

DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF POLICY ANALYSIS
MARYLAND GENERAL ASSEMBLY

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The Honorable Bill Ferguson
President of the Senate

The Honorable Adrienne A. Jones
Speaker of the House of Delegates

Members of the General Assembly

Dear President Ferguson, Speaker Jones, and Members:

The Tax Expenditure Evaluation Act (formerly the Tax Credit Evaluation Act) establishes a process for evaluating certain tax credits, exemptions, and preferences. Under the Act, the Department of Legislative Services (DLS) is required to evaluate the Innovation Investment Incentive Tax Credit (IIITC) by July 1, 2023.

DLS is required to evaluate the credit on a number of factors, including (1) the purpose for which the tax credit was established; (2) whether the original intent of the tax credit is still appropriate; (3) whether the tax credit is meeting its objectives; (4) whether the goals of the tax credit could be more effectively carried out by other means; and (5) the cost of the tax credit to the State and local governments.

During the 2023 interim, DLS reviewed the IIITC program. The Department of Commerce (Commerce) considers any investment through the program a success. By this measure, fiscal 2022 was a moderately successful year. However, DLS was unable to satisfactorily evaluate the credit, primarily because the credit has only existed in its current form for two full fiscal years. This paucity of data makes it difficult to draw any conclusions with certainty.

In lieu of a full evaluation, this letter will provide background information about the tax credit and limited information about credit activity.

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The Innovation Investment Incentive Tax Credit Program

Background

Chapter 113 of 2021 extended, expanded, and redesignated the Cybersecurity Investment Incentive Tax Credit (CIITC) program, which provided tax credits to incentivize investment in early-stage cybersecurity companies in the State to be the IIITC program. The IIITC program applies to technology companies more broadly, rather than solely cybersecurity companies. Commerce advised DLS that Chapter 113 improved upon the underutilized CIITC program by covering more businesses under the broader industry scope and making the program better able to respond to trends in innovation and research and development through the flexibility provided by the annual technology sector evaluation and recommendation process provided for in the Act.

Credit Value and Funding

The IIITC program offers a refundable income tax credit for investments in qualified Maryland technology companies. An investor who invests at least \$25,000 in a Qualified Maryland Technology Company (QMTC) can claim a credit equal to 33% of the investment, not to exceed \$250,000. If the QMTC is located in Allegany, Dorchester, Garrett, or Somerset counties or, under certain circumstances, is located in a Regional Institution Strategic Enterprise (RISE) zone, the value of the credit for investments made in these companies is equal to 50% of the investment, not to exceed \$500,000.

Commerce administers the tax credit application, approval, and certification process and is required to submit an annual report to the Governor and the General Assembly detailing specified information about the tax credit. Commerce may not certify investments in a single technology company or a single technology sector that total more than 15% or 25%, respectively, of the total appropriations to the reserve fund for that fiscal year. The fiscal 2024 operating budget includes \$2 million in funding for the IIITC program.

Qualifications

A QMTC is a company organized for profit that is primarily engaged in, or within four months will be primarily engaged in, the research, development, or commercialization of innovative and proprietary technology in an eligible technology sector. Each year, upon conclusion of an evaluation and recommendation process involving the Maryland Economic Development Commission and the Maryland Department of Labor, Commerce is required to establish a list of eligible technology sectors for the IIITC program.

A QMTC also must (1) have its headquarters and base of operations in the State; (2) not have participated in the IIITC program for more than three prior fiscal years; (3) have an aggregate capitalization of at least \$100,000; (4) own or license proprietary technology; (5) have fewer than 50 full-time employees; (6) not have its securities publicly traded on any exchange; and (7) be in

good standing. A QMTC does not include a sole proprietorship or a company that is or has been certified as a Qualified Maryland Biotechnology Company (QMBC) under the Maryland Biotechnology Investment Incentive Tax Credit (BIITC) program.

To be eligible for the credit, an investor must (1) be current in all State and local tax obligations; (2) not be in default in any State or local contract; and (3) for companies, be in good standing with the jurisdiction in which it is organized and with the State and authorized or registered to do business in the State. A qualified pension plan, individual retirement account, or other qualified retirement plan under the Employee Retirement Income Security Act of 1974, as amended, fiduciaries or custodians under such plans, or similar tax-favored plans or entities under the laws of other countries may not qualify for the credit. A qualified investor may not (1) be a founder or current employee of a QMTC that has been in active business for more than five years; or (2) after making a proposed investment, own or control more than 25% of the equity interests in the QMTC in which the investment is to be made.

An investor must invest at least \$25,000 in a QMTC to claim a credit under the BIITC program. A qualifying investment is defined as a contribution of money in cash or cash equivalents, at a risk of loss, to a QMTC in exchange for stock, a partnership or membership interest, or other ownership interest in the equity of the QMTC title to which ownership interest must vest in the qualified investor. Generally, an investment does not include debt unless it is convertible debt.

Application and Verification Process

To claim eligibility for and to be initially certified as eligible for the tax credit, an investor must submit an application to Commerce at least 30 days before making an investment in a QMTC. The application must include certain taxpayer information and information concerning the QMTC in which an investment is to be made. Commerce reviews and processes applications and makes allocations of available tax credits on a first-come, first-served basis in the order in which individual applications are received. Within 30 days after the date of an initial certificate, the qualified investor must make the investment in the QMTC. The qualified investor must then provide notice to Commerce within 10 days after the date on which the investment is made. Commerce issues a final certificate to the qualified investor within 30 days after the investor files the notice of investment. If a qualified investor fails to provide the notice and proof of the making of the investment within 40 days after the date on which Commerce issues an initial certificate, Commerce rescinds the certificate, and the credit amount allocated to the rescinded certificate is made available for allocation by Commerce to other applicants.

The credit may be recaptured if within two years from the close of the taxable year for which the credit is claimed: (1) the qualified investor sells, transfers, or otherwise disposes of the ownership interest in the QMTC that gave rise to the credit or (2) the QMTC that gave rise to the credit ceases operating as an active business with its headquarters and base of operations in the State.

Legislative Changes

Chapter 390 of 2013 established the CIITC program by creating a refundable tax credit against the State income tax for Qualified Maryland Cybersecurity Companies (QMCC) that receive an investment from a qualified investor. The value of the credit equaled 33% of an eligible investment made in the QMCC during the taxable year. The maximum amount of the credit could not exceed \$250,000. Chapter 390 also established a tax credit application and certification procedure and created a reserve fund into which the Governor was required to annually appropriate at least \$2 million in funds beginning in fiscal 2014.

The Budget Reconciliation and Financing Act of 2015 (Chapter 489) required a one-time reduction of the mandatory minimum appropriation to the CIITC reserve fund from \$2 million to \$1.5 million for fiscal year 2016.

Chapter 504 of 2016 increased the value of the tax credit to 50% of the investment, not to exceed \$500,000, if the QMCC in which an investment was made was located in Allegany, Dorchester, Garrett, or Somerset counties.

Chapter 578 of 2018 altered the CIITC program by specifying that the investor who makes the qualifying investment in a QMCC claims the tax credit instead of the QMCC. In addition, the Act altered the eligibility of a QMCC under the program by (1) eliminating the time period limitation that prohibits a qualified company from being eligible for the tax credit if the company has been in active business for more than five years and (2) specifying that a cybersecurity company includes an entity that becomes duly organized and existing under the laws of any jurisdiction for the purpose of conducting business for profit within four months of receiving a qualified investment and provides for recapture of the credit if the entity does not satisfy this requirement.

Finally, as previously indicated, Chapter 113 expanded the application of the CIITC program to technology companies generally and renamed CIITC and its reserve fund as the IIITC program and the Maryland Innovation Investment Tax Credit Reserve Fund, respectively. The purpose of the IIITC program was also established as discussed below. Finally, Commerce was required to study and submit a report on or before December 1, 2021, on its findings and recommendations for awarding credits under the program on a competitive basis.

IIITC Is Modeled After the Biotechnology Investment Incentive Tax Credit

The IIITC program is modeled after the BIITC program. Chapter 99 of 2005 established the BIITC program, which offers a refundable income tax credit for investments in qualified biotechnology companies. In accordance with alterations to the BIITC program by Chapter 112 of 2021, an investor who invests at least \$25,000 in a qualified QMBC can claim a credit equal to

33% of the investment, not to exceed \$250,000, or if the QMBC is located in Allegany, Dorchester, Garrett, or Somerset counties, the credit is equal to 50% of the investment, not to exceed \$500,000.

During the 2017 interim, DLS evaluated the BIITC program, which is a budgeted tax credit program subject to an annual overall budgetary limit. The program's fiscal impact has doubled over time due to an increase in the amounts appropriated to the program. The geographic distribution of participating biotechnology companies is similar to the location of biotechnology clusters within Maryland. Nonresidents are a significant source of investments – making a total of 911 investments that comprised about 6 out of every 10 investment dollars. The report discusses some of the unique challenges that biotechnology companies face, such as securing adequate financing and gaining federal regulatory approval. The report highlights how credit implementation and process issues, such as issuing credits on a first-come, first-served basis, reduces the program's effectiveness, results in an unequal distribution of credits, and favors repeat applicants over first-time applicants.

The report also discusses how the program does not allocate credits in a manner that is most likely to provide financial assistance in the most crucial, early development phases of a biotechnology company. The report includes a number of recommendations to improve the BIITC program. These recommendations include (1) setting aside, in each fiscal year, a portion of credits for first-time applicants and establishing a lifetime maximum on the total credits that can be claimed with respect to each company; (2) lowering the credit percentage and tailoring the credit value based on the company's risk; and (3) establishing a competitive process for the awarding of credits and performance metrics to measure the program's impact. Following the report's publication, Chapter 112 altered the BIITC program by (1) reducing the percentage value of the tax credit; (2) terminating the program effective June 30, 2028; (3) establishing the objective and goals of the program; and (4) requiring Commerce to report specified information about the program. The Act also altered several program eligibility requirements.

Since the IIITC program is modeled after the BIITC program, many of the findings and recommendations made in the BIITC evaluation report could be applicable to the IIITC program.

Intent of Tax Credit

When Chapter 113 established the IIITC program in its current form, it included a program objective. The Act specified that the purpose of the program is “intended to foster the growth of Maryland's technology sectors by incentivizing investment in early-stage companies with the goal of increasing the number of companies developing innovative technologies in Maryland, increasing overall investments in current and emerging technology sectors, and increasing the number of individual investors actively investing in Maryland's technology companies.”

In theory, the IIITC program achieves its goal of incentivizing investment in early-stage companies. The tax credit partially offsets the cost of an investment, which lowers the investor's

risk. Investors who receive a 33% tax credit only risk 67% of their investment amount, and investors who receive a 50% tax credit only risk half of their investment amount. Lowering the investor's risk may encourage someone to invest when they otherwise would not have done so, or it may encourage someone to invest more than they otherwise would have. In practicality, it cannot be determined whether the tax credit actually influences investor behavior or merely rewards investors for decisions they were already planning on making.

Increasing Innovation is an Appropriate Goal

DLS can identify a valid efficiency goal that is supported by economic theory for a government innovation incentive. Innovation is one of the key determinants of long-term economic growth and living standards. A program that is focused on promoting innovation will likely produce long-term benefits to the State. Indeed, the Maryland Innovation Competitiveness Study identified cybersecurity and information technology (especially software, network security, business-to-business services) and the life sciences (biomanufacturing, diagnostics, manufacturing, and contract research services) as Maryland's highest growth opportunities. Thus, the IIITC program's goal of increasing the number of companies developing innovative technologies in Maryland seems like an appropriate goal.

The IIITC program is just one of a number of programs in Maryland that are designed to take advantage of the State's unique opportunities in areas of technology and innovation. These other programs include the State's incubators, Maryland Technology Development Corporation (TEDCO) programs, university technology transfer activities, and direct investment. In Commerce's fiscal 2022 *Consolidated Incentives Performance Report*, it states that the goal of these programs is the commercialization of existing technology to create new economic activity and new startups. The core metric is generally related to the amount of investment leveraged, the number of startups nurtured, and "graduations" from incubators. The number of jobs created by the recipients is generally smaller than other programs initially, with greater potential for growth in later years. It goes on to state "as the purpose of this program is to attract investment to [QMTCs], any investment that is attracted counts as a successful outcome."

Federal Securities Laws and Pathways to Raise Capital from Investors

Under the Federal Securities Act of 1933, a business may not offer or sell securities unless the offering has been registered with the Securities and Exchange Commission (SEC) or falls within an exemption from registration. When raising capital through the sale of securities to potential investors in the public capital market (a public offering), the issuer must generally register the offer and sale of securities with SEC, a process that requires extensive information and additional subsequent reporting. Alternatively, a private company can raise capital by accessing private capital markets through an unregistered (private) offering in a transaction exempt from registration.

The private offering path allows private companies to avoid certain regulatory burdens and the increased oversight that comes with a public offering, with the intended effect of reducing issuance costs and the time required to raise new capital. This particularly benefits smaller firms for whom accessing public capital markets may generally be too costly. However, because of these accommodations, private offering alternatives are generally subject to investor restrictions (being an accredited investor) and/or offering limits. There are multiple exemptions available for small businesses looking to raise capital from investors, which include Rule 506(b) Private Placements, Rule 506(c) General Solicitation Offerings, Rule 504 Limited Offerings, Regulation Crowdfunding Offerings, Intrastate Offerings, and Regulation A Offerings. Depending upon which regulatory pathway a company chooses to raise capital, the company may be limited in how it can connect with potential investors. For example, the most commonly used offering exemption under the federal securities laws — Rule 506(b) of Regulation D — prohibits the use of general solicitation to market the securities.

Types of Investors

Capital from investors often provides funding in exchange for an ownership interest in the company. Friends and family, angel investors, and venture capital (VC) funds are common types of investors in early-stage companies. Friends, family, and founders are a critical source of early funds for technology and innovation companies. These investments are relatively modest, typically under \$50,000, but are often large enough to get the company through the earliest stage.

As the need for capital intensifies, a company may seek external investments from angel investors and networks who are often the only external private source of funds. Angel investors are generally high net-worth individuals who invest their own money directly in emerging businesses, typically in early funding rounds. Most angel investors are accredited investors (investors who meet specified income, net worth, or financial professional credentials), and many are current or former entrepreneurs themselves.

VC is a form of financing that is used primarily by young, innovative, and high-risk companies. Venture capitalists seek to identify promising innovations with high growth potential. VC can leverage a small amount of capital that helps create a large number of new fast-growing and innovative companies. In addition to providing capital in order to help bring these innovations to the marketplace, venture capitalists can also provide mentorship, strategic guidance, network access, and other support. VC funds are managed by professional fund firms, in contrast to other early-stage investment funding sources, such as angel and seed funding, which are typically made by individual investors. VC investments are highly speculative, and most of the companies that receive funding will ultimately fail. Because the investments are risky, venture capitalists will diversify their portfolios, thereby increasing the chances that one investment will generate significantly large returns that offset the losses on other investments.

Funding Rounds

A company raises money from investors on the same or similar terms within a specific time period through a funding round. A seed round is typically a company's first funding round, often raised from friends and family, angel investors, or early-stage funds in exchange for a convertible note. Capital at this stage may be used for product development and market research. Afterward, companies typically raise money from investors in a series of funding rounds in which investors, often including VC funds, provide money in exchange for preferred stock. Series rounds may also be broken into early-stage (Series A and B) and late-stage (Series C+). While the use of proceeds varies, commonly:

- Series A often supports a company with an initial customer base and proof of concept;
- Series B often supports a company scaling production and expanding customer base; and
- Series C+ often supports companies' optimizing operations in preparation of a future initial public offering.

While the capital raising industry often distinguishes between funding rounds by type of investor or series round, the federal securities laws do not differentiate in the same way. That means that regardless of whether the company calls it "early-stage," a "friends and family round," "angel round," "seed round," "Series A," or any subsequent or "later-stage" round of funding, the company must structure the deal to fit within one of the federal regulatory exemptions if it wishes to avoid having to register the offering.

Investment Tax Credits in Other States

Angel investor tax credits are a tool many states use to spur high-growth entrepreneurship. A majority of states, including Maryland, have established programs that provide income tax credits for angel investments in and VC funding for early-stage technology and innovation companies. These programs are commonly referred to as investment tax credit programs.

Maine established the first tax credit for investing in early-stage technology companies in 1988. Since then, 32 more states have enacted similar tax credit programs, although 9 states have allowed their programs to lapse. Angel investor programs vary according to the value of the credit, restrictions on the investments and companies that qualify, and other program requirements. DLS found that the value of tax credits typically vary from 20% to 50% of a qualifying investment. While states typically place limits on the maximum credits awarded annually and/or by an investor or for a company, DLS is not aware of any states placing limits based on industry in the same manner as the IIITC program. The IIITC program limits aggregate credit awards for a single technology sector to 25% of the total annual program appropriation. States typically set a maximum aggregate amount of investments within a single qualified business as opposed to setting a percentage like Maryland's IIITC program (as noted previously, the IIITC program limits the

amount tax credits that may be approved for investments in a single qualified company to 15% of the appropriations).

States appear to be concerned about insider investment activity, as most states prohibit tax credits if the individual who makes an investment has certain connections to the business. The most common restriction is related to employees or family members. A 2014 evaluation of the Minnesota Angel Investor Tax Credit Program found that 42% of survey respondents were a founder, executive, principal, or board member of the businesses in which an investment was made and 10% were an immediate family member of one. The evaluation stated that these investors have a strong personal stake in the firm's success and may have invested regardless of the tax credit. Maryland limits insider investment activity in the IIITC program by prohibiting a qualified investor from being a founder or current employee of a QMTC if it has been in active business for more than five years.

Several states provide set-asides or higher tax credits for minority- or women-owned businesses. Minnesota's Angel Tax Credit Program reserves 50% of available credits for those headquartered outside the Twin Cities seven-county metropolitan region and those majority-owned and managed by women or minorities. Likewise, the Illinois Angel Investment Tax Credit Program sets aside \$500,000 in tax credits (out of the \$10 million annual aggregate cap) for investments made in qualified new business ventures that are minority-owned businesses, women-owned businesses, or businesses owned by a person with a disability and \$500,000 in tax credits for investments in rural counties. New Jersey increases its angel investor tax credit from 20% to 25% if an investment is made in a certified minority business enterprise or women business enterprise or if the business is located in specified areas.

Tax Credits May Not Be the Most Effective Method to Encourage Investment

While increasing innovation is an appropriate goal, DLS questions whether an angel investor tax credit to offset the risk of private investments is the most effective way to accomplish this goal. Proponents of angel investor tax credits argue that there is a role for government to promote investment at an early stage when a start-up company has exhausted an entrepreneur's own funds and those of family and friends but before VC is readily available because there is a "market failure" for such funds when little is known about the opportunities. Securing capital is a constant challenge for developing technology and innovation companies but is most acute in the early stages of product and company development. SEC notes in its Office of the Advocate for Small Business Capital Formation fiscal 2022 annual report that access to capital was the number one barrier to company survival and 89% of entrepreneurs say access to capital is limiting their business growth potential.

Opponents, however, argue that the tax credits disproportionately benefit wealthy investors and fail to fully achieve their objectives. SEC generally requires an investor to be an accredited investor to invest in businesses conducting common types of exempt offerings. To qualify as an

accredited investor, an individual must have (1) annual income exceeding \$200,000 (single) or \$300,000 (with spouse or spousal equivalent) in each of the two most recent years; (2) more than \$1 million in net worth, excluding primary residence (single or with spouse or spousal equivalent); or (3) certain financial professional credentials. This federal requirement, in addition to the IIITC program requiring a minimum investment of \$25,000, makes the program likely to disproportionately benefit wealthy investors.

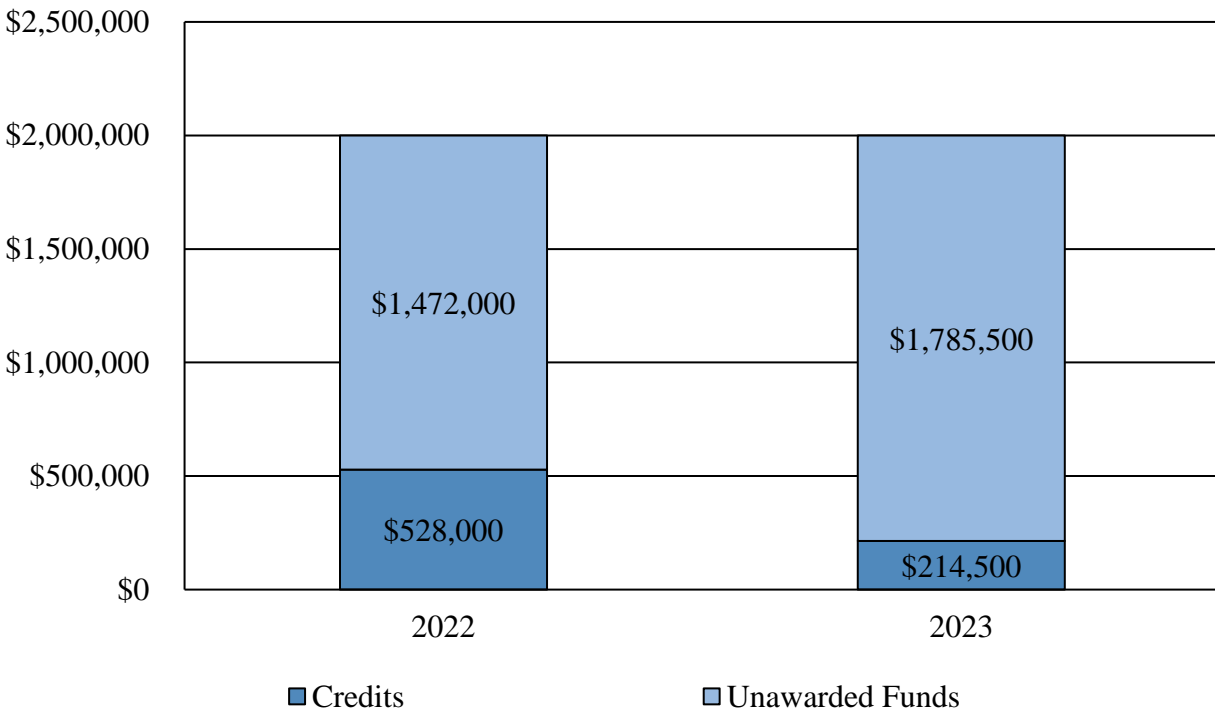
Academic research on angel investor tax credit programs has generally found that these programs increase investment but are ineffective in promoting high-quality entrepreneurship. An empirical analysis of states with angel investment tax credits found that the introduction of angel investment tax credit programs increase entrepreneurial activity on a state level. Another study found that angel investment tax credits increase the number of angel investments in a state by approximately 18% and that angel investment tax credits increase the average investment size by 14% to 17%. However, they also found capital flows to lower-quality firms suggesting that state-level investor tax credits are not effective in boosting high-growth entrepreneurship. A study in 2019 found that angel investor tax credits had a positive impact on angels' activity at the state level, but it did not lead to employment growth and had no measurable effect on local entrepreneurial activity or beneficiary company outcomes. Explanations for these findings were that the programs failed to screen out financially unconstrained firms and were often being used for tax arbitrage with many beneficiary companies having insider investments.

According to SEC's 2022 annual report, when facing financial challenges, common sources of capital for small and emerging businesses are grants or donations (71%), personal funds (61%), cash reserves (56%), and external financing, including with repayment (52%). For those small businesses that sought external financing, 76% used a loan or line of credit, and 29% used a credit card. Only 6% of small businesses that sought external financing sought equity investments. External financing through equity investments has some drawbacks, such as dilution of business ownership, sacrifice of some control over the company, and being potentially more expensive than borrowing, making it less than an ideal option for companies to pursue. Since the IIITC program requires an equity investment, the program limits itself to a narrow subset of companies, since only approximately 3% of small and emerging businesses seek external financing through equity investments (6% of the 52% seeking external financing). Thus, the IIITC program is not the most efficient way to increase the number of companies developing innovative technologies in Maryland. For example, changing the IIITC program to a program providing grants to companies developing innovative technologies would have a broader reach since 71% of small and emerging businesses seek grants or donations when faced with financial constraints as opposed to the 3% seeking equity investments through external financing.

Program Activity

The change from CIITC to IIITC was effective as of June 30, 2021, and the Governor must appropriate at least \$2.0 million in the annual budget bill to the Maryland Innovation Investment Tax Credit Reserve Fund. **Exhibit 1** shows the appropriation and awarded credits in fiscal 2022 and 2023. The fiscal 2022 and 2023 budgets each included \$2.0 million to the Maryland Innovation Investment Tax Credit Reserve Fund; however, only three investors received credits for investing in two QMTCs totaling \$528,000 in fiscal 2022 and only six investors made investments into one technology company totaling \$214,500 for fiscal 2023. Commerce has not issued any final tax credit certificates for fiscal 2023 as of July 2023 because the technology company has not yet qualified as a QMTC (companies have within four months of receiving an investment to qualify).

Exhibit 1
IIITC Awards Versus Appropriation
Fiscal 2022-2023



IIITC: Innovation Investment Incentive Tax Credit

Source: Department of Legislative Services; Department of Commerce

QMTCs for fiscal 2022 were located in Prince George's County and Baltimore City, and the potential QMTC for fiscal 2023 is located in Montgomery County. The program provides an enhanced credit for investments in QMTCs located in Allegany, Dorchester, Garrett, or Sommerset counties or within RISE zones that meet specific qualifications, but as of July 2023, no investments have qualified for the enhanced credits.

In fiscal 2022, one QMTC was in the energy and sustainability sector, while the other was in the cybersecurity sector, and the fiscal 2023 potential QMTC is in the life sciences sector. Commerce may not certify investments in a single technology company or a single technology sector that total more than 15% or 25%, respectively, of the total appropriations to the Maryland Innovation Investment Tax Credit Reserve Fund for that fiscal year. Awards have been within these limits, though the program came close to approaching the 15% company cap in fiscal 2022. In fiscal 2022, investors invested \$247,500 (12% of the fiscal 2022 appropriation) in one company and \$280,500 (14% of the fiscal 2022 appropriation) in another company, which were just below the 15% limitation (\$300,000 for that fiscal year). The technology sectors were also below the 25% limitation at 12% for the energy and sustainability sector and 14% for the cybersecurity sector in fiscal 2022. Credits consisted of less than 11% of appropriations in fiscal 2023, so company and sector caps also were not a factor in awarding credits in fiscal 2023.

In addition to having company and sector caps based on appropriations, the maximum an investor may receive for an investment is \$250,000 (or \$500,000 for an enhanced credit). Two investors (one located in Vancouver, Canada and the other in Baltimore City) came close to approaching that cap, being awarded \$247,500 each in tax credits for \$750,000 investments into QMTCs.

Although data for fiscal 2023 is not yet finalized as of July 2023, Commerce has issued tentative credits of \$214,500 for six investments in one company, Acrew Imaging, headquartered in Montgomery County. One of the investments was made by the company's chief innovation officer. While statute prohibits founders or current employees from receiving a credit if the company has been in active business for more than five years, Acrew Imaging has been in business for approximately four years.

Program Is Undersubscribed

In its testimony in support of Chapter 113, Commerce advised that the legislation had two primary effects, one of which was that the IIITC program would cover more businesses under the broader industry scope. Under the prior CIITC program, qualifying investments were only made in one to three qualifying businesses annually between fiscal 2014 and 2020, with the program awarding less than \$500,000 on average annually between fiscal 2016 and 2020. Commerce attributed the CIITC program undersubscription in part due to definitional constraints that limit the number of firms that are eligible. Commerce predicted that broadening the scope of the CIITC program would attract investment in more businesses. However, that has yet to

materialize with the new IIITC program only benefiting two companies in fiscal 2022 and one company in fiscal 2023.

Of the \$2.0 million appropriation to the reserve fund in fiscal 2022 and 2023, Commerce only awarded tax credit certificates totaling a little over a quarter (26.4%) of the appropriation in fiscal 2022 and only 10.7% in fiscal 2023. When asked about the program's underutilization, Commerce cited the following factors: (1) entry barriers for technology companies; (2) restrictive timing requirements for investments; and (3) multiple credit caps confusing or deterring investors.

Commerce noted that barriers to entry make participation unattractive to technology companies, especially newer companies, which prefer to maintain flexibility in operations. Eligibility requirements such as having a headquarters and base of operations in Maryland and an aggregate capitalization of at least \$100,000 have prevented some companies from participating. These requirements may be unattainable for some companies, especially recent start-ups.

The IIITC statute requires that investments be made within the 30-day period after they are authorized by Commerce. Companies looking to raise money via investment may not be ready to give up present ownership in the company but rather may want to raise money through convertible notes or other similar investment vehicles. Convertible notes are acceptable for the IIITC program but still must be converted into stock along a short-term timeline. Technology companies routinely report that their investors are looking for as much certainty in the program as possible. There are several statutory caps that restrict credit availability and decrease investor certainty. The program has an overall annual credit cap, each investor is subject to an individual credit cap, each company is subject to a cumulative credit cap for their investors, and each technology sector is subject to a cumulative credit cap for investors in that tech sector. Additionally, DLS questions if current awareness of the program by both companies and investors is a factor and if so, whether activity might increase as the program matures.

Administrative Costs

Commerce administers the IIITC program. Commerce must approve tax credit applications from investors and determine whether a technology company qualifies for investments that are eligible for tax credits. Currently one program administrator spends a portion of their time overseeing the program at Commerce, so administrative costs are minimal. While administrative costs of the program are eligible to be deducted from the IIITC reserve fund, as of July 2023, Commerce has not deducted any administrative costs from the fund.

Diversity Challenges and Opportunities

Lack of Diversity in Angel Investors

Studies have shown that angel investors typically are White males. A recent study reported that 87% of angel investors in their study were male, which was in line with other studies reporting that between 80% and 92% of angel investors are male. Similarly, the study identified 95% of investors appearing to be White in their study while another study reported 87.6% of respondents being White.

SEC's 2022 annual report notes that 33.6% of angel investors in 2021 were women, and women remain underrepresented among VC and micro fund checkwriters. The report also mentions promoting and recruiting women checkwriters can open doors for more women founders and diversify portfolios. Additionally, the SEC reports 4.1% of angel investors in 2021 were minorities. While only 1.4% of the total assets under management in the United States are in minority-owned funds, they are three to four times more likely than non-minority-owned funds to fund minority entrepreneurs. SEC's 2022 report states that "diversifying the pool of investors and capital allocators facilitates greater funding of diverse founders...Therefore, policies that have a negative impact on underrepresented investors further impede investment in the next generation of diverse innovators working to grow their companies".

Angel investors generally must be accredited investors, and the accredited investor definition largely determines whether an individual is eligible to invest in many early-stage companies. SEC states that "entrepreneurs who are African American/Black or Hispanic/Latino face additional barriers to entry because the increasing wealth gap affects their ability to tap personal assets as a funding source" and disparities in income distribution add additional hurdles to overcome. SEC goes on to state that "African American/Black and Hispanic/Latino investors are excluded from the accredited investor definition at higher rates than White and Asian American/Pacific Islander investors due, in large part, to historic wealth inequality".

Lack of Diversity in Inventors and Entrepreneurs

SEC's 2022 annual report notes that the gender gap in new entrepreneurs has been persistent over the past 25 years and continued in 2021 with 28 out of 10,000 women becoming new entrepreneurs compared to 45 out of 10,000 men. In 2021, women-only-led teams received 5% of invested seed capital while men-only founders received 84% of invested seed capital, with the remaining 11% to women and men founders. The Center on Budget and Policy Priorities (CBPP), a nonpartisan research and policy institute, issued a report highlighting that (1) 82% of inventors are men; (2) White children are three times likelier than Black and eight times likelier than Latinx children to invest; and (3) children from affluent families are nine times likelier to invest than those from low-income families. According to CBPP, investing in women, people of color, and children from low-income families who are historically shown to be less likely to

become inventors provides an opportunity for states to bolster economic growth. These national findings were in line with the findings of a recent study engaged by TEDCO.

The fiscal 2023 budget restricted \$250,000 for TEDCO to conduct a study on the effectiveness and impact of the State's current economic development strategy as it relates to specific areas, including financial, policy, and governance recommendations for the establishment of a Maryland Equitech Growth Fund. TEDCO hired a consultant to conduct the study, and the resulting report was submitted in January 2023. The report, entitled *Maryland Innovation Competitiveness Study*, analyzed Maryland's high-tech industry growth in comparison with other states; employment in science, technology, engineering, and math (STEM) jobs; business ownership by race, ethnicity, and gender; and opportunities for Maryland to support high-tech industry growth in an inclusive way.

The study found that "Black and Hispanic owners represent 7% and 3%, respectively, of all companies with employees (any industry sector). It will take an estimated 47 years for Black business owners to reach representational parity based on a 2012 through 2019 compound annual growth rate (CAGR) of 3.2%. The gap for Hispanic owners is widening rather than closing, based on a 2012 through 2019 CAGR of -0.4%. Black founders represent less than 1% of venture-backed companies in Maryland, and no data are available for Latinx founders. Women represent 23% of owners of companies with employees. It will take an estimated 43 years to reach representational parity based on a 2012 through 2019 CAGR of 1.9%. No data are available for female founders of venture-backed startups in Maryland, but they represent 7% of VC deals and 2.4% of VC investment nationally."

The study also reported that "[one] study indicated that, in Maryland, in 2021, high-tech firms founded by Black individuals received 0.67% of VC investment dollars" and data "indicated that 73% of employer firms (companies with one or more employees, as opposed to self-employed individuals) are White-owned and 77% are male-owned".

Recommendations from the report include that Maryland should (1) develop a high-tech industry recruitment and expansion strategy with a focus on high-tech manufacturing; (2) focus on workforce development, including degree and non-degree certificate programs, to expand the participation of women, people of color, and first-generation college students in STEM careers; and (3) expand entrepreneurial leadership training and mentoring for people of color and women as well as investments in companies and venture funds led by people of color and women.

Chapters 461 and 462 of 2023 established the Equitech Growth Commission and Fund in TEDCO to support economic competitiveness and inclusive growth of emerging and advanced industries in the State. By July 1, 2025, the commission must develop an inclusive, comprehensive, long-term strategic plan and 10-year goals for growing the State's innovation economy to be highly competitive with other states and regions relative to growing, attracting, and retaining a skilled workforce and high-growth businesses. The strategic plan must include mechanisms to increase the participation of communities in the innovation economy, create pathways for high-paying jobs,

and increase and expand wealth in minority communities. The new fund will support the economic competitiveness and inclusive growth of emerging and advanced industries in the State through the creation of supporting infrastructure assets, resources, and a diverse workforce that builds the strengths of the State's economy.

In SEC's 2022 Small Business Forum report, policy recommendations from participants included ensuring that capital raising rules provide equitable access to capital for underrepresented founders and investors.

Findings and Recommendations

The IIITC program in its current form is in its early stages, and the lack of activity precludes DLS from being able to make more robust recommendations as with other tax credit evaluations. However, based on the information provided above, DLS makes several findings and recommendations about the IIITC program as follows.

Program Is Undersubscribed and May Not Be Aligned with Other State Goals

The previous CIITC program was undersubscribed with only one to three recipients receiving the credit annually between fiscal 2016 and 2020. The current IIITC continues to be undersubscribed with Commerce only awarding a little over a quarter of the credits appropriated to the reserve fund in fiscal 2022 and a little over one-tenth of the credits appropriated in fiscal 2023. There is no evidence of a strong demand for either the previous or current CIITC programs. According to Commerce, the balance in the reserve fund as of November 2023 is approximately \$2.9 million.

Meanwhile, Chapters 461 and 462 created the Equitech Growth Commission, which must develop an inclusive, comprehensive, long-term strategic plan and 10-year goals for growing the State's innovation economy to be highly competitive with other states and regions relative to growing, attracting, and retaining a skilled workforce and high-growth businesses. The strategic plan must include mechanisms to increase the participation of communities in the innovation economy, create pathways for high-paying jobs, and increase and expand wealth in minority communities. Given the lack of diversity generally found in existing angel investment tax programs and the underrepresentation of people of color and women in high-tech companies and start-ups, DLS questions whether the IIITC program is the most appropriate way to increase innovation.

Recommendation: Given the low utilization of the program, DLS recommends that the General Assembly allow the IIITC program to abrogate on June 30, 2025, as currently scheduled, since there is not currently a high demand for the program. DLS also recommends redirecting funds from the IIITC reserve fund to the Equitech Growth Fund to help grow the State's innovation economy or to the General Fund.

If the General Assembly wishes to retain the credit beyond fiscal 2025, Commerce should improve efforts to increase awareness of the tax credit. Given the lack of diversity typically found in angel investment tax credit programs, Commerce should conduct outreach in a manner that ensures a wide array of diverse applicants.

Program Limitations Based on Appropriations Provide Uncertainty

Commerce may not certify investments in a single technology company or a single technology sector that total more than 15% or 25%, respectively, of the total appropriations to the Maryland Innovation Investment Tax Credit Reserve Fund for that fiscal year. These limitations provide additional uncertainty to investors. Appropriations to the IIITC Reserve Fund may fluctuate from year to year, so it can make it difficult for investors to plan their investments. Additionally, it is difficult for investors to know whether the cap for a technology sector is at or near its limit.

Recommendation: DLS recommends the General Assembly eliminate the prohibition against certifying investments in a single technology company or a single technology sector that total more than 15% or 25%, respectively, of the total appropriations to the Maryland Innovation Investment Tax Credit Reserve Fund for that fiscal year.

Program Performance Metrics Do Not Align with Statutory Goals

In Commerce's fiscal 2022 Maryland Jobs Development Act report on the IIITC program, it states "as the purpose of this program is to attract investment to QMTCs, any investment that is attracted counts as a successful outcome." However, statute clearly defines the program's goals "to foster the growth of Maryland's technology sectors by incentivizing investment in early-stage companies with the goal of increasing the number of companies developing innovative technologies in Maryland, increasing overall investments in current and emerging technology sectors, and increasing the number of individual investors actively investing in Maryland's technology companies." Based on the goals listed in statute, Commerce should be determining success by measuring (1) the number of companies developing innovative technologies in Maryland; (2) the overall investments in current and emerging technology sectors; and (3) the number of individual investors actively investing in Maryland's technology companies.

Recommendation: Commerce should define performance metrics for the program that align with the goals of the program stated in statute and periodically evaluate the program using those metrics.

Commerce Does Not Award Credits on a Competitive Basis

The State tax credit program awards credits on a first-come, first-served basis if the company meets program requirements. Since the program is undersubscribed, all applicants that meet the program's requirements receive the credit, so the manner in which Commerce awards the credits makes no difference in who receives the credit. Chapter 113 required Commerce to study

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and report to the General Assembly on the methods and criteria by which the department may award the program's tax credits on a competitive basis. Commerce evaluated awarding credits using a first-come, first-served method; a lottery system method; and a competitive review method. After considering the pros and cons of each method, estimating the fiscal resources needed for each method, and surveying stakeholders, Commerce recommended the continuation of the current first-come, first-served allocation method for the IIITC program.

Recommendation: If the program becomes fully subscribed, the General Assembly should consider reexamining the effectiveness and manner by which Commerce awards credits and may want to consider setting aside a portion of tax credits for minority and women-owned businesses to the extent permitted under federal and State law.

Program's Objectives Could Be Better Achieved Through Alternative Methods

Innovation is a key driver in economic growth in the United States. The Congressional Research Service states that "in general, economists agree that technological innovation has accounted for a major share of long-term growth in real per-capita income in the United States."

In SEC's annual report, it notes that individuals with a mentor are five times more likely to plan to start a business than those without a mentor, and the introduction of accelerators to a region have a significant impact on the number of early-stage deals for new businesses. The 2022 Office of the Advocate for Small Business Capital Formation annual forum report likewise states that one of the biggest resources for new entrepreneurs is having relationships with entrepreneurs who have been through the process.

Recommendation: The General Assembly should consider directing funds to other programs that create innovation, such as technology incubators, that could provide a more effective means of reaching innovation goals than just financial support to entrepreneurs.

We wish to acknowledge the cooperation and assistance provided by Commerce. DLS trusts that this information will be useful to members of the General Assembly in its deliberations about the IIITC program.

Sincerely,



Victoria L. Gruber
Executive Director



Ryan Bishop
Director

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