



**Maryland Technology Development Corporation
FY 2026 Operating Budget
Response to Department of Legislative Services Analysis**

House Appropriations Committee
Subcommittee on Education & Economic Development
Delegate Stephanie Smith, Chair
February 13, 2025

Senate Budget & Taxation Committee
Subcommittee on Education, Business & Administration
Senator Nancy King, Chair
February 14, 2025

TESTIMONY OF TROY A. LEMAILE-STOVALL
Chief Executive Officer, Maryland Technology Development Corporation

TEDCO Response to DLS Analysis: Concur

TEDCO appreciates the thorough work and analysis done by DLS analyst Elizabeth Waibel and acknowledge and concur with her recommendations.

TEDCO Response to DLS Request: TEDCO should comment on the possibility of MSCRF offering loans to later-stage companies, especially if it continues to expand its manufacturing awards:

In FY 2023, MSCRF launched the Manufacturing Assistance Grant Program. The initiative, which is designed to mitigate risks in the development and approval of regenerative medicine while fostering the expansion of Maryland's manufacturing workforce, aligns with the needs of the maturing ecosystem and has been an important tool in our efforts to fortify biomanufacturing in Maryland. The Manufacturing Assistance Grant Program supports local companies in establishing cutting-edge manufacturing facilities and optimizing manufacturing. Funding under this program is awarded in the form of grants.

MSCRF's Manufacturing Assistance Program was specifically designed as a grant program to incentivize companies to build crucial infrastructure without the burden of repayment, which encourages them to expand their operations and workforce, ultimately fostering a commitment to remain in the state—a phenomenon we refer to as “stickiness.”

MSCRF's grant framework includes a crucial requirement for equal matching funds, ensuring that companies actively seek additional non-state resources to enhance their financial backing. This approach encourages fiscal responsibility and promotes a sustainable growth model within the ecosystem, enabling innovative curative treatments to reach patients efficiently and cost-effectively.

Providing funding as grants allows companies to attract outside capital and stimulate economic activity in Maryland. This strategy enhances the viability of these companies and contributes to the overall growth and vibrancy of the state's life sciences ecosystem.

Shifting to a loan model could discourage both entrepreneurs and established companies from applying due to the associated financial pressures. For instance, had Theradaptive—a clinical-stage company in Frederick, MD, benefiting from the manufacturing assistance grant program—been required to take on a loan, it may not have pursued building its manufacturing infrastructure or consolidating R&D activities in Maryland. The company attracted millions in non-state dollars to support its infrastructure development, an achievement made possible through grants.

Additionally, although MSCRF has had a tremendous impact not only on the state's ecosystem, but also the larger global ecosystem, it is staffed by a team of three dedicated individuals. The increased complexity of designing, underwriting, issuing, monitoring, and managing loans would require additional resources which far exceed the current capacity of the program.

Maintaining the Manufacturing Assistance Program's design as a grant program is essential for driving innovation, stimulating the growth of the manufacturing sector, creating jobs, and enhancing Maryland's economy. By keeping this program focused on grants, MSCRF can continue fueling transformative research and economic expansion in the state.

Introduction

Chairs King and Smith, members of the Committees, thank you for the opportunity to discuss TEDCO's fiscal 2026 budget allowance. I would also like to thank DLS analyst Elizabeth Waibel, for her thorough analysis.

While many of you are familiar with TEDCO, for the benefit of those who are not, TEDCO, Maryland's **economic empowerment organization**, was created in 1998 to grow the State's technology-based economy through the creation of jobs, new products and services, and other economic opportunities. TEDCO primarily acts through advancing technology, entrepreneurial support, and investment programs.

As Maryland looks at our competitive standing and how to better build an inclusive, equitable economy, innovation will be the thing that drives us forward; innovation is, due to Maryland's strategic investment, something we have leadership on and can do. The status quo is not a viable growth strategy for Maryland. As we look to the rapidly evolving future, new entrepreneurial opportunities will help keep us safe, improve quality of life, allow more efficient and effective global teams, and deliver even more value from e-commerce.

TEDCO appreciates the funding provided by the Moore Administration to TEDCO's funding and programmatic efforts in the State's Fiscal Year (FY) Budget; we stand ready to continue to serve the State.

With the support provided by the State of Maryland, TEDCO's six core programs generated **at least \$2.7 billion in Maryland economic activity as of 2023, supporting a total of 12,000 jobs and generating estimated annual state and local government revenues of \$140 million.**

This impact affects every part of Maryland's ecosystem. For example:

- TEDCO supports medical researchers through the Maryland Stem Cell Research Fund as we seek innovations in and cures for addressing diseases like cancer, diabetes, and sickle cell anemia.
- TEDCO collaborates with Maryland's five world class research institutions through the Maryland Innovation Initiative, a program that seeks to move research to the marketplace and builds innovation and entrepreneurial touch points at our comprehensive institutions.
- TEDCO impacts Maryland's first-in-nation number of federal facilities via our federal efforts to bring those innovations to Maryland-based entrepreneurs.
- TEDCO touches every county – urban and rural – via our Rural Business Innovation Initiative and our Urban Business Innovation Initiative efforts that seek to stitch all the necessary elements to ensure early-stage success.
- TEDCO positively impacts communities that have long been underinvested by increasing our Marketing and Investment efforts, leading to more than half of our investments over the last three years going to Maryland-based enterprises started by a person of color , a woman and/or a founder from our rural communities.

Further, as an organization, TEDCO impacts the TEDCO team as we make investments in our talent and infrastructure to better serve each other and the Maryland ecosystem.

A core focus for TEDCO, in serving the Maryland innovation ecosystem, is stitching and scaling, through collaborative TEDCO efforts, creating more cohesion and connectivity to support our Maryland entrepreneurs.

The following is a summary of some of the new TEDCO initiatives supporting and powering Maryland's entrepreneurs and innovative ecosystem.

TEDCO's Entrepreneur Expo: Convening 1,000+ Maryland Innovators

In December 2024, TEDCO relaunched TEDCO's Entrepreneur Expo. This [award-winning](#) event was established to spotlight entrepreneurship in the region by bringing together Maryland's various assets for a day of celebration. The event hosted over 24 unique sessions featuring 111 speakers including, Governor Wes Moore, House Ways & Means Chair Vanessa Atterbeary, Appropriations Education and Economic Development Sub-Committee Chair Stephanie Smith, former Maryland Commerce Secretary Kevin Anderson, and Maryland Labor Secretary Portia Wu, among others. Over 1,000 attendees participated in this ecosystem wide event.

Equitech Growth Fund: Powering Maryland Innovation Job Growth and Infrastructure

In FY 2025, TEDCO also announced the release of the Equitech Growth Commission's Preliminary Strategic Plan: Funding Plan & Priorities as well as the inaugural award cycle for the Equitech Growth Fund. The Equitech Growth Commission (The Commission) was established by legislation in 2023 (CH 461 of 2023) and is tasked with developing an inclusive, comprehensive, long-term strategic plan and 10-year goals geared towards creating a highly competitive innovation economy in Maryland that grows, attracts, and retains a skilled workforce and high-growth businesses. The Commission consists of leaders from various State entities, institutions of higher education, trade and non-profit organizations, and legislative and gubernatorial appointees from the business community each bringing unique insights and perspectives to inform the development of the strategic plan and 10-year goals.

Over 75 applications, totaling over \$30 million in needs, were received in the inaugural award cycle of the Equitech Growth fund. Ultimately, 14 projects, totaling \$6.9 million, were selected to receive awards. Awards were made in two categories of projects – infrastructure (6 projects, \$4.7 million) and workforce development (8 projects, \$2.2 million). Awardees were selected based on criteria developed to align with the Equitech Growth Commission's Preliminary Strategic Plan: Funding Plan & Priorities. Awarded projects included:

- **Allegany County**
 - Regulated Medical Waste Recycling Facility, CLYM Environmental Services, LLC - \$1,000,000
- **Baltimore City**
 - LaunchPort Medtech Manufacturing Acceleration – Workforce & LaunchPort Medtech Manufacturing Acceleration - Infrastructure, LaunchPort, LLC (received awards for two projects) - \$234,100&\$41,500
 - Community-Centered Advanced Manufacturing in Baltimore's Underserved

Communities, Early Charm Ventures -\$1,200,000

- **Caroline County**
 - The Data Analytics Apprenticeship Accelerator (DA³) , Health Tech Alley - \$135,500
- **Howard County**
 - Cyber Workforce Accelerator Infrastructure Project (Statewide), Maryland Association of Community Colleges - \$935,680
- **Montgomery County**
 - HJF Innovation Labs at Montgomery County MD, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. - \$904,237
 - Teach for the Future , KID Museum - \$250,000
 - Reskilling Frontline Workers for Careers in Cybersecurity, Escalate USA Inc - \$250,000
 - Life Science Sector Connector (Biohub Master Class), Worksource Montgomery Inc. - \$250,000
- **Prince George's County**
 - Inclusive Mentorship Program for Advanced Computing Talent in Maryland (IMPACT Maryland), The Coding School - \$250,000
 - Cyber Ready Clinic, TCecure, LLC - \$786,216
- **Talbot County**
 - Eastern Shore Agbiotech Manufacturing Facility, Eastern Shore Entrepreneurship Center - \$625,000
- **Washington County**
 - USMH Applied Computer Science Lab , University System of Maryland at Hagerstown - \$97,127.50

In terms of impact, the Equitech Growth Fund 2024 award cycle is projected to support training for more than 3,200 students studying information technology (IT), placing 2,500 of these students into jobs annually, and support the creation of more than 160 science, technology, engineering and math (STEM) jobs in Maryland during the first year alone.

Over the next five months, the Commission will analyze findings from the inaugural round of awards from the Equitech Growth Fund to refine the Equitech Growth Commission's Final Strategic Plan: Funding Plan & Priorities, which will be released on July 1, 2025.

Cyber Maryland: Launching Maryland's Progress towards a National Cyber Epicenter

As noted in DLS's Analysis of TEDCO's budget, SB241/HB82 has been introduced this legislative session, which would move the Cyber Maryland Program from TEDCO to Maryland Department of Labor. Given a greater mission alignment between the Cyber Maryland Program and Maryland Department of Labor, TEDCO is in support of the program transfer.

Chapter 578 of 2023 established the Cyber Maryland Program in TEDCO and tasked the program with creating a cybersecurity talent pipeline, serving as a hub for State workforce development programs in cybersecurity, and generally coordinating cybersecurity, research, and

innovation in the State. The Act also created the Cyber Maryland Fund, a special, non-lapsing fund, and the Cyber Maryland Board.

In FY 2025, TEDCO convened the Cyber Maryland Board to better understand the state's robust, but fragmented ecosystem. The Cyber Maryland Program, under the guidance of the Cyber Maryland Board, commissioned and released '[*Cybersecurity Workforce Analysis and Strategy*](#),' an analysis of the current state of Maryland's cybersecurity workforce ecosystem. Building off the findings of the report, the Cyber Maryland Board partnered with the Governor's Workforce Development Board within the Maryland Department of Labor to engage over 65 industry leaders, educators, and other stakeholders across the state to coordinate an ecosystem wide action plan.

Throughout this process, it became clear that Maryland is the national epicenter for cybersecurity; as a result, there is a global significance to developing Maryland's cybersecurity workforce. The development of a robust workforce pipeline that meets the demands of Maryland's cybersecurity ecosystem requires extensive resources and staff capacity, which can be achieved most efficiently and effectively through strong mission alignment.

Given the strong strategic alignment between the mission of the Cyber Maryland Program and the mission of the Maryland Department of Labor, TEDCO fully supports the transfer of the Cyber Maryland Program, Fund, and Board as proposed in SB241/HB82, and is committed to working collaboratively and strategically with the Maryland Department of Labor to facilitate the proposed program transfer should the legislation pass.

Updates on FY25 New Programs

In addition to the previously mentioned initiatives, TEDCO, with the support of the Maryland General Assembly and Administration, has launched the following to better meet evolving ecosystem needs.

SBIR/STTR: Improving Maryland Small Business "Win" Rate on Federal Funds

TEDCO appreciates the budget allowances provided in the FY 2025 budget to support the Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) program. The SBIR/STTR programs, coined "America's Seed Fund," bring federal dollars into the State of Maryland to support early-stage, technology-based companies and better prepare them for capital investment from TEDCO and other investors, which is needed to scale the businesses and create jobs. Increasing the number of entrepreneurs pursuing this funding through incentives and increasing the award rate by improving proposals through technical assistance presents a significant economic benefit to the State. To date, regulations for the program are in the process of being promulgated and TEDCO anticipates final adoption of the regulations in early spring 2025.

Human Relevant Research Fund: Positioning Maryland as a National Leader in a Cutting-Edge Industry

In 2023, CH448 passed, establishing the "Human-Relevant Research Fund" (HRRF) at TEDCO. The bill established an annual fee on all Maryland research facilities conducting research with non-human animals, to be collected by the Maryland Department of Health (MDH) based on the number of animals used, with payments ranging from \$5,000 to \$75,000. Collected funds are transferred to TEDCO and are to be used to establish a program that promotes research focused on developing alternatives to animal testing. In FY 2024, fees generated from the program are estimated to be \$840,000. DBM, TEDCO and MDH have been engaged in discussions regarding transfer of funds from MDH to TEDCO.

Related to the HRRF, TEDCO has become aware of growing developments within Federal Regulatory Agencies in the field of New Approach Methodologies (NAMS) (alternatives to animal testing) ecosystem, and TEDCO has approached a number of organizations focused on the development and acceleration of the NAMS ecosystem to work collaboratively on this initiative. TEDCO is pleased to be working collaboratively with these organizations on the forefront of this emerging industry.

Workgroup on Independent Innovation in Prince George's County

CH677 of 2023 established the "*Workgroup on Independent Innovation in Prince George's County*" in TEDCO, tasking the workgroup with:

- Discussing and making recommendations regarding strategies to support investments in industry opportunities and potential areas of innovation;
- Identifying and collaborating with a group of angel investors based in Prince George's County in order to:
 - encourage investment in Prince George's County, including investments at the preconceptual stage; and
 - strengthen an innovation-focused entrepreneurial system; and
- collaborating with TEDCO and other stakeholders in order to build partnerships and develop strategies to build Prince George's County's potential to become a hub for entrepreneurs and technology start-up companies.

To date, the workgroup has convened four meetings and has formed 3 workgroups focused on objectives including:

- Objective 1 – Target Tech Industry Opportunities and Investment Opportunities
- Objective 2 – Strengthening the early-stage investment (preconceptual/conceptual) ecosystem
- Objective 3 – Building partnership with TEDCO and the Innovation ecosystem

A final report on recommendations will be developed and provided on January 15, 2026.

Concept Capital

In FY 2025, TEDCO launched Concept Capital program, an initiative to bridge the early-stage funding gap for underrepresented entrepreneurs across Maryland. The program was created to provide flexible funding and specialized support to founders, thereby ensuring they are prepared for future venture opportunities.

To be eligible to participate in the Concept Capital Program applicants must be:

- A Maryland-based business (principal office in Maryland with 51%+ workforce in-state)
- A Technology-driven business (non-retail focus)
- Founded within the last 7 years
- A founder or business located in a rural or disadvantaged community, or a socially and economically disadvantaged individual (SEDI), including minority, disabled, or female founders.

To date, the Concept Capital Program has deployed \$200,000 of funding into companies representing a cross section of rural-based, socially or economically disadvantaged founders. The first two deployments through the program were to Plainr and Sybal, and last December TEDCO held its first ever Concept Capital Pitch Competition at TEDCO's Entrepreneur Expo.

During Concept Capital Pitch Competition, five early-stage companies that had previously applied to either TEDCO's Rural Pre-Seed Fund or the Social Impact Funds pitched their innovative solutions to real-world problems in a friendly competition to be awarded an additional \$25,000 in funding through the program, on top of \$25,000 that they already received. The five participating companies included:

- Plainr, Lydia Ofori, Baltimore (Winner)
- Game4Good, Dexter Carr, Baltimore
- Cravvn, Schapiro Kula, Beltsville
- Pedestal, David Asbery, Middle River
- ThermoReg, Larry Sumerville II, Baltimore

Additionally, through the Concept Capital program, TEDCO has committed \$100,000 to be deployed in Prince George's County for start-ups aligned with the objectives of the Prince George's Innovation Workgroup.

Since the start of 2025, NurseLynx, a Carroll County based startup, has also received \$25k in our rolling application process, and TEDCO anticipates deploying another \$100k in Concept Capital before the end of our fiscal year in June.

Programs Supporting the Federal Baltimore MSA Tech Hub Initiative:

TEDCO is an active member in the Great Baltimore Committee led Baltimore-Columbia-Towson MSA Tech Hub Consortium and is committed to working with our consortium collaborators to strengthen Maryland's competitiveness as a global economic leader in artificial intelligence (AI) and biotechnology, while promoting an equitable innovation economy. To that regard, we are grateful for the faith the state has put in TEDCO as stewards of public funds through funding allowances to support the addition of new initiatives related to the Tech Hub initiative. The MSA area includes Baltimore City, Anne Arundel, Baltimore, Carroll, Cecil, Harford, Howard, and Queen Anne's Counties. A brief update of the initiatives introduced in 2024 are provided below:

- **Baltimore Innovation Initiative (BII) Pilot Program:** The Baltimore Innovation

Initiative, housed within the Maryland Innovation Initiative (MII), supports technology commercialization for Colleges and Universities in the Baltimore-Columbia-Towson MSA prioritizing products or services aimed at integrating artificial intelligence or machine learning in health care and biotechnology sectors. The program builds off the learnings from the successful MII University Partnership Pilot Program in 2023 that expanded eligibility of MII to Bowie State and Frostburg State Universities, launching the next evolution of MII that provides opportunities for new institutions to participate.

The objectives of the BII include:

- Advancing technologies and technology-based startups from faculty, staff, and students across BII's eligible institutions;
- Creating lasting infrastructure supporting innovation, entrepreneurship, commercialization, and technology transfer in the Tech Hubs region and for Tech Hubs focus technology areas;
- Supporting the culture of innovation and entrepreneurship across eligible institutions; and
- Fostering collaboration across eligible institutions and with other key collaborators, including industry collaborators and federal laboratories.

A program manager for the BII was hired in FY 2025; grants are anticipated to be disbursed through two unique grant mechanisms:

- **Technology Advancement Grants:** Advancing technologies toward commercialization via collaborative institutions; these grants will offer up to \$50,000 for single institution awards or \$75,000 for joint-institution awards and are open to students, faculty, and staff at participating institutions
- **Entrepreneurship and Commercialization Programming and Infrastructure Grants:** Creating or augmenting programming to support tech-based entrepreneurship. Up to \$50,000. Open to entrepreneurship and commercialization programs operated by BII-participating institutions

The first round of grants are anticipated to be selected by late Spring 2025.

- **Pava LaPere Innovation Acceleration Grant Program:** TEDCO was deeply saddened by the tragic passing of Pava LaPere. Pava was a TEDCO friend and collaborator. We had the great opportunity to work with and support Pava in her capacity as CEO of EcoMap Technologies. Given her tireless advocacy and championship of supporting entrepreneurship we can think of no better way to preserve her legacy than through the Pava LaPere Innovation Acceleration Grant Program, and we are honored to support this program within TEDCO.

In FY25, TEDCO partnered with UpSurge Baltimore for administration of the program. A steering committee of 19 universities evaluated over 39 student ventures and ultimately selected 9 student ventures for awards. Awardees will be announced at the [Maryland Student Venture Showcase](#) on February 18.

As the state ecosystem continues to evolve and grow, TEDCO remains focused on scaling and stitching our investments and programs to have a greater impact on Maryland’s entrepreneurs, innovation economy, and serving underserved communities and entrepreneurs. TEDCO also recognizes that we must enhance our data collection processes and analysis to support entrepreneurs, provide more meaningful data to our stakeholders, and have initiated efforts to address these needs. TEDCO will also continue to work to improve our reach to underserved communities and individuals. With the right strategies, Maryland has the potential to cultivate an innovation ecosystem with global recognition for social innovation and impact.

TEDCO appreciates the support, leadership and partnership with the Maryland General Assembly. With your vision and support TEDCO continues to be a national leader in tech transfer, commercialization, and powering ecosystems and innovators across Maryland. The remainder of this written testimony covers each of TEDCO’s programs and specific achievements made in the last fiscal year.

TEDCO Program Overview

Mission

Enhance economic empowerment by fostering an inclusive entrepreneurial and innovation ecosystem. Identify, invest in, and help grow technology companies in Maryland.

Vision

TEDCO will be the recognized national leader for supporting translational research, and technology-based, economic, and entrepreneurial development while being the hub of Maryland’s innovation ecosystem.

Core Values

TEDCO’s core values unite us, guiding our efforts and interactions with people inside and outside of TEDCO. They are critical in TEDCO’s commitment to excellence in carrying out its mission and serving its stakeholders:

- ***Accountability*** – We take responsibility for our actions and for adherence to our mission; we ensure that this responsibility is ingrained throughout the organization. We measure our activities and report our outcomes to our stakeholders. We do the right thing.
- ***Collaboration*** – We focus on building trust and credibility across the organization and with our customers. We are transparent in the exchange of ideas and our encouragement of one another. We value teamwork in our pursuit of supporting innovation and entrepreneurial excellence.
- ***Integrity*** – We provide the best quality service to our customers and strive to exceed expectations. We pursue innovation and entrepreneurial success with the highest regard

for moral and ethical standards. We stand by what we say and what we do, and we always act in an honest and open way.

- **Respect** – We uphold a culture of respect at work, within our communities and nationally. We embrace diversity and value our employees for their individuality and the unique perspectives that they bring to the organization.
- **Stewardship** – We take seriously our responsibility to manage scarce resources and to serve as stewards of State, Federal, and private funds. We value our ability to carry out our mission and to serve our customers in an efficient and fiscally responsible manner. We encourage and empower TEDCO’s staff to act in accordance with our culture.

Technology Transfer and Commercialization

Maryland Stem Cell Research Fund

Funding for the Maryland Stem Cell Research Fund (MSCRF) is \$15.5 million in the Governor’s FY 2026 Allowance, reflecting a \$5 million or 24 percent reduction from FY 2025.

MSCRF was established by the Governor and the Maryland General Assembly under the Maryland Stem Cell Research Act of 2006. The purpose of the fund is to promote state-funded human stem cell research and medical treatments through grants to public and private entities in the state.

TEDCO, through the Maryland Stem Cell Research Fund, provides crucial funding across Maryland in advancing cutting-edge stem cell research and regenerative medicine initiatives. This vital support for academic institutions, startups, and established companies not only transforms scientific breakthroughs into tangible treatments for patients but also drives economic growth, job creation, and investment in the state. To date, MSCRF supported 650 innovations have created significant long-term benefits for both the community and the state.

In late 2024, TEDCO was saddened to learn of the passing of Dr. Dan Gincel, the first Executive Director of the Maryland Stem Cell Research Fund (MSCRF). His legacy is truly remarkable, and his spirit continues to live on through the Maryland Stem Cell Research Fund. His passion for stem cell research catalyzed countless initiatives that have made a lasting impact, and has left a global footprint, benefiting countless individuals worldwide. While his passing is a profound loss, TEDCO remains immensely grateful for his unwavering commitment to advancing medical research.

In April 2023, MSCRF announced [Dr. Ruchika Nijhara](#) as the Executive Director of the program. Continuing to build on Dr. Gincel’s legacy, the past few years have underscored the importance of funding research and innovation on medical research to deliver cures. What commenced with two MSCRF grant programs in 2007, has burgeoned into seven grant programs in 2024, with the newest being the manufacturing assistance program. These seven grant

programs cover various facets of stem cell research and its development and commercialization. As one of two states in the country supporting stem cell research, these programs have helped elevate Maryland into an important stakeholder in the development of new innovations and research in the field - catalyzing new cures and treatments, while providing a home for this important industry and driving economic development across the state.

MSCRF's seven programs are designed to catalyze innovation and sequentially transition the most promising discoveries from the labs where the invention occurred to the clinic where they will be offered to patients. Observing the maturation and evolving need of the state's ecosystem, MSCRF funding to companies tripled in the last 7 years, benefiting 30 companies across the state.

Further, MSCRF deployed over **\$3.2 million** to support local companies in establishing cutting-edge manufacturing capabilities through its Manufacturing Assistance Grant Program launched in FY2023. This vital program allows companies to build critical infrastructure and manufacturing processes, fostering an environment that enhances product development and accelerates market readiness. The funding supported companies like Frederick County-based RoosterBio, Inc., which has expanded their employee base from 4 to 43 and generated revenues of more than \$50 million, and Theradaptive, Inc., which has expanded their employee base from 3 to 33 people and plans to double the workforce in the next two years, as they continue to grow and innovate in the ecosystem.

Over the years, MSCRF-funded companies have made remarkable contributions to Maryland's economy, generating substantial returns and creating countless jobs while attracting additional investments. Their innovative therapies not only prove to be viable but also beneficial to both patients and the broader economy. By nurturing these forward-thinking companies, MSCRF stimulates economic growth throughout the state and cultivates a vibrant ecosystem that encourages collaboration among researchers, entrepreneurs, and investors.

Together, these ventures have raised hundreds of millions in capital, expanded their operations, and moved closer to delivering transformative technologies to patients. For instance, MSCRF's investment of \$700,000 in Germantown-based Seraxis empowered the company to secure \$50 million from private investors, propelling their pioneering diabetes treatment further into clinical development. Similarly, Cartesian Therapeutics, initially supported by MSCRF funding, has successfully grown its clinical and manufacturing operations in Frederick and is now a publicly traded entity. Meanwhile, Maxcyte, a company from Montgomery County that benefited from MSCRF's early support, has experienced significant increases in both operations and revenues as it proudly celebrates its 25th anniversary this year.

This impressive growth not only strengthens Maryland's economy but also cements the state's status as a leading hub for biotechnology and regenerative medicine, showcasing the powerful impact of MSCRF's commitment to innovation and advancement.

MSCRF supported research continues to have local, national, and global impacts, helping patients worldwide. During FY 2024, MSCRF received 111 grant applications requesting \$37 million in funding- nearly double the FY 2024 budget allocation to MSCRF. MSCRF deployed \$19.7 million to fund 57 projects.

MSCRF funding enabled notable breakthroughs including, treating solid tumors with a cell therapy, healing damaged skin for amputees, half match bone marrow transplants, and major advancements in curing sickle cell disease. In the last seven years, MSCRF supported 15 clinical trials, including the clinical trial that is set to begin by MSCRF funded, Germantown-based company, Seraxis, Inc. on a curative treatment for Type I diabetes using stem cells. These are just a few examples of the impact and potential made available through MSCRF.

MSCRF continues to foster a robust ecosystem that drives economic growth, generates jobs, and enhances patient outcomes. Since its inception, the fund has awarded over \$200 million, resulting in \$524 million in economic activity, \$200 million in labor income, and over \$19 million in tax revenue. This has created more than 2,000 jobs across Maryland, showcasing the substantial returns on the state's investment.

Maryland Innovation Initiative

The FY 2026 Allowance funds MII at \$6.8 million.

Chapter 450 of 2012 created the MII, Maryland's premier early-stage technology transfer and commercialization program. Established in 2012, MII is a collaboration between the State of Maryland; Johns Hopkins University; Morgan State University; the University of Maryland, College Park; the University of Maryland, Baltimore; and the University of Maryland, Baltimore County. The program's mission is to accelerate promising technologies with significant commercial potential to market while leveraging each institution's strengths. As part of a "Lab-to-Market" approach, the program offers grants to assess commercial viability of technology and investments for companies that form to license the related intellectual property.

For over 12 years, MII has served a vital role in seeding, supporting, and scaling innovation coming out of its collaborative universities, which include five world class research and two top notch comprehensive institutions. Since its inception MII has helped create 194 start-up companies that have gone on to receive over \$771 million in follow-on investment.

In FY 2025, MII welcomed Dr. [Abishek Kulshreshth](#), as the new Executive Director of the program. In his position, Dr. Kulshreshtha began overseeing all MII activities in supporting the commercialization of new technologies from Maryland's universities and research institutions. Dr. Kulshreshtha's expertise lies at the intersection of scientific innovation, economic development, and entrepreneurship; he has worked across the U.S. advancing regional economic competitiveness through research and development.

FY2024 MII Statistics

- # of proposals - 72
- # of awards/investments – 38
- # of startup companies formed - 18
- # of startup companies funded – 7
- Total amount granted and invested - \$5,864,107

Baltimore Innovation Initiative (BII) Pilot Program

- The BII, housed within the Maryland Innovation Initiative (MII), supports technology commercialization for colleges and universities in the Baltimore-Columbia- Towson MSA- prioritizing products or services aimed at integrating artificial intelligence or machine learning in health care and biotechnology sectors. The program builds off the learnings from the successful MII University Partnership Pilot Program in 2023 that expanded eligibility of MII to Bowie State and Frostburg State Universities, and launched the next evolution of the MII providing opportunities for new institutions to participate in MII.

The objectives of the Baltimore Innovation Initiative include:

- Advancing technologies and technology-based startups from faculty, staff, and students across BII’s eligible institutions;
- Creating lasting infrastructure supporting innovation, entrepreneurship, commercialization, and technology transfer in the Tech Hubs region and for Tech Hubs focus technology areas;
- Supporting the culture of innovation and entrepreneurship across eligible institutions; and
- Fostering collaboration across eligible institutions and with other key partners, including industry partners and federal laboratories.

A program manager for the Baltimore Innovation Initiative was hired in FY 2025, and grants are anticipated to be disbursed through two unique grant mechanisms:

- **Technology Advancement Grants:** Advancing technologies toward commercialization via partner institutions. Up to \$50,000, or \$75,000 for joint-institution awards. Open to students, faculty, and staff at participating institutions
- **Entrepreneurship and Commercialization Programming and Infrastructure Grants:** Creating or augmenting programming to support tech-based entrepreneurship. Up to \$50,000. Open to entrepreneurship and commercialization programs operated by BII-participating institutions

The first round of awardees are to be selected by late Spring 2025.

MII Pilot Program

Following the passage of Chapter 697 of 2021, the Maryland Innovation Initiative launched the Maryland Innovation Initiative University Partnership Pilot Program, a two-year pilot program expanding MII’s model to entrepreneurial activities at two of the State’s four-year public

comprehensive universities, Bowie State University (BSU) and Frostburg State University (FSU). The program was designed to secure the pilot universities as anchor economic development institutions for their respective regions and communities while also including the two pilot comprehensive universities in the ecosystem of knowledge and resources available at the State's other major research institution partners party to the MII program, thereby strengthening the respective regional economic development strategies of FSU and BSU as well as fostering a statewide university entrepreneurship and commercialization ecosystem.

Over the duration of two fiscal years beginning July 1, 2022, the MII has worked collaboratively with the two pilot universities to design and implement programs to encourage and support student and faculty entrepreneurship, industry collaboration, and technology commercialization, leveraging state resources to raise awareness, deploy educational materials, and directly fund proposals to strengthen each university's capacity to commercialize innovations. Through these programs, MII, BSU, and FSU have seen significant advancements towards the development of a resilient and lasting infrastructure that fosters and supports innovation and entrepreneurship at the two pilot institutions.

Builder Fund

The Pre-Seed Builder Fund (Builder Fund) was created to financially and operationally support the development of startup companies run by entrepreneurs who demonstrate a socially or economically disadvantaged background that hinders access to traditional forms of capital and executive networks at the pre-seed stage. Companies selected for Builder Fund support receive direct investment and agree to receive executive management assistance to accomplish specified milestones that better position the company for follow-on, professional investment. The Builder Fund differentiates itself by identifying exceptional investment opportunities statewide operated and majority owned by anyone who can exert proof of their economic disadvantaged status (as informed by 13 CFR 124) by collaboratively advancing the development of those opportunities in ways that can lead to the next stage of investment. This program supports TEDCO's overall mission of discovering, investing in, and helping to build great, Maryland-based companies that grow and last. In FY 2024, the program provided funding to 22 companies.

To provide additional support, TEDCO advises companies of other State programs for minority and women-owned businesses. Specifically, all companies are informed of the services and investment programs under the Maryland Small Business Development Financing Authority (MSBDFA). TEDCO will systematically make referrals to MSBDFA for all companies that express an interest in other resources.

FY 2024 Builder Fund Statistics

- # of investments – 26 companies
- # of jobs in funded companies - 107
- \$ awarded - \$4,525,000

Maryland Technology Commercialization Fund

TEDCO's legacy initiative in technology transfer and commercialization is the Maryland Technology Commercialization Fund (TCF). TCF supports technology and product development by startup companies often deemed too early in their development to gain the interest of traditional venture capital investments. TCF's investments are intended to defray the cost of the additional research and development activities that would move a specific technology or technology package to the threshold of commercialization.

FY 2024 TCF Statistics

- # of investments - 3
- # of jobs in funded companies – 6
- Total \$ invested - \$649,996

Cybersecurity Investment Fund

Chapter 535 of 2014 created the Cybersecurity Investment Fund (CIF). The CIF is targeted to six cyber security technologies and builds on TEDCO's Technology Commercialization Fund.

FY 2024 CIF Statistics

- # of proposals received - 7
- # of investments - 3
- # of jobs in funded companies – 2
- Total \$ invested - \$800,000
- Annual amount of follow-on funding for active CIF portfolio - \$11,430,085

Life Science Investment Fund

The Life Science Investment Fund (LSIF) provides funding to companies developing products for human health that require FDA approval. This fund was transferred to TEDCO from the Department of Commerce's BioMaryland program. This program previously provided awards under the names Biotechnology Development Awards and the Translational Research Awards. TEDCO modified the funding program to better meet the demand of those life science companies with the most challenging commercialization pathways.

FY2024 LSIF Statistics

- # of investments - 3
- # of jobs in funded companies - 4
- Total \$ invested - \$650,000

Gap Investment Fund

The Gap Investment Fund seeks to make disbursements to startup technology-based companies that need capital to grow their businesses in Maryland. The disbursements are matched by investments the company has received from other sources. The purpose of this Fund is to help bridge the gap to traditional institutional venture capital and retain companies in Maryland who might be vulnerable to leave the state for other funding opportunities at this stage of investment.

Companies must use Gap Investment Funds to employ new staff to grow and become more firmly established in Maryland.

FY2024 Gap Investment Fund Statistics

- # of investments – 2
- # of jobs in funded companies - 6
- \$ awarded - \$550,000

Maryland Venture Fund

The Maryland Venture Fund is managed by an experienced team with significant venture investing experience whose focus is on making the entrepreneurs successful and are dedicated to funding and growing the next generation of outstanding businesses in Maryland. The Fund was established in 1994 as the Enterprise Fund and was transferred from the Department of Business and Economic Development to TEDCO in 2015.

State Small Business Credit Initiative (SSBCI)

In FY 2022, it was announced that TEDCO would receive additional funding through the U.S. Treasury Department’s State Small Business Credit Initiative (SSBCI). TEDCO developed plans to allocate the funds into four existing programs targeting technology-based Maryland businesses and entrepreneurs.

Three programs—the Venture Equity Fund, Venture Capital Limited Partnership Equity program, and Seed Funds—are primarily focused on venture capital and startup funding. The fourth, the Social Impact Funds, provides investment and support to entrepreneurs who demonstrate economic or social disadvantage. Through these four programs, TEDCO continues to leverage its relationships with top-tier technology companies, entrepreneurs, and investors in the state while collaborating with universities, regional business accelerators and incubators, and other organizations.

In FY 2024, TEDCO allocated the following amounts:

- **Social Impact Fund:** \$1,650,000
- **Seed Funds:** \$5,891,022
- **Venture Equity Fund:** \$7,613,067

The Venture Capital Limited Partnership Equity Program secured its first Limited Partner Agreement Side Letter and deployed a capital of \$198,733 in FY 2024.

Technology Incubator Programs

Business Assistance Fund

To support the incubator network in Maryland, TEDCO provides the Maryland Business Innovation Association (MBIA) with project funding grants to assist startups located within

individual incubators. The individual grant amounts are determined through a competitive application process which is managed by MBIA.

The funding is used to both attract startups to incubators and help startups pay for assistance that is not provided by their incubators. This includes but is not limited to the following types of business assistance:

- Prototype development
- Market studies
- Lab equipment purchases
- Competitive analysis

Venture Development (formerly Entrepreneur and Ecosystem Empowerment (E3))

TEDCO's Entrepreneur and Ecosystem Empowerment (E3) was renamed Venture Development in FY 2025. TEDCO's Venture Development department manages several programs to assist startup companies in accelerating their growth. Our Venture Development programs and services take several different forms, depending on the company's stage and an assessment of its likely path forward.

The Venture Development team collaborates with the startup company to create mentorship and advisory solutions that complement and build on other assistance the entrepreneur receives. Some of the programs include Rural Business Innovation Initiative (RBII), Urban Business Innovation Initiative (UBII), Network Advisors, Loaned Executives, Maryland Makerspace Initiative Program, Prelude Pitch, and more.

The following overview outlines the activities of the E3 department in FY 2024. TEDCO will provide information on the activities of the Venture Development department in Calendar Year (CY) 2026.

Rural Business Innovation Initiative

Studies conducted by the U.S. Small Business Administration (SBA) have shown that high-tech companies based in rural areas are often impeded by the absence of infrastructure necessary to support technical commercial enterprises and the inability to recruit critical masses of people with the appropriate education and skill sets to fully staff such enterprises. However, the same studies show that when rural policy initiatives are enacted to provide small business assistance through non-profits and rural development centers, economic development in those areas is enhanced.

The Rural Business Innovation Initiative (RBII) was created to address the needs of small businesses in the rural areas of Maryland (Western Maryland, Southern Maryland, Northeastern Maryland, Upper Eastern Shore and Lower Eastern Shore) through the Rural Business Innovation Initiative (RBII). Since its inception in 2009, the program has been supported by state, federal, and TEDCO funds. To implement the program, TEDCO brought on Business Mentors from the local areas to enhance technology commercialization activities by providing technical and business assistance to incubator-stage companies and incubators in the targeted

counties. The program currently provides project grants and pre-seed investments.

The RBII program has been well-received by rural businesses and elected officials and has been successful in providing technical assistance to the entrepreneurs in the rural areas. The hands-on involvement of the Business Mentors and the technical assistance of third-party consultants have been key factors in furthering the growth of these startup companies.

In FY 2024, Business Mentors mentored 30 new companies, resulting in 1,149 hours of mentoring. Four companies received pre-seed investments, and three companies received project grant funding.

Examples of business assistance included:

- Market studies
- Competitive analysis
- Funding for infrastructure development
- Funding for technical assistance
- Funding for product development

In addition, the RBII program organized regional meetings with TEDCO's CEO and continued to support the virtual I-Corps course in conjunction with the University of Maryland, College Park (UMD). To increase participation and access for underrepresented entrepreneurs, while maintaining focus on rural companies, access to this course was also extended to companies from other TEDCO programs.

Rural Pre-Seed Fund

In FY 2018, the RBII program launched a Rural Pre-Seed Investment Fund which invests \$25,000 in rural companies in the RBII program. In FY 2024, a total of 4 investments have been made totaling \$100,000.

Urban Business Innovation Initiative

In FY 2021, TEDCO expanded the RBII concept to assist underserved entrepreneurs in two urban areas, Prince George's County and Baltimore City. This program is referred to as the Urban Business Innovation Initiative (UBII).

In FY 2024, UBII representatives mentored 17 new companies with a total of 510 mentoring hours and 1,512 hours of outreach. In addition, the program approved three project grants to startups – examples of assistance included market assessment and product development. Like RBII, the mentor reps in these regions also work with other ecosystem organizations, accelerators, and incubators to ensure entrepreneurs are connected to the right resources at the right time in their growth. The UBII program has formalized these relationships and meets quarterly as a group.

Maryland Makerspace Initiative Program

In fiscal year 2023, TEDCO managed the Maryland Makerspace Initiative Program (Makerspace Program). Created through legislation passed by the Maryland General Assembly, the Makerspace Program provides grants up to \$100,000 and technical assistance (provided by Open Works) for qualified entities looking to establish a new Makerspace, expand an existing Makerspace, or develop Makerspace programming. The mission of this initiative is to grow a state-wide community of Makerspaces that provides entrepreneurs with access to tools, technologies, and knowledge to support their growth and development as well as expand workforce training.

In its second year of execution, the Makerspace Program received 43 applications and awarded 18 makerspaces with a collective funding total of \$817,000. Of that, 48% or \$396,000 went to makerspaces located in rural counties in Maryland. 11 awardees were previously funded last year while 7 new awardees were selected. Our support has increased across rural counties, with 39% of all funds from FY 2024, and 49% of FY 2025 all to rural counties (applications received in FY 2024 were awarded in FY 2025).

Network Advisors

Growing great companies takes more than money and Maryland's entrepreneurs repeatedly express the need for assistance in certain very specific areas. To help meet that need, TEDCO has curated a highly diverse network of advisors who have current, relevant experience in one or more of these specific areas. This group, the Network Advisors, brings its broad and diversified depth of experience to bear on the unique needs of Maryland's startup companies – the entire effort is dedicated to helping the State's technology-based entrepreneurs reach their full potential. Network Advisors typically provide two to three hours of pro bono advising to individual companies multiple times a year. In FY 2024, this program grew to 115 Network Advisors and requests for Network Advisors grew by 69% (more than three times growth compared to FY 2022).

Loaned Executives

In certain cases, companies that have already received, or are likely to receive, an investment from TEDCO, can engage one of the Network Advisors on a contractual basis to provide paid advisory services to a company to help that company achieve a specific milestone and make them competitive for the next round of funding and growth. In FY2024, TEDCO funded 23 loaned executive projects totaling a maximum of 990 hours served, more than twice the amount in FY 2023. Projects have demographically and geographically spanned the state and range from designing medical device prototypes to filing non-provisional patents to developing customer acquisition and sales strategies. All projects went to underserved entrepreneurs.

Prelude Pitch

Each month, TEDCO invites startup companies to practice their pitch in front of TEDCO team members and experienced mentors (Network Advisors) to receive valuable feedback and an introduction to TEDCO. In FY 2024, TEDCO held multiple virtual Prelude Pitch events which provided 47 companies an opportunity to pitch their ideas.

Online Educational Resources

While several educational materials on entrepreneurship can be found online, the current thinking around best practices in entrepreneurship revolves around the lean startup approach. TEDCO believes strongly that entrepreneurs in most technology sectors should follow these practices when working to establish a company. The TEDCO website links entrepreneurs to a variety of available and accessible online educational resources including several focused on the lean startup approach.

To add to these educational resources, in FY 2024, TEDCO held Investor Readiness Workshops, and a Latinos in Tech webinar.

Maryland Entrepreneur Hub

In FY21, TEDCO partnered with Commerce and the University System of Maryland (USM) to build and develop a state-wide AI enabled platform designed to connect all parts of the entrepreneurial community. The Maryland Entrepreneur Hub now enables innovators, startup founders, and small business owners to find and connect with the right resources for their business, including investors, universities, mentoring programs, networking groups, training programs, and more. Resources can also be viewed on a map by region or by type of resource, industry sector, stage of growth, type of business, and/or by founder focus (e.g., female led, Black led, Latino led, BIPOC led, veteran led, and other underserved founders).

Market Search Databases

Many startup companies fail due to a lack of understanding of their market. While there is no substitute for talking to potential customers, entrepreneurs first need to assess their potential market at a general level. An understanding of competitors, industry trends, and market segments through secondary research is an important part of developing a plan to launch a business. Moreover, entrepreneurs that do not have a solid understanding of their market will find it difficult to raise funding from TEDCO and other investors.

Market Search Services provided by TEDCO continue to be available to entrepreneurs via remote access. The services are a resource to help entrepreneurs address the challenges of conducting market assessments. The goal is to improve the market assessment and opportunity analysis associated with the development of business plans and applications for TEDCO's funding programs.

In addition to research, entrepreneurs often need assistance in understanding their intellectual property (IP) and the patent process. With this in mind, TEDCO collaborated with a Builder Fund portfolio company called IPGen, which was founded by a patent attorney. IPGen uses AI, NLP, machine learning, and NLG, to streamline and simplify various stages of the patent process. The platform is free for entrepreneurs to use for one year as they navigate the complexities around securing their IP.

Federal Laboratory Technology Initiatives

NIST-Science and Technology Entrepreneurship Program

The overall objective of N-STEP (NIST – Science and Technology Entrepreneurship Program) is to provide opportunities for motivated researchers to build upon the experience gained while working at the National Institute of Standards and Technology (NIST) as they explore entrepreneurial careers. The Program is focused on the commercialization of research performed at NIST by employees nearing the end of their term of employment (including graduating post-docs) who are interested in forming companies to independently pursue further translational research and development of technologies specifically related to NIST’s mission so that the technologies can be commercialized as products or services to benefit the public. As of the fall of 2023, NIST required that the program be put on hold.

FAST Grant – SBIR/STTR Proposal Lab

The Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Proposal Lab is a series of workshops funded, in part, by the Small Business Administration with a TEDCO match of cash and in-kind effort. TEDCO collaborated with the GovCon Incubator and the Small Business Development Center (SBDC) on a Small Business Administration FAST grant. A new grant was awarded at the end of FY24 (September 2024) which included changing the program to teach Part 1, the NSF project pitch, and Part 2, the NSF proposal. The expectation is that we will see an increase in the win rate for first time NSF SBIR/STTR proposals from women-owned, small disadvantaged, and rural Maryland businesses. The original program’s goal was to double the national win rate of 15% to 30% for Proposal Lab participants. The program has an overall award rate of 39%. Cohort graduates have been awarded more than \$28 million in SBIR and STTR Phase I and Phase II awards from multiple agencies. Not only does the SBIR/STTR Proposal Lab help with the SBIR/STTR win rate, but also provides business skills that improve the entrepreneur’s overall business acumen. For FY 2025, TEDCO accepted 28 companies into the cohort.

Marketing

Expanded awareness for TEDCO and its portfolio companies is seen through targeting more national publications for press releases, articles, and interviews.

Portfolio Company Exposure

Through TEDCO’s marketing support, its portfolio companies continue to receive exposure through targeted regional and national publications. With opportunities like these, our Maryland companies can grow into new markets. In FY 2024, TEDCO facilitated the interviews of 6 thought leaders through the TEDCO Talks podcast and 9 portfolio companies through a regional news station.

Additionally, TEDCO facilitated the recognition of 30 companies and founders through regional recognition opportunities, plus 25 articles featured in various publications highlighting different companies across the ecosystem.

Fostering Collaboration and Coordination in Maryland's Entrepreneurial Ecosystem

In December 2024, TEDCO relaunched the TEDCO's Entrepreneur Expo. This [award-winning](#) event was established to spotlight entrepreneurship in the region by bringing together Maryland's various resources for a day of celebration. The event hosted over 24 unique sessions featuring 111 speakers including, with Governor Wes Moore, House Ways & Means Chairwoman Vanessa Atterbeary, Appropriations Education And Economic Development Subcommittee Chairwoman Stephanie Smith, Maryland Commerce Secretary Kevin Anderson, and Maryland Labor Secretary Portia Wu, among others. Over 1000 attendees participated in this ecosystem wide event.

Management and Administration

Effective management and administration are fundamental to TEDCO's success in providing programs and services that meet Maryland's entrepreneurial needs. One indicator of effective administration is a clean audit, and I am pleased to report that for the 24th consecutive year, TEDCO received an unqualified (clean) audited financial statement. TEDCO is required by statute to seek an independent audit of its annual financial statements, and we take this requirement very seriously, as we do TEDCO's additional reporting requirements.

Transparency and accountability are fundamental to our leadership approach and have been front and center. With that context, after about a year and a half into my tenure as TEDCO's CEO, our management and administration focus has included:

- Bringing more rigor to TEDCO's business processes
- Building investments in our data systems to provide a higher level of intelligence on what we do, how we serve, and when we should intervene
- Being intentional on diversity, equity, and inclusion in TEDCO's talent management, vendor selection, investment thesis and entrepreneurial support
- Ensuring the TEDCO team is supported and coached to achieve their highest potential
- Through marketing and communication efforts, implementing aggressive outreach to communities that have not been traditionally reached by TEDCO and tech-based innovation opportunities
- Ensuring TEDCO's information technology infrastructure is secure and accessible
- And, most importantly, doing all that we do through and by our five core values:
 - Accountability
 - Collaboration
 - Integrity
 - Respect
 - Stewardship.

By focusing on these values and management practices, we are telling the story of how we build and sustain Maryland's innovation ecosystem and attract talented and a diverse group of people to work at TEDCO. We are moving towards a sense of belonging for those that have historically been excluded in our industry and Maryland's economic development.

It is worth noting that, in general, TEDCO's funding is considered a general fund grant of the State and is not subject to annual adjustments for inflation, COLA's, or other annual increases like other State agencies. This has been especially impactful on TEDCO's administration and operating budget. The expenses are driven, not just by normal inflationary pressures, but also by increases in operational and programming responsibilities.