PENNSYLVANIA

VIDEO GAME PRODUCTION TAX CREDIT

An Evaluation of Program Performance

March 2021

COMMONWEALTH OF PENNSYLVANIA
INDEPENDENT FISCAL OFFICE

Independent Fiscal Office

Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17105

717-230-8293 | contact@ifo.state.pa.us | www.ifo.state.pa.us

Staff Acknowledgements

Robyn Toth, Revenue Analyst I
Rachel Flaugh, Revenue Analyst I

Staff Contact: rtoth@ifo.state.pa.us

- This page intentionally left blank. -

INDEPENDENT FISCAL OFFICE

March 25, 2021

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 third year, the IFO reviewed five tax credits: the Neighborhood Assistance Program, Resource Enhancement and Protection Program, Entertainment Economic Enhancement Program, Video Game Production and Keystone Special Development Zone 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 Video Game Production (VGP) Tax Credit. The IFO reviewed studies on video game production incentives, 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, nineteen states (includes Pennsylvania) offer one or more incentives to video game production companies. Twelve states offer tax credits and the remaining offer grants or a rebate. Pennsylvania is one of only a few states that offer a video game incentive that is separate from its program for film production. Annual program caps vary by state, and Pennsylvania provides one of the lowest amounts. Due to the recent enactment of the credit (2016) only three years of historical data were available for review. This analysis examined available data and other issues that determine the net economic return of the VGP 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

Dr. Matthew J. Knittel
Director

- This page intentionally left blank. -

Table of Contents

- This page intentionally left blank. -

General Findings and Recommendations

Enacted in 2016, the Video Game Production (VGP) Tax Credit is available to eligible video game production companies whose Pennsylvania production expenses comprise at least 60 percent of total video game production expenses. The maximum amount of credit awarded to an applicant is 25 percent of the qualified video game production expenses incurred in the first four years and may not exceed 10 percent of expenses incurred in each subsequent year. The program cap is $1.0 million annually and the credit is non-refundable. The credit seeks to generate economic activity in the video game and related sectors and to enhance the long-term impact of that activity.

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

- Nineteen states offer one or more incentives to encourage video game production. Twelve states offer tax credits and the remaining offer grants or a rebate. Pennsylvania is one of only a few states that offers an incentive that is separate from its program for film production. Annual program caps vary by state and Pennsylvania provides one of the lowest amounts.
- More than one-half of the annual VGP Tax Credit allotment goes to established Pennsylvania firms. For this reason, it is unlikely that the credit has a significant impact on location decisions although it may retain established firms.
- For small firms, the credit may provide crucial financial support that facilitates the movement of projects from the design to production phase and enhances the long-term viability of those firms.
- Based on employment data for the Software Publishers subsector, it does not appear that the VGP Tax Credit has had a significant impact on Pennsylvania employment.
- The analysis finds that the net return on investment (ROI) is 8 to 16 cents of state tax revenue for each tax credit dollar. This result occurs because a significant portion of the credit likely subsidizes projects that would have occurred regardless.

The final section of this report contains various **recommendations**. A summary is as follows:

- Convert the existing tax credit into a competitive grant or rebate program and award projects based on projected economic impact (not on a first-come, first-served basis). Grants and rebates also get funds to firms more quickly.
- To increase the impact of the tax credit on business formation/job creation, consideration should be given to limiting the tax credit (or grant) to young firms that may not be viable without the initial temporary public support.
- The tax credit is currently sellable and could also be made refundable for 95 cents per credit dollar. The fees and discounts charged by third parties do not contribute to the economic output of the industry. This change also simplifies administration.

- This page intentionally left blank. -

Section 1: Introduction

Act 48 of 2017 requires the Independent Fiscal Office (IFO) to review various state tax credits over a five-year period.[1] For the third year, the IFO reviewed five tax credits: the Neighborhood Assistance Program, Resource Enhancement and Protection Program, Entertainment Economic Enhancement Program, Video Game Production, and Keystone Special Development Zone 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.

The remainder of this review contains four sections. **Section 2** discusses how the tax credit is administered and presents historical data. **Section 3** presents relevant data for states that offer a video game production tax incentive program. **Section 4** provides a cost profile for video game production, discusses factors that affect the economic return of the tax credit and provides 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 report can be found in the **Appendix**. If submitted, written comments provided by stakeholders and affected agencies are also included in the Appendix.

[1] 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.

- This page intentionally left blank. -

Section 2: VGP Tax Credit Overview

Article XVII-D of the Tax Reform Code of 1971 (Act 84 of 2016) created the Video Game Production (VGP) Tax Credit. The VGP Tax Credit is available to eligible video game production companies whose Pennsylvania production expenses comprise at least 60 percent of a video game's total production expense.[2] Production expenses include, but are not limited to, employee compensation, cost of food and lodging, purchase of music or story rights and game development. Pennsylvania production expenses ("qualified expenses" for purposes of the VGP Tax Credit) consist of production expenses that are incurred within the Commonwealth.[3] The maximum amount of credit awarded to an applicant is 25 percent of the qualified video game production expenses incurred in the first four years of production and may not exceed 10 percent of expenses incurred in each subsequent year. The program is capped at $1.0 million annually.

Tax credits may be utilized against Pennsylvania personal income (excludes withholding), corporate net income, bank and trust company shares, title insurance companies shares, insurance premiums and mutual thrift institutions taxes for the tax year the tax credit was issued. Credits not used in that tax year may be carried forward for an additional three tax years. The credit is non-refundable and may not be carried back to preceding years. The credit may be sold or assigned at any time in the initial tax year or in the three subsequent tax years.[4] The credit is also transferable however, transferred credits cannot be carried forward or back, sold, assigned and/or used to obtain a refund.

This section begins with a description of the purpose and goals of the tax credit. It then discusses the application process and administration of the tax credit, concluding with a presentation of program data.

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 documentation provided by the Pennsylvania Department of Community and Economic Development (DCED) regarding the VGP Tax Credit. For this analysis, the IFO established the specific and quantifiable goals and general purpose of the VGP Tax Credit as follows:

Goals

- Increase the number of video games produced in Pennsylvania.
- Expand employment in the video game industry.
- Expand Pennsylvania's market share of national employment in this industry.

---

[2] A video game that contains obscene performance or material or a game designed primarily for private, political, industrial, corporate or institutional purposes is not eligible for the VGP Tax Credit.
[3] For a full list of qualified video game production expenses see: https://dced.pa.gov/download/video-game-production-tax-credit-vgptc-guidelines/?wpdmdl=83215&ind=1598536554325.
[4] A buyer must claim the full amount of the credit in the taxable year in which the credit was assigned and the amount may not be used to offset more than 50 percent of the buyer's tax liability. Any unused portion of the credit is forfeited.

Purpose

- Generate economic activity in the video game production and related sectors and enhance the long-term economic impact of that activity by incentivizing the consumption of Pennsylvania goods and services.

Administration

The Pennsylvania DCED administers the tax credit and reviews applications. Applicants for the VGP Tax Credit must provide a complete application package that includes the following:

- Evidence that the applicant is registered to do business in Pennsylvania and has a valid state tax ID number.
- Indication that all personal service corporations or loan-out companies that will be engaged by the applicant are incorporated, or formed in Pennsylvania, or are registered to do business in Pennsylvania.
- Completed Video Game Production Application and Single Application for Assistance.
- Production Year Budget Top Sheet listing the projected total and qualified Pennsylvania video game production expenses.[5]
- Overall Video Game Production Budget Allocation Form listing the maximum amount of total production expenses and qualified Pennsylvania video game production expenses.[6]
- Description of the game concept including game plan.
- Verification that at least 70 percent of the financing for the video game production project is secured and the remaining amount will be secured prior to the planned project start date.

Completed application packages must be submitted no earlier than 180 days prior to the start date of the production. Within 15 business days of submission of the application package, the tax credit program manager will conduct a telephone interview with the applicant to discuss the video game production project details. The department evaluates applications based on compliance with program guidelines and various criteria, including:

- Start date of production.
- Location where services will be performed and supplies will be consumed.
- State tax compliance.

Applications are approved (or rejected) in the order in which they are received. Once approved, DCED will issue a contract to the applicant, which specifies the maximum amount the applicant is eligible to receive. The contract requires submission of monthly progress reports until video game production is complete.[7] It also requires confirmation that (1) the logo and official acknowledgment of the Commonwealth's support appears in the video game's end credits, (2) the Pennsylvania logo is included on all packaging materials

[5] A video game production year is defined as a consecutive 12-month period beginning on the start date of production.
[6] Overall production includes the combined total for all production years.
[7] The monthly progress report includes information on changes to the production deadlines and finances.

and hard media and (3) DCED is provided a copy of the electronic press kit for the video game.

DCED issues a VGP Tax Credit certificate within 45 days of receipt of the following finalized forms and reports for the video game production year:

- Economic Impact Report.[8]
- Production Year Budget Top Sheet.
- Pennsylvania Vendor/Subcontractors Report.
- Employees form.[9]
- Independently audited Examination Engagement Report of total qualified video game production expenses.
- Confirmation of state tax compliance.

Applicants are also required to submit the above documents with the combined totals for all years of production following completion of the project in order to receive a VGP Tax Credit certificate for the last production year. The VGP Tax Credit certificate is then submitted to the Department of Revenue (DOR) for application against the recipient's Pennsylvania state tax liability. DOR ensures that the tax credit is applied appropriately.

The administration of the VGP Tax Credit requires 130 DOR staff hours and 100 DCED staff hours annually. The costs are nominal to both agencies.

Historical Data

Table 2.1 provides detail on VGP Tax Credit authorizations for fiscal year (FY) 2017-18 through FY 2019-20. For the latest year, DCED authorized credits up to the maximum statutory cap. The application data show that demand has increased since inception of the credit. For FY 2019-20, the credit was oversubscribed by a small amount. Some firms reported that they did not submit applications for otherwise eligible projects due to the limitation of the program cap. Therefore, the VGP Tax Credit has potential to be significantly oversubscribed.

Credits are "authorized" when DCED approves the VGP Tax Credit application and reserves a portion of the annual credit allocation. Credits are "awarded" when the video game production year is complete, all final reports have been submitted/approved and the credit certificate has been issued. Due to the recent enactment of the credit (2016), it is too early to determine how many Pennsylvania firms will sell or transfer the VGP Tax Credit. For credits that were sold, preliminary data show that recipients received a net of 83 cents for each dollar of credit awarded. (Roughly 10 cents of each dollar of credit sold was paid to a third party facilitator of the sales transaction and the remaining 7 cents flowed to the purchaser of the credit.)

---

[8] The Economic Impact Report is a comprehensive report that includes information on the applicant, project production, production location, lodging, financials, expenses, general employment, production employment and proof of marketing requirements.

[9] A Final Employees form lists the identifying information (including job description) of any employee, both resident and non-resident, who worked on the video game production.

Table 2.1
Video Game Production Tax Credit

	Fiscal Year			
	2017-18	2018-19	2019-20	Total
# Authorized	2	2	5	9
Requested	$0.33	$0.95	$1.00	$2.28
Authorized[1]	$0.33	$0.95	$1.00	$2.28
Awarded[2]	$0.20			$0.20

Note: Millions of dollars.
1 Credit is authorized when application is approved and a portion of the credit is reserved from the annual credit allocation.
2 Credit is awarded after final reports are approved and credit is issued.
Source: Pennsylvania Department of Community and Economic Development.

Based on application data, the number of Pennsylvania residents employed and salaries/wages paid increased with the number of applicants. (See **Table 2.2**.) In FY 2019-20, recipients of the VGP Tax Credit paid approximately $2.3 million in qualified wages associated with VGP approved projects to roughly 83 full-time Pennsylvania employees.[10] Qualified Pennsylvania expenses increased over time and reached $4.0 million in FY 2019-20, comprising 97.3 percent of the total production budget.

Table 2.2
Video Game Production Budget and Employment Data

	Fiscal Year		
	2017-18	2018-19	2019-20
Total Production Budget	$1.71	$3.82	$4.12
Qualified PA Expenses	$1.26	$3.81	$4.01
Qualified Expenses as % of Budget	73.7%	99.7%	97.3%
Employment Data (Qualified)			
# PA Resident employed	8	45	83
# Non-PA Resident employed	0	0	4
Salary/Wages Paid (Qualified)			
PA Resident	$0.69	$1.76	$2.31
Non-PA Resident	$0.00	$0.00	$0.07

Note: Millions of dollars. Employment Data and Salary/Wages Paid data shown for qualified expenses only. Data include projected amounts and are subject to change once final audited figures are received.
Source: Pennsylvania Department of Community and Economic Development.

[10] Some tax credit recipients may also employ independent contractors. Those payments would not be included with wages and salaries paid.

Section 3: State Comparison

Currently, 19 states offer one or more incentives to encourage video game production. The majority of these programs were initially designed for film or television productions and were expanded to include the production or development of video games.

Table 3.1 provides a comparison of video game production incentives across the 19 states. The type of incentive offered varies by state and can be in the form of a grant, rebate or tax credit. Grants and rebates are similar in that both provide cash support: grants are typically made prior to completion of a project (e.g., Texas) while rebates are made after production is complete and are targeted towards specific costs (e.g., Colorado). Tax credits are applied to taxes such as corporate net income or personal income taxes. Some states allow a full refund of the tax credit while others refund a fixed share of the credit. If states do not have a refundable tax credit, then they allow the credit to be transferred or sold to other firms.

The fourth column of Table 3.1 lists the incentive available as a percentage of qualified expenses. The majority of states offer a base rate between 20 and 25 percent. Although Table 3.1 displays a comparison of rates, those rates may not be directly comparable because each state defines "qualified" expenses differently. In addition, some states will offer higher incentives if the production company meets certain criteria. For example, Texas offers an additional 2.5 percent for projects that complete a portion of their production days in an underutilized or economically distressed area. Select states also offer higher rates for wages paid to residents as a way to encourage companies to hire locally. Non-resident labor may be included at a lower rate or not at all.

Pennsylvania offers a broad definition of qualified expense and most Pennsylvania payroll qualifies for the credit. Other states, such as Connecticut, require that all production costs or expenses be incurred within the state. (In contrast, Pennsylvania only requires that 60 percent of costs or expenses be incurred in-state). The table also denotes if the state has an annual dollar cap and the amount of the cap (if applicable). In states that incorporate the incentive through the film tax credit, the video game and film production companies compete for the same funding. Currently, five states offer uncapped video game incentives: Arkansas, Connecticut, Georgia, Louisiana and Maine.

Two programs similar to Pennsylvania (separate from the film programs) are noted below:

- **Louisiana** provides an uncapped tax credit equal to 25 percent of qualified in-state labor and 18 percent of qualified production expenses for digital media and software development companies. The credit can be utilized against state income tax liability and is refundable. The program alternatively offers a rebate that may be claimed any time during the year and is equal to 85 percent of the value of the tax credit that could be earned.[11]
- **New Jersey** provides a 20 percent tax credit for qualified digital media production expenses, or 25 percent of qualified digital media production expenses for goods and services purchased through vendors whose primary place of business is located within a designated area in the state. The program is capped at $10.0 million annually.[12]

[11] See https://louisianaentertainment.gov/interactive/digital-interactive-media-and-software-program.
[12] See https://www.njeda.com/filmdigitalmediataxcredit.

Table 3.1
Video Game Production Incentives Across the States

State	Type	Utilization	Rate	Annual Cap[1]
Alabama	Rebate	--	25-35%	$20
Arkansas	Rebate	--	20-30	no
Colorado	Rebate	--	20	1
Connecticut	Credit	Transferable	10-30	no
Florida[2]	Grant/Rebate	--	5-20	varies
Georgia	Credit	Transferable	20-30	no
Hawaii	Credit	Refundable	20-25	50
Louisiana	Credit	Refund/Transfer	18-25	no
Maine	Credit/Rebate	--	5-12	no
Mississippi	Rebate	--	25-30	20
Montana	Credit	Transferable	20-35	10
Nevada	Credit	Transferable	15-25	10
New Jersey	Credit	Transferable	20-25	10
New Mexico	Credit	Transferable	25-35	110
Ohio	Credit	Refundable	30	40
Oregon	Rebate	--	20	14
Pennsylvania	**Credit**	**Transferable**	**10-25**	**1**
Texas	Grant	--	5-22.5	50
Virginia	Credit	Refundable	15-20	7

Note: Most states offer a digital media or video game component within their Film Incentive Program. Louisiana, New Jersey and Pennsylvania offer incentives separate from their states film incentive.

1 Millions of dollars. For states with a combined program the amount indicates the combined cap and not the cap for the individual video game production component.

2 Select counties offer specific grant or rebate programs.

Source: Various state websites.

Industry Employment Trends

There is no standard industry classification specific for the video game industry. However, the broader Software Publishers industry (NAICS 511210) can be utilized to identify overall trends.[13] **Table 3.2** ranks states based on level of industry employment for 2019. The data are from the U.S. Bureau of Labor Statistics through the Quarterly Census of Employment and Wages (QCEW) and are based on returns filed by firms covered by the national unemployment insurance program, which comprise more than 99 percent of all private wage and salary employment. The data are compiled based on the location of the firm (not an

[13] The NAICS Association describes this industry as follows: This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers. These establishments may design, develop, and publish, or publish only.

employee's state of residence) and include part and full-time positions.

California ranked highest, with 21.1 percent of national employment for this subsector. The next largest states were Washington (15.3 percent), Massachusetts (7.5 percent) and Texas (4.9 percent). The data show that the industry comprised approximately 0.4 percent of total U.S. payroll employment.

In 2019, the Software Publishers industry comprised 0.2 percent of total Pennsylvania payroll employment and 11,096 jobs were held in this industry. The number of jobs grew by nearly 6,000 from 2014 and approximately half of the increase was from 2017 to 2018. The rapid expansion in Pennsylvania employment for that year coincides with the creation of the VGP Tax Credit. However, application data from Table 2.2 indicates that in FY 2019-20, firms that received the tax credit directly employed 83 Pennsylvania residents related to VGP Tax Credit projects. Other residents could be employed as independent contractors or on non-qualified VGP projects.

Over the past five years, employment in the U.S. Software Publishers industry grew at a notably higher (8.0 percent per annum) average annual growth rate (AAGR) than total U.S. private payroll employment (1.8 percent). The bottom portion of Table 3.2 displays Pennsylvania employment data for all private industries compared to the Software Publishers industry. From 2014 to 2019, Pennsylvania employment in the Software Publishers industry also grew at a much higher average annual rate (16.8 percent) compared to total Pennsylvania private payroll employment (1.1 percent).

Table 3.2
Software Publishers Industry Employment Data

	Employment Level			Change: 2009-14		Change: 2014-19	
State	**2009**	**2014**	**2019**	**Number**	**AAGR**	**Number**	**AAGR**
California	44,317	55,747	96,698	11,430	4.7%	40,951	11.6%
Washington	51,305	55,370	69,848	4,065	1.5%	14,478	4.8%
Massachusetts	22,006	27,041	34,416	5,035	4.2%	7,375	4.9%
Texas	16,617	18,099	22,469	1,482	1.7%	4,370	4.4%
Florida	8,683	11,532	18,863	2,849	5.8%	7,331	10.3%
Georgia	10,776	14,163	18,660	3,387	5.6%	4,497	5.7%
North Carolina	7,092	11,410	18,424	4,318	10.0%	7,014	10.1%
New York	3,751	6,429	16,937	2,678	11.4%	10,508	21.4%
Colorado	11,188	11,718	15,401	530	0.9%	3,683	5.6%
Wisconsin	6,310	10,994	13,715	4,684	11.7%	2,721	4.5%
U.S. Industry Total	**255,417**	**310,902**	**457,645**	**55,485**	**4.0%**	**146,743**	**8.0%**
U.S. Total (millions)	106.9	115.6	126.4	8.7	1.6%	10.8	1.8%

Pennsylvania Employment Data

	Employment Level			Change: 2009-14		Change: 2014-19	
Category	**2009**	**2014**	**2019**	**Number**	**AAGR**	**Number**	**AAGR**
Software Publishers	5,227	5,114	11,096	-113	-0.4%	5,982	16.8%
All Industries	4,741,257	4,961,421	5,249,732	220,164	0.9%	288,311	1.1%
Market Share	0.11%	0.10%	0.21%				

Notes: Data represent Software Publishers industry, NAICS Code 511210. AAGR is average annual growth rate.

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

Literature Review

As part of its analysis, the IFO reviewed industry reports that relate to the video gaming industry. Due to the relative size of the industry and types of incentives offered by states (i.e., most states combine the incentive with the much larger film tax credit), there is a dearth of research that examines the specific impact of the video game industry on state and local economies. The text that follows provides a summary of two recent video game industry reports. These reports are reviewed to provide context, and the IFO has no opinion or insights regarding the analysis contained therein.

The Video Game in the 21st Century: 2017 Report

United States sales of computer and video games grew to $24.5 billion in 2016, up from $10.1 billion in 2009. Total consumer spending on all video game products (includes hardware, software and in-game purchases) reached $30.4 billion in 2016, a 29.4 percent increase over the prior year. According to the study, in 2015 there were approximately 2,900 game company locations across all fifty states that directly employed 65,678 workers. Seven states comprised 85 percent of the total direct employment for the United States game software industry. California employed the largest number of individuals followed by Washington, Texas, New York, Illinois, Florida and Massachusetts. Direct employment in the United States gaming industry grew at an annual rate of 2.9 percent from 2013 to 2015. In 2015, the average annual compensation for a game developer was $97,000.

Future-Proofing the Video Game Industry in California (2018)

Global consumer revenue in the video game industry topped $100 billion in 2016 and continues to grow. Current trends like mobile video games, virtual reality, augmented reality, mixed reality and self-publishing drives this result. Mobile video game revenues are expected to reach $72.3 billion in 2020 and may comprise one-half of the total video game market. There are approximately 3,090 video game company establishments in the United States and 99.7 percent of these companies qualify as small businesses. California contains the most video game company establishments (933) but the number of firms located in other states is growing rapidly. The top ten states in establishment growth are Indiana, Utah, Maryland, Florida, Louisiana, Wisconsin, Arizona, Pennsylvania, Georgia and Colorado. In the video game industry, firms that develop games make up over 80 percent of all companies and 98 percent of new businesses. Due to increased access to self-publishing platforms, developer opportunities have grown and allowed individuals or companies to develop their own content for purchase on mobile devices.

The report made specific recommendations for California to enable the state to remain a leader in the video game industry: (1) expand an existing sales tax exemption to certain business purchases of equipment used in video game production, (2) revise the current Research and Development Tax Credit program by making it transferable or refundable, (3) consider the addition of a Video Game Production Tax Credit and (4) build relationships between the higher education institutions and the video game industry so that new and growing companies can fill open positions with qualified talent from within the state.[14]

[14] Current California law allows a partial (5.25%) sales tax exemption for the purchase of teleproduction and post-production equipment to businesses primarily engaged in teleproduction and post-production activities when that property is used 50 percent or more in those activities. This exemption is taken by the seller and passed on to the buyer of the equipment at the point of purchase. The report recommendation is to amend this existing exemption to include equipment used in video game production.

Section 4: Economic Analysis

This section contains the economic analysis of the Pennsylvania VGP Tax Credit and is divided into two subsections. First, a cost profile of the typical Pennsylvania video game production is created from applications received by DCED. Based on that profile, the analysis estimates a range of direct spending that may be incentivized by the tax credit and applies various multipliers to determine the potential economic impact. All multipliers used in this analysis use the RIMS II multipliers for Pennsylvania published by the U.S. Bureau of Economic Analysis.

Video Game Project Cost Profile

A cost profile for a typical Pennsylvania video game project is established to identify the types of new, direct spending leveraged by the tax credit. **Table 4.1** (next page) displays the share of total costs by spending category for a typical video game project. The profiles are based on credits committed by DCED for the past three fiscal years.[15]

The data show that qualified expenses typically comprise 94 percent of total video game project expenditures. Non-qualified expenses are those that flow outside the state such as compensation paid to most non-resident employees or services performed by out-of-state businesses. Wages and salaries comprise more than one-half of total qualified expenses in the average profile. The share paid to Pennsylvania residents (52.4 percent) was much larger than paid to non-residents (0.8 percent). Non-wage expenses include various rentals (e.g., facilities), as well as production, operation, payments to independent contractors and other miscellaneous expenses.

The final line in Table 4.1 displays the total share of qualified spending received by Pennsylvania residents and vendors (i.e., remains in the state). It includes wages paid to residents and all qualified non-wage expenses. Wage payments to non-residents are assumed to flow out-of-state.

[15] The analysis utilizes preliminary expenditure data when final audited reports were not yet available.

Table 4.1
Video Game Project Cost Profile

	Share of Project Budget
Total Expenses	**100.0%**
Qualified	94.1%
Non-Qualified	5.9%
Qualified Expenses	**100.0%**
Wages and Salaries	53.1%
PA Residents	52.4%
Non-PA Residents	0.8%
Non-Wage Expenses	46.9%
Share of Qualified Spending that Remains in PA[1]	99.2%

1 Share of Qualified Spending that Remains in PA is equal to wages paid to PA residents plus qualified non-wage expenses divided by total qualified expenses.

Source: Tax credit data based on credits committed by DCED for the past three fiscal years. The analysis utilized preliminary expenditure data when final audited reports were not yet available.

Economic Impact

A key parameter that drives the economic impact of any tax credit program is the amount of spending actually incentivized by the credit. To the extent that the spending would have occurred regardless of the program, then the tax credit is a windfall and has negative economic implications because the state could have used the funds for another purpose.

In the case of the VGP Tax Credit, the IFO was unable to determine the incentivized share of spending due to the limited program history (three years and nine recipients) combined with a lack of applicable research from other states or academics. The limited data that are available indicate that roughly one-half of the tax credits flow to established Pennsylvania firms and it is unknown how much of the remaining share affects location and spending decisions. Due to the uncertainty regarding the amount of spending incentivized by the tax credit, this subsection estimates the economic impact under two scenarios: Scenario 1 (25 percent of spending is incentivized) and Scenario 2 (50 percent).

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 award and utilization would not change the overall results of this analysis.

Table 4.2 presents the analysis and the following text describes the computation based on line number:

Line 1 The analysis assumes that $1.0 million of tax credits are awarded and utilized.

Line 2 The limited data available suggests that approximately 10 percent of credits are sold for a net of roughly 83 cents on the dollar, with 7 cents lost to the purchaser and 10 cents to the third party facilitator. Therefore, it is assumed that 98.3 percent (10 percent x 17 cents = 1.7 percent is lost) incentivizes the activities of the recipient.

Line 3 The product of lines 1 and 2: the effective value of the tax credit to the recipient.

Line 4 Share of activity that occurs due to the credit. More than one-half of the annual tax credit allocation goes to established Pennsylvania firms. It is therefore likely that the tax credit has a limited impact on location/business decisions and a material portion flows to projects that would have occurred even in the absence of the credit. For other firms, the credit may provide financial support that could be critical in getting a project to completion and enhances the long-term viability of recipients. Based on discussions with stakeholders, this analysis assumes that the tax credit incentivizes 25 percent of eligible spending under Scenario 1 and 50 percent under Scenario 2.

Line 5 The product of lines 3 and 4. This is the amount of tax credit that effectively leverages investment because it reflects (1) the true value to the firm after any sales discount and (2) recognizes that a portion of video game productions would have occurred in the state without the tax credit.

Line 6 The tax credit leverage factor. The base tax credit is equal to 25 percent of qualified spending. Therefore, every $1 of tax credit leverages or motivates $4 of qualified spending. It is noted that the factor could be higher in the future because the tax credit is reduced to 10 percent of qualified spending for projects that qualify for the credit longer than four years. (The average VGP qualifying project extended 2.2 years and no project extended beyond four years.) The analysis uses a leverage factor of 4.0.

Line 7 Qualified spending due to the tax credit is equal to the product of lines 5 and 6. This is the direct spending by all qualifying firms and includes payment of non-resident and resident wages, as well as payments to Pennsylvania vendors for goods and services.

Lines 8 to 10 This breakdown is determined using detail from the project profile established in Table 4.1. Based on that profile, 0.8 percent of qualified spending flows to non-residents in the form of labor compensation, 52.4 percent to Pennsylvania residents as wages and 46.9 percent to Pennsylvania goods and services providers (e.g., rental of facilities, lodging and production and operation costs).

Line 11 For this analysis, payments to non-residents are not included because they flow out-of-state and have no implications for state economic growth.

Line 12 An economic spending or output multiplier of 2.64 is computed for the Pennsylvania spending (line 11).[16] The multiplier implies that every $1.00 of new spending attributable to the tax credit increases total output or sales by $2.64 in the state, as the original spending moves through the state economy and is respent. The original $1.00 is referred to as direct spending and the $1.64 is referred to as the induced

[16] Under the requirements of the VGP Tax Credit, almost all qualified wages are paid to Pennsylvania residents and non-wage qualified expenses generally flow to Pennsylvania firms. This results in an unusually large multiplier because nearly all of the first round of spending associated with the credit remains in the state. More technically, it is known that the firms that supply the immediate inputs to tax credit recipients are located within the state.

and indirect effects.[17]

Line 13 The product of lines 11 and 12: the total output or spending impact due to the tax credit.

Line 14 Net incremental spending is equal to the total output or spending resulting from the VGP Tax Credit less the total output or spending under the alternative use of state funds (i.e., the balanced budget adjustment).[18] To finance the credit, this analysis assumes that state discretionary spending is reduced and those monies would have been spent on education and health care. This economic offset is also reflected in the next four lines.[19] [20]

Line 15 A GDP (also referred to as value added) multiplier is applied to the new Pennsylvania spending (line 11) that results from the VGP Tax Credit.

Line 16 An earnings multiplier is applied to the new Pennsylvania spending that results from the VGP Tax Credit.[21]

Line 17 An employment multiplier is applied to the new Pennsylvania spending that results from the VGP Tax Credit.

Line 18 Tax collections due to the VGP Tax Credit less tax revenues from the alternative use of state spending. The analysis utilizes the project profile (Table 4.1) to project tax revenues that result from the VGP.

Line 19 The <u>gross</u> return on investment (ROI) for the tax credit. The gross ROI is 12 cents for every $1.00 spent under Scenario 1 and 20 cents for every $1.00 under Scenario 2. The gross return does not reflect other uses of the tax credit monies. A gross ROI less than 1.0 indicates that the tax credit does not "pay for itself." In this case, the gross ROI indicates that a portion of the tax credit is self-financed. (See the Appendix for a discussion of the factors that would allow a tax credit to be self-financed.)

Line 20 The <u>net</u> return on investment (ROI) for the tax credit. The net ROI is 8 cents for every $1.00 spent ($0.08 million in tax collections divided by the $1.0 million tax credit) under Scenario 1 and 16 cents for Scenario 2. This figure represents a <u>net positive return</u>, because it deducts the amount of tax revenues that would have been generated if the state funds had been used for other purposes.

Approximately one-half of the firms that receive the VGP Tax Credit also benefit from the Research and Development (R&D) Tax Credit Program. The R&D Tax Credit is available to eligible firms that incur qualified

---

[17] The indirect effect represents the impact from other businesses that supply inputs to the video game production (i.e., the supply chain). The induced effect represents the impact from employees that spend their wages and business owners that spend higher profits.

[18] Under the balanced budget requirement, states must reduce spending or raise taxes to fund the tax credit. If the alternative use of the state spending is not incorporated into the analysis, then the net economic impact of the credit will be overstated.

[19] The state spending is reduced by 20 percent to reflect the fact that the portion used to pay state or public school employee compensation includes pension contributions and employer and employee payroll taxes, which do not have immediate implications for the state economy.

[20] Lines 14 to 18 also include an induced effect only from tax credit monies received by firms that were not incentivized. In these cases, the credit is essentially an income transfer.

[21] Earnings include employee compensation such as wages and salaries, employer contributions for health insurance and the net earnings of sole proprietorships and partnerships. It excludes personal contributions for social insurance programs (e.g., Social Security) and employee pension plans. For software developers, data from the U.S. Bureau of Labor Statistics' Occupational Employment Statistics for Pennsylvania show a median wage of $96,530 for 2019.

research expenses in Pennsylvania. To the extent that VGP firms receive multiple tax credits, this economic analysis will be overstated. Conversely, to the extent that the VGP Tax Credit provides the critical funding that enables a firm to be a viable, long-term employer that would otherwise fail, the impact is understated because that multi-year impact is not included in the analysis. Due to the small size of the tax credit, it is assumed that these effects, to the extent they are relevant, largely offset.

Table 4.2
Net Economic Impact of VGP Tax Credit

	Spending Category or Adjustment	Scenario 1	Scenario 2
1	Tax Credits Awarded and Used	$1.00	$1.00
2	Reduction for Sales Discount	98.3%	98.3%
3	Value to Firm	$0.98	$0.98
4	Incentivized Spending	25.0%	50.0%
5	Effective Amount of Tax Credit	$0.25	$0.49
6	Tax Credit Leverage Factor	4.00	4.00
7	Qualified Spending Due to Tax Credit	$0.98	$1.97
8	Non-Resident Wages	$0.01	$0.02
9	Resident Wages	$0.51	$1.03
10	Goods and Services	$0.46	$0.92
11	Spending in PA Only	$0.98	$1.95
12	Multiplier	2.64	2.64
13	Total Output or Spending	$2.57	$5.15
	Net Economic and Revenue Impact[1]		
14	Total Output or Spending	$1.87	$4.15
15	Gross Domestic Product	$1.01	$2.31
16	Labor Earnings	$0.74	$1.71
17	Full-Time Equivalent	11.3	25.2
18	Tax Revenues[2]	$0.08	$0.16
	Return on Investment		
19	Gross ROI[3,4]	$0.12	$0.20
20	Net ROI[3,5]	$0.08	$0.16

Note: Millions of Dollars.

1 Net Economic and Revenue Impacts include direct, indirect and induced impacts for the portion of the tax credit that incentivizes activity. Net economic and revenue metrics also include an induced effect from the credit monies received by firms that were not incentivized.

2 Tax revenues reflect state tax revenues only.

3 Gross and Net ROI are cents per tax credit dollar spent.

4 Gross ROI excludes alternative use of tax credit monies.

5 Net ROI reflects alternative use of tax credit monies (see text).

Source: IFO computations based on applications submitted to DCED from the last three years. Tax credit data include projected amounts and is subject to change once final audited figures are received.

- This page intentionally left blank. -

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 agencies that administer the tax credit. The following bullet points summarize the main findings of this research:

- Nineteen states offer one or more incentives to encourage video game production. Twelve states offer tax credits and the remaining states offer a grant or rebate. Pennsylvania is one of only a few states that offers an incentive that is separate from its program for film production. Annual program caps vary by state and Pennsylvania provides one of the lowest amounts.
- In FY 2019-20, a total of five projects were authorized and based on unaudited application data, a total of 83 Pennsylvania residents were employed directly by the recipient firms on qualified projects.
- More than one-half of the annual VGP Tax Credit allotment goes to established Pennsylvania firms. For this reason, it is unlikely that the credit has a significant impact on location decisions, although it may retain firms.
- For small firms, the credit may provide crucial financial support that facilitates the movement of projects from the design to the completion phase and enhances the long-term viability of those firms.
- Based on employment data for the Software Publishers subsector, it does not appear that the VGP Tax Credit has had a significant impact on Pennsylvania employment. That outcome is expected given the modest size of the tax credit.
- The analysis finds that the net return on investment (ROI) is 8 to 16 cents of state tax revenue for each tax credit dollar.
- The VGP Tax Credit generally overlaps with the Research and Development (R&D) Tax Credit. Approximately one-half of firms that receive the VGP Tax Credit also benefit from the R&D Tax 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 goals and purpose.

Convert the tax credit to a competitive grant or rebate program and award projects based on projected economic impact.

More than one-half of the annual VGP Tax Credit allocation goes to established Pennsylvania firms. It is therefore likely that the tax credit has a limited impact on location/business decisions. In addition, VGP applications are awarded on a first-come, first-served basis without regard to the potential economic impact of the award. Converting the tax credit to a competitive grant or rebate program would allow DCED to award credits based on greatest projected economic impact associated with the program.

Consideration should be given to limiting the tax credit (or grant) to young firms that may not be viable without the initial public support.

Allocating the credit (grant) to younger firms maximizes the potential economic impact of the program because the funding is more likely to incentivize a project that would not have otherwise occurred in the absence of the credit. It also provides timely funds to support start-up firms that face temporary cash flow constraints and greater difficulty securing capital investment.

The tax credit should be made refundable. The fees and discounts charged by third parties represent leakage and do not contribute to the economic output of the industry.

Preliminary data suggest that sellers of the VGP Tax Credit receive roughly 83 cents on the dollar and the entity that facilitates the sales transaction typically receives a commission equal to 10 percent of the total credit sold, while the remaining 7 percent flows to the purchaser of the credit. The credit could be made fully refundable, or partially refundable, such as 95 cents on the dollar. A refundable tax credit ensures the full benefit of the tax credit flows to the intended firm.[22]

Provide separate program guidelines and require distinct supporting documentation for the VGP Tax Credit.

Some stakeholders noted that portions of the program guidelines/reporting relate only to the Film Production Tax Credit and are not applicable to video game production. This creates confusion and increases the time required for the applicant to complete forms. Consideration should be given to creating separate documents for the VGP Tax Credit Program.

[22] A refundable tax credit or tax credit that is sold represents taxable income and firms would need to weigh tradeoffs if opting for that treatment. However, it is likely that many small firms that receive awards may not report taxable profits for the applicable year, even if the extra income is included.

Key Decision Points

In addition to the specific recommendations above, policymakers should also consider general issues that merit discussion if the VGP Tax Credit is amended. These issues are strategic and will be related to the overall goals and purpose of the tax credit as envisioned by policymakers.

- Would a grant or rebate program better support growth in the video game production industry? The timing of when the funds are available for use is especially critical to young start-up firms and a grant program generally provides funding support earlier than a tax credit.
- Should all video game production firms be eligible for VGP benefits, or should the program be targeted to start-up firms?
- Should consideration be given to whether firms also receive other Pennsylvania tax credits (i.e., R&D and Keystone Innovation Zone)? Should recipients report other credits that have been applied for and/or been awarded?

Conclusion

Act 48 requires that the IFO make a determination regarding whether the tax credit has achieved its goals and purpose. For this review, the analysis establishes the specific and quantifiable program goals as:

- Increase the number of video games produced in Pennsylvania.
- Expand Pennsylvania's market share of employment in this industry.
- Expand employment in the video game industry.

The analysis establishes the general program purpose as:

- Generate economic activity in the video game production and related sectors and enhance the long-term economic impact of that activity by incentivizing the consumption of Pennsylvania goods and services.

As noted, this program is relatively new and only three years of historical data are available for analysis. The IFO was unable to ascertain whether firms that received credits were more or less viable than firms that did not. Therefore, the analysis defers comment regarding whether the tax credit has successfully achieved its assumed goals and purpose. Additional data are needed to make that determination.

- This page intentionally left blank. -

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.

Note on Return on Investment

An important metric used by many studies to assess the effectiveness of tax credits is the gross or net return on investment (ROI). The **gross ROI** is the ratio of all new tax revenues generated by the tax credit to the dollar amount of the tax credit. That metric does not consider alternative uses of state funds for other purposes and is best used to determine the portion of the tax credit that is self-financed (i.e., "pays for itself"). The **net ROI** is a similar ratio, but the numerator deducts the tax revenues that would have been generated if the state funds had been used for a different purpose such as local education, road repairs or tax cuts. The gross and net ROI are useful metrics, but they are limited because the ultimate objective of most tax credits is to generate economic activity and jobs that would not otherwise exist, as opposed to generating a net profit for the state.

If a tax credit is fully self-financed or paid for itself, two strong conditions must generally hold. First, nearly all of the activity undertaken by firms that receive the credit must have been motivated by the credit and not other factors. That is, the tax credit must be the factor that tips the decision of a firm to locate or expand in the state. Second, the economic activity induced by the tax credit must generate sufficient new tax liability (through direct, indirect and induced effects) to offset the entire tax credit.

For example, assume that a new firm locates in a state and would not have done so without the tax credit. The firm qualifies for a $1 million tax credit, and all new activity attributable to the tax credit generates $500,000 of tax revenue, either from the firm and its employees or from others (firms in the supply chain, other secondary effects). The firm sells the residual tax credit that it cannot use to another firm that can use it. The net cost to the state of the new economic activity is then $500,000. Hence, even if it were true that all firms receiving a tax credit were fully incentivized by the credit and the new activity would not have otherwise occurred, they must still also generate or cause sufficient new tax liability (both directly and indirectly through supplier firms and induced spending by households) to offset the tax credit. If they do not, then there is a net cost to the state.

An illustrative computation demonstrates the amount of new activity that would need to be generated for a tax credit to be self-financed. In general, personal income tax and sales taxes are by far the main state taxes that will increase to offset the cost of a tax credit. Assume a $1 million tax credit that had an equal impact on both taxes in terms of new revenue. In order for the tax credit to be self-financed:

- Labor earnings would need to increase by $500,000 / 3.07% = $16.3 million if all earnings were subject to Pennsylvania personal income tax. An average wage of $55,000 implies 296 new full-time employees.
- Total purchases (sales or output) would need to increase by ($500,000 / 30%) / 6.0% = $27.8 million if 30 percent of any new spending was subject to state sales tax.[23] The computation may or may not include any "first round" spending by the firm that qualifies for the tax credit. Typically, most expenses that qualify for a credit are for labor or are not subject to state sales tax (i.e., various services, contractors).

[23] The 30 percent assumption is an average spend on goods and services subject to state sales tax based on data from the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey. The computation is based on consumer spending patterns, and the actual percentage could be different than 30 percent.

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 Protection (REAP)	Entertainment Economic Enhancement Program	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

Sources

"2016 State Technology and Science Index: Sustaining America's Innovation Economy," Milken Institute (2016).

"2019 Annual Report," Department of Business Economic Development & Tourism (2019).

"2020 Essential Facts about the Video Game Industry," Entertainment Software Association, theesa.com (2020).

"Arkansas Film Industry Report," Arkansas Inc. (2019).

"Economic Impact of the Film Industry in New York State: 2017 & 2018," Camoin Associates (April 2019).

"The Economic Impact of Montana Film Production: An Analysis of the Industry and the MEDIA Act, 2019-2020," ESI Econsult Solutions Inc. (June 2020).

"Evaluation: Film Incentives- Economic Development Incentives Evaluation Series," Commonwealth of Virginia, Joint Legislative Audit and Review Commission (November 2017).

"Florida Office of Film and Entertainment- Fiscal Year 2017-2018 Annual Report," Florida Department of Economic Opportunity (November 2018).

"Future-Proofing the Video Game Industry in California," Milken Institute (2018).

"Interactive Media: Industry Assessment," Washington Interactive Network (December 2016).

"New Gaming Boom: Newzoo Ups its 2017 Global Games Market Estimate to $116.0Bn Growing to $143.5Bn in 2020," Wijman, Tim, newzoo.com (November 2017).

"State Film Production Incentive & Programs," National Conference of State Legislatures (January 2018).

"United States Tax Incentives for Video Game Production," Kane, Sean F. (2014).

"Video Games in the 21st Century: The 2017 Report," Siwek, Stephen E., Entertainment Software Association (2017).

"Video Game Production Tax Credit Program Guidelines," Pennsylvania Department of Community & Economic Development (August 2020).

Agency and Stakeholder Feedback

SCHELL GAMES

220 W Station Square Dr
Pittsburgh, PA 15219 USA

www.schellgames.com
info@schellgames.com

p: +1 412.390.0101
f: +1 412.927.0208

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

October 31, 2020

Dear Mr. Knittel:

Schell Games is the largest full-service education and entertainment game development company in the United States. Since 2002, we've worked to create interactive experiences on every platform to enrich the lives of players of all ages. Projects in our award-winning portfolio range from mobile, desktop, and virtual reality games to interactive installations and theme park attractions. Some of our favorite projects include working with PBS and the Pennsylvania-based Fred Rogers Productions to create the Daniel Tiger and Peg+Cat educational experiences.

While Schell Games certainly existed before the Video Game Production Tax Credit (VGPTC) was created, the introduction of the VGPTC has allowed this studio to take on projects of a scale we might not have been able to otherwise. These larger projects tend to have a global reach. Our virtual reality titles are selling well in Europe, and our most recent theme park attraction will be installed in France as well as the US. We're now exploring releasing our games in the Asia-Pacific market. Since our workforce is based entirely within Pennsylvania, all of this global income is allocated to and taxed in the Commonwealth. The VGPTC gives us the financial freedom to explore these opportunities, which in turn drives increasing income tax revenues for Pennsylvania.

Perhaps most importantly, the VGPTC has directly assisted in the retention of forty-four (44) full-time jobs. With an average annual salary and benefit package of $85,000, this represents nearly $3.75MM paid by Schell Games to Pennsylvania residents. The VGPTC also allows us to accelerate our hiring and compete with other video game city-hubs across North America, such as San Francisco, Los Angeles, Seattle, Austin, and Montreal. Recent tax credits we received enabled us to increase studio headcount by 10% in 2019. The VGPTC allows us to be more competitive in our compensation packages and gives us the ability to attract talent (and their income and sales tax revenues) that would otherwise go to one of these other hubs in other states.

We envision Pittsburgh becoming a major video game production hub. However, the $1MM funding cap of the VGPTC program is not enough to accomplish this objective. Increasing the VGPTC to $10MM annually, which would still only represent 15% of the size of the current Film Production Tax Credit, would greatly help. Considering the video game industry was valued at $151B in 2019 (surpassing the film industry at $136B) and is expected to grow at a compound annual growth rate of 13%, the Commonwealth would be well served by attracting as much of this booming industry as possible.

Sincerely,

Jake Witherell
Chief Operating Officer