tax credit has achieved its goals and purpose. The review established the program goals as:

- Incentivize research and development “clusters” in targeted industry sectors that are supported by higher education partners.
- Provide early infusion of capital, mentorship and support for young high-tech companies.
- Encourage the creation of high-paying, high-tech jobs that appeal to recent college graduates.
- Foster innovation and facilitate commercialization of newly developed technology.

The review established the program purpose as:

- Increase entrepreneurial activity to generate more output and employment in targeted high-tech sectors in geographic zones across the state.

Based on existing research, conversations with stakeholders and reasonable assumptions, this review finds that it is plausible that the KIZ Tax Credit has achieved some portion of its defined purpose. The program has significant potential, but requires much stronger data collection and verification efforts to facilitate a more detailed analysis that will allow researchers to make more definitive statements regarding progress towards legislative intent. It was necessary to employ many strong assumptions to overcome the lack of data used for the economic impact analysis of this review.

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.

Overview of the Recent Grand Jury Report

On August 26, 2019, the Dauphin County Court of Common Pleas accepted Investigating Grand Jury Report No. 2 on a fraudulent scheme to obtain state tax credits. The scheme involved \$10.6 million in Pennsylvania Keystone Innovation Zone (KIZ) and Research and Development (R&D) Tax Credit awards over a six-year period. Before the scheme was discovered, \$6.4 million of the fraudulent tax credits were sold for cash. The Grand Jury report provided detailed information on the scheme and made six recommendations to reduce future fraud in the KIZ and R&D programs. The recommendations can be summarized as follows:

- Require an audit of applications by an independent certified public accountant.
- Allow more time for a thorough application review process.
- Tax brokers that facilitate the sale of tax credits should receive training, be licensed and be required to report suspicious activity.
- Local KIZ coordinators should be properly trained and required to make unscheduled site visits.
- Verify applications through in-person interviews, photographic submissions, receipts and other financial records.
- Awardees should be required to provide an annual breakdown of how the tax credits were used, or if sold, how the proceeds from the sale were utilized.

The first three Grand Jury recommendations would require statutory changes to implement. Small businesses (particularly young KIZ firms) may find the audit requirement costly and burdensome if they are not otherwise required to produce audited financial statements.

The last two Grand Jury recommendations may prove difficult to implement in practice. First, it is unlikely that DOR or DCED possess the resources necessary to conduct in-person interviews for every applicant for the KIZ and R&D Tax credits or to review all of the suggested supporting documentation, particularly under the current timeline. Second, it is unclear how an awardee would document the use of proceeds from the sale of a credit. Savings from the tax credit or proceeds from a sale cannot be distinguished from other monies available for spending within the business.

In response to the fraud and the subsequent Grand Jury report, DCED implemented, or is in the process of implementing, the following protocols:

- Mandated annual site visits by the local KIZ coordinators.
- Mandated state tax compliance checks for KIZ firms to verify complete and timely state tax filings and no outstanding state tax liabilities.
- Development of a standardized Statement of Work for KIZ coordinators which establishes best practices and procedures for the responsible administration of the KIZ Tax Credit.
- Creation of a database to monitor KIZ applicants suspected of fraud or other questionable activity concerning tax credits.
- Cross-training of DCED personnel to increase efficiency in the review of KIZ applications and to increase the breadth and depth of KIZ knowledge among DCED personnel.

DOR has implemented, or is in the process of implementing, the following changes:

- Mandated electronic filing of R&D tax credit applications to facilitate DOR's review and analysis.
- Implementation of a risk-based review process that identifies R&D applications that require additional examination and documentation.
- Creation of a database to monitor firms suspected of fraudulent or questionable R&D tax credit sales.
- Additional training for staff and updated protocols to improve interactions with tax credit applicants.
- Reorganization of DOR staff, which will help create a standardized training plan that provides employees with education on fraud prevention.
- Implementation of a new electronic filing system for all taxes that will integrate many of DOR's old systems into a single system. The new system will provide DOR with a consolidated view of each taxpayer's account, which lead to an improved starting point to detect fraud.
- DOR will utilize the Fraud Detection and Analysis Unit's resources to examine potential cases of fraud in future tax credit applications that are received by the department.

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		
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

 Independent Fiscal Office

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Agency and Stakeholder Feedback



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT

January 14, 2020

Dear Director Knittel,

The Department of Community and Economic Development (DCED) thanks the Independent Fiscal Office (IFO) for conducting a review of the Keystone Innovation Zone (KIZ) Tax Credit Zone program as part of the requirement under Act 48 of 2017. The report, and overall concept, is beneficial and we will use this report to help guide this unique program forward. As noted, the KIZ Tax Credit Program impacts the Commonwealth's early stage technology companies by incentivizing them to locate around Pennsylvania's world-renowned institutions of higher education as well as providing them with financial technical assistance.

Agency Response to the Tax Credit Plan Specific Recommendations

IFO Recommendation:

The credits could be made refundable for 95 cents on the dollar to eliminate tax credit brokers and facilitators. This would simplify administration of the tax credit and enhance the appeal to small firms. The data reveals that 80-90 percent of KIZ tax credits are transferred or sold to firms other than the original recipient, with sellers receiving roughly 92 cents on the dollar, while the entity that facilitates the transaction receives an average commission of 5 percent of the transaction. If KIZ coordinators are remunerated with state funds (next recommendations), they could work with firms to facilitate the credit application. Coordinators might also retain a five percent fee as partial remuneration.

DCED Response:

This recommendation would require statutory change. DCED is open to discussing this proposed amendment with the Legislature, the Department of Revenue and the Governor's Budget Office related to the potential fiscal impact on the Commonwealth and administrative impact on the Department. There are pros and cons to both saleable and refundable tax credits and any change would require a thorough review of the impacts of both.

IFO Recommendation:

KIZ coordinators should be remunerated with state funds, particularly in larger KIZ's where coordinator duties may necessitate a full-time staff position. The coordinator conducts annual site visits, answers questions, coordinates activities and provides general support to KIZ firms. The zone coordinator is often an employee of one of the KIZ participating partners and undertakes these responsibilities in addition to an existing job. The provision of funds for these coordinators should increase accountability and support coordinator oversight functions.

DCED Response:

At the program's inception, grant dollars were provided to the local KIZ coordinators to administer the program. The funding was provided for the first four years after the zone's establishment and decreased in value each year with the understanding that the zones would become self-sustaining. The Department recognizes the importance of providing additional financial resources to our Coordinators, however, this recommendation would require legislative and budgetary action to implement.

IFO Recommendation:

DCED should collaborate with the Department of Labor and Industry to track firms after they age out of the program. Firms self-report semi-annual performance metrics to DCED to remain eligible for the KIZ Tax Credit. As noted in the economic analysis, it would be highly informative if DCED tracked firms for at least five years after departure from the program. These data are necessary to determine the long-term economic impact of the KIZ Tax Credit. They will also provide insight regarding the viability of firms that no longer receive subsidization from KIZ tax credits.

DCED Response:

The Department agrees that the sharing of data could assist in determining the long-term economic impact of the program and the vitality of the KIZ-supported companies in Pennsylvania. DCED will explore this recommendation further with the Department of Labor and Industry.

IFO Recommendation:

The statutory program deadlines should be revisited (1) to facilitate the taxpayer's ability to include supporting documents with the tax credit application and (2) to allow for a more thorough evaluation of submitted applications. Federal extension returns are due October 15 and the corresponding state return is due November 15. Currently, the credit application is due September 15 and DCED has 90 days (September 15 to December 15) to perform a review of 250 KIZ applications (on average) and supporting documentation, determine applicant eligibility and verify compliance with state tax obligations. An application due date after November 15 would allow the applicant to include final copies of their federal and state tax returns. A review period greater than 90 days would provide agencies more time to review applications and supporting documentation.

DCED Response:

While DCED thoroughly reviews applications to ensure that they are lawful and appropriate, the Department agrees with the recommendation to extend the review period. This would afford program staff more time to uncover inconsistencies and/or red flags.

IFO recommendation:

The number of program metrics reported by KIZ firms should be increased and verified. To reduce burdens, KIZ firms might report metrics on an annual basis rather than semi-annually. The audit or verification of employment statistics will reduce fraud and give policymakers more data on which to judge whether the tax credit is efficient and cost effective. In addition to the number of employees, firms could report the types of new jobs created, hourly wage rates and annual salaries. Moreover, a critical piece of data is how long firms remain in the program and what share of tax credit recipients eventually fail. Without these data, it is not possible to accurately quantify the economic impact of the KIZ Tax Credit.

DCED Response:

DCED requires all active KIZ companies to report on a variety of metrics semi-annually to be eligible to receive tax credits. These metrics include, but are not limited to: employee count, estimated revenue, payroll, job creation, job retention, new Pennsylvania graduates hired, leveraged funding, and product development. While the Department agrees that audit or verification of the data reported would be beneficial to the program, it would require a significant increase in resources and staffing beyond what is currently available to DCED.

IFO Recommendation:

Policy makers should consider statutory reforms to facilitate administration of the tax credit.

DCED Response:

DCED recommends that the General Assembly consider the following changes:

- Modify the statutory definition of a "Keystone Innovation Zone Company" to require that a qualified firm engage in "developing proprietary technology or intellectual property";
- Modify the statutory definition of a "Keystone Innovation Zone Company" to require that a qualified firm "meet any other requirements specified by DCED". The technology industry is constantly evolving, and it is difficult for the program to evolve with the industry unless DCED has the statutory authority to impose additional program requirements; and
- Provide local KIZ grants to support internship opportunities, assist in technology transfer and to host business competitions/networking events.

IFO Recommendation:

Policy makers should enact statutory changes to deter fraudulent activity. For this purpose, the analysis does not offer any specific recommendations but only refers to the Grand Jury recommendations and agency responses included in the Appendix to this review.

DCED Response:

As stewards of taxpayer dollars, DCED examines each project application for inconsistencies. The Department works closely with local coordinators, as well as its sister agencies to ensure all applications are consistent, lawful and appropriate. However, DCED agrees that there needs to be stronger oversight of the KIZ program, and that action must be undertaken by the General Assembly. The legislature should act in implementing the statutorily required changes set forth in the Grand Jury recommendations. DCED is willing to work with the Department of Revenue and lawmakers to discuss these changes.

Once again, DCED thanks the IFO for its review, and looks forward to additional conversations around these recommendations.

Sincerely,



Dennis M. Davin
Secretary



July 31, 2019

Matthew Knittel
Independent Fiscal Office
400 Market Street
Harrisburg, PA 17105

Dear Mr. Knittel:

I am writing on behalf of the University City Science Center, fiscal agent of the University City Keystone Innovation Zone (KIZ), in follow-up to a phone call we had with your office on July 10, 2019.

Founded in 1963, the Science Center is a mission-driven nonprofit organization that helps innovators and entrepreneurs bring world-changing technologies to market. We provide innovators, entrepreneurs and companies at any stage of the business lifecycle with support and access to resources, programming, capital, and space – helping move innovation from idea to IPO, and beyond. Science Center programs have helped over 360 companies launch over the last 15 years; these companies are largely science-based and tech-enabled businesses that have developed and commercialized technologies originating at 26 academic and healthcare institutions, primarily in the Commonwealth. The companies have also raised over \$750 million in follow-on funding.

In our 15 years serving as fiscal agent and KIZ coordinator for the University City KIZ, the Science Center has assisted 102 companies in obtaining \$15.3 million in tax credits. At any given time, we are working with roughly 90 KIZ-eligible companies. The services we provide for these companies include providing an overview of the tax credit program, walking them through the intake process, providing technical assistance with reporting and tax credit applications, and completing site visits to every eligible company.

We are strongly supportive of the KIZ Tax Credit program and encourage the Commonwealth to fully fund it annually. We note that the program has been oversubscribed since 2016, and that, due to the high level of demand, the tax credits awarded to each company are currently prorated. We also note that the Science Center devotes hundreds of staff hours each year to its responsibilities as fiscal agent for the zone, and that this burden increases every year as the program grows. While we do receive a modest amount of funding from a few of our academic and healthcare stakeholders, it does not come close to fully covering all of our costs and expenses relating to our role as fiscal agent; consequently, we respectfully request the restoration of Commonwealth funding for KIZ coordinators and fiscal agents statewide, to support the cost of administering the program.

We very much appreciate being a part of this program, which is well aligned with our mission, our programs, and our 56-year track record of facilitating innovation, entrepreneurship, and technology-based economic development. We applaud the Commonwealth for its continued investment in the innovation economy.

Thank you for the opportunity to provide comments on the program. Please feel free to contact me if you have any questions or need more information.

Sincerely,

Saul A. Behar
Senior Vice President, Advancement and Strategic Initiatives



August 19th, 2019

Joe Shockey
Revenue Analyst
Independent Fiscal Office
400 Market Street
Harrisburg, PA 17105

Dear Mr. Shockey,

I am writing in response to your inquiry regarding the Independent Fiscal Office's evaluation of the State's Keystone Innovation Zone Tax Credit Program.

The City of Bethlehem has been focused on diversifying its economy since the collapse of Bethlehem Steel. The Keystone Innovation Zone Tax Credit program has allowed us to retain talent in the City that is generated out of local colleges and universities and has helped to make Bethlehem competitive when entrepreneurs are scouring the landscape for the best places to launch their startup.

The KIZ Tax Credit program has allowed our Southside Bethlehem KIZ to retain Primary Partners that form our KIZ Board. Primary Partners invest \$5k - \$40k annually, which funds programs designed to assist KIZ Companies. 2019's Budget is \$127,500.

KIZ Companies often sell their KIZ Tax Credit and have used the proceeds to fund the following: upgrading current facilities, purchasing a new facility, upgrading machinery and equipment, hiring staff, increasing wages, investment in research and development, etc.

In conclusion, the KIZ Tax Credit Program has helped Bethlehem to engage in a homegrown economic development effort by attracting and retaining startup companies. Encouraging and rewarding innovative startups generating revenue is a smart investment by the Commonwealth and one that furthers our reputation as a catalyst for fledgling startup companies. We are hopeful that the KIZ Tax Credit Program is increased to the original amount of \$25 Million.

Sincerely,

A handwritten signature in black ink, appearing to read "Asher Schiavone".

Asher Schiavone

City of Bethlehem
Dept. of Community & Economic Development
10 East Church St.
Bethlehem, PA 18018

Asher Schiavone
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