



**Maryland Technology Development Corporation
FY 2024 Operating Budget
Response to Department of Legislative Services Analysis**

House Appropriations Committee
Subcommittee on Education & Economic Development
Delegate Stephanie Smith, Chair
March 2, 2023

Senate Budget & Taxation Committee
Subcommittee on Education, Business & Administration
Senator Nancy King, Chair
March 7, 2023

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

TEDCO Response to DLS Analysis: Concur

DLS Recommendation – Add the following language to the general fund appropriation:

, provided that \$1,000,000 of this appropriation made for the purpose of the Maryland Equitech Growth Fund is contingent on the enactment of HB 781 or SB 699 establishing the Equitech Growth Fund in the Maryland Technology Development Corporation.
Explanation: This language makes funding for the Maryland Equitech Growth Fund contingent on the enactment of HB 781 or SB 699 establishing the program in the Maryland Technology Development Corporation.

TEDCO appreciates the thorough work and analysis done by DLS analyst Emily Haskel and acknowledge and concur with her recommendation.

Introduction

Chairs King and Smith, members of the Committees, thank you for the opportunity to appear before you to discuss TEDCO's fiscal 2024 budget allowance. I would also like to thank DLS analyst Emily Haskel, 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 Governor to TEDCO's funding and programmatic efforts and TEDCO stands ready to continue to serve the State.

Next May, TEDCO will celebrate its 25th anniversary; with the support provided by the Governor and the Maryland General Assembly, TEDCO's six core programs generated **"a total of \$2.3 billion in Maryland economic activity as of 2021, supporting a total of 10,433 jobs earning \$884.7 million in labor income and generating estimated state and local government revenues of \$100.1 million."** *Source: November 2021, independent study by the University of Baltimore, Jacob France Institute*

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 partners and 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 Builder Innovation Initiative efforts that seek to stitch all the necessary elements to ensure early-stage success.

- TEDCO positively affects communities that have long been underinvested via our Marketing and Investment efforts that have led to more than half our investments over the last three years going to Maryland-based enterprises started by someone of color and/or a woman.
- Further, TEDCO, as an organization, impacts our TEDCO team as we make investments in our talent and our infrastructure to better serve each other and the Maryland ecosystem.

However, we cannot stop there. 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 need to enhance our ability to do a better job with data collection and analysis to support our entrepreneurs and provide more meaningful data to our stakeholders. TEDCO will also continue to work to improve our reach to underrepresented communities and individuals. With the right strategies, Maryland has the potential to cultivate an innovation ecosystem that will be recognized globally for social innovation and impact.

With this as context, the following highlights a few of the many accomplishments that TEDCO realized over the past year as we continue to be responsive to Maryland's evolving needs.

- **Maryland Stem Cell Research Fund (MSCRF)**: The past few years have underscored the importance of funding research and innovation on medical research to deliver cures. The MSCRF have moved over one hundred technologies toward validation, into companies and clinical trials and have supported the creation and/or growth of companies through 26 research/product development and clinical trial grants in the past five years (compared to 12 in the previous 10 years). Notably, most of the companies in MSCRF's portfolio have raised follow-on funding and several are either in clinical trials or are scheduled to commence one next year. This represents the sustainable success of our program and exemplifies our mission. In 2022, the MSCRF funded 36 new awards with over \$11 million, addressing a wide range of medical conditions including cancer, stroke, liver disease, eye disease, heart disease, diabetes, blood disorders and neurological conditions amongst others. Our companies have persevered through challenges to raise follow-on funds, create partnerships, and have advanced their research and clinical programs to bring us one step closer to delivering therapies to the public.

Further, in 2022, MSCRF launched a seventh funding program, the Manufacturing Assistance Program. The program is designed to help growth-stage stem cell companies build their own manufacturing capabilities, which is a critical need, particularly among the Fund's portfolio companies that have reached this stage in their development. This program will provide initial resources to enable GMP production of cell therapy products in Maryland. This will help our companies advance their therapies to patients sooner and in a more cost-effective way, whilst simultaneously creating and retaining an advanced therapy manufacturing workforce in our region.

- **Maryland Innovation Initiative (MII):** This year is special, marking both a successful year and MII's 10-year anniversary of this tenured and impactful program. The program seeks to commercialize the great lab work done by Maryland's five research institutions from bench to market through investments in innovation, entrepreneurship, and venture creation. This year MII has seen a plethora of new technologies explored and de-risked through MII grants with a strong push towards both digital and cybersecurity technologies applied across various industry sectors. The Fund's health and life sciences portfolio, however, remained strong, with emphasis on respiratory disease management as well as diagnostics, including for viral infections such as COVID-19.

MII creates successful, scalable start-up tech companies in Maryland, as demonstrated by their ability to attract follow-on funding. Over the years, MII companies have successfully commercialized early-stage technology and attracted nearly \$693 million in follow-on funding. Furthermore, a significant portion of this funding comes from sophisticated technology investors such as angels and venture capitalists. MII has funded/invested a total of \$47.5 million over the past 10 years while maintaining a steady 36% start-up creation rate—a testament to the program model and the excellent work of the MII site miners and university tech transfer offices.

As a testament to the program's success and demand, TEDCO's MII was given a pilot program, established by legislation in 2021, to expand its model to entrepreneurial activities at two of the State's four-year public comprehensive universities, Bowie State University and Frostburg State University. The MII is pursuing the vision of promoting entrepreneurship and technology commercialization at two pilot universities. The Program is designed to poise these universities as formidable anchor institutions for their respective regions and communities and expose these comprehensive universities to the knowledge and resources available at the major research institution partners in the main MII program, thus knitting the university entrepreneurship ecosystem together. While the approach for each university will be slightly different, TEDCO anticipates that these pilots will provide the breadth of metrics to determine successful programs that could be applied to other comprehensive universities in the State in future years.

- As in the previous years, demand in TEDCO's investments remains very high. For example, just in the past year (FY22), TEDCO could fund 18% of applicants overall. Specifically, 19% of the social impact funds, 14% of the Seed Funds, and 27% of the Venture Fund applications. This is due to increased recognition and demand for the programs. Further, in fiscal 2022, TEDCO's Rural Business Innovation Initiative (RBII) program mentored 35 new companies, resulting in 1,430 hours of mentoring. Also, in fiscal 2022, TEDCO's Urban Business Innovation Innovations representatives mentored 15 new companies with a total of 442 mentoring hours and 1,508 hours of outreach and over 1,000 hours of mentor hours under the Builder Fund, and yet this is still not meeting the demand.
- In the past year, TEDCO launched two women-focused pilot programs, leveraging the unique expertise of Maryland's four Historically Black Colleges and Universities –

Bowie State University, Coppin State University, Morgan State University, and the University of Maryland Eastern Shore – and other colleges, universities, economic development centers, and counties to build an alliance of diverse founders and CEOs to enable promising women business leaders to focus on unique challenges for female entrepreneurs and as they navigate Maryland’s entrepreneurial innovation ecosystem and raise the economic standards for all. As we work together with our collaborators, we are creating a business multiplier for all women entrepreneurs to create sustainable and repeatable growth for Maryland.

- Further, TEDCO created the 2022 Tech Fair to connect entrepreneurs and small business owners in any industry from Maryland’s underserved communities to technology companies, resources, trainings, and networking opportunities to grow their business. U.S. Senate Committee on Small Business & Entrepreneurship Chair Ben Cardin worked closely with TEDCO to create the fair in collaboration with the U.S. Small Business Administration.

Small businesses looking to broaden their footprint and increase future sales interacted with larger, established tech companies, including Grow with Google, Meta, TikTok, Square, Microsoft, eBay, PayPal, and Amazon, to learn about trainings, online platforms for sales, advertising techniques, cloud services, and more. Women and diverse startup founders and business owners who traditionally have been underserved by the entrepreneurial ecosystem were encouraged to attend and share news of the free fair with their networks.

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 \$20.5 million in the Governor’s FY24 Allowance, reflecting the same funding as FY23. TEDCO and MSCRF greatly appreciate this support.

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. 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. Research we identify and support here in Maryland will have local, national, and global, helping patients worldwide. During calendar year 2022, we had six active programs and we funded 36 new awards with over \$11 Million.

MSCRF is focused on identifying and fostering cutting-edge research and innovation in the field of regenerative medicine in Maryland. Our Accelerating Cures initiative comprises programs that help transition human stem cell-based technologies from the bench to the bedside as well as mechanisms to build and grow stem cell companies in Maryland. MSCRF has supported over

500 projects to accelerate stem cell-based research, commercialization, and cures, in addition to building a collaborative stem cell community in our region.

The pandemic has underscored the importance of funding research and innovation on medical research to deliver cures. MSCRF supports research to address a diverse range of diseases and conditions including the top 10 leading causes of death in Maryland such as diabetes, cancer, and respiratory diseases. Beyond an economic impact, MSCRF's mission has a human and societal impact - innovative treatments and cures for diseases to improve the quality of life and increase life expectancy. MSCRF's vision is not only to improve the health of many Marylanders but also reduce health care costs for the state. Investing in basic and translational biomedical research is important to reduce the burden of diseases for individuals, their families and society; this will pay future health dividends for the State of Maryland.

Maryland Innovation Initiative

The Fiscal Year 2024 Allowance funds MII at \$7.8 million, an increase of \$2.5 million to the FY2023 funding. The funding level was increased due to the very high demand for this program and to reflect the need for increased funding amounts, as the grant amounts have not been increased since the inception of the program. Demand remains very high and TEDCO appreciates the FY24 Allowance. TEDCO plans to use the additional funding to increase the award size for company formation investments from \$150,000 to \$300,000. The MII board is also considering raising the maximum award amount for MII technology assessment grants above the current level of \$115,000. In addition, the FY24 Allowance also provides \$500,000 to support an MII pilot program with Bowie State University and Frostburg University, as required by legislation passed during the 2022 Session.

Chapter 450 of 2012 created the MII program, Maryland's premier early-stage technology transfer and commercialization program. Established in 2012, MII is a partnership 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 partner institution's strengths. As part of a "Bench-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.

MII supports a diverse portfolio of awardees from various technical domains that include but are not limited to life sciences, engineering, and information technology. The diversity of Awards by Tech Class ultimately reflects MII's partner universities and that of the world-class research conducted by scientists across the State.

Since the launch of the initiative in 2012, MII has seen not only a steady increase in demand for the grants, but also an improvement in the quality of the companies spun-out of partner institutions. In fact, many of MII's partner institutions have launched several pre-MII funds and programs to enhance their competitiveness for the MII funds: an indication toward true ecosystem maturation. Indeed, a 2018 Milken Institute report named the MII program as one of

the state initiatives helping Maryland retain the top tier ranking on the State Technology and Science Index.

To date, MII has reviewed 679 grants and 149 investment applications and has an award funding rate of 50% and 60% of applicants, respectively. In FY22 alone, MII reviewed 55 grants and five investment applications and awarded funding to 70% and 40% of applicants, respectively. While the demand for MII funding remains consistently high, the success rate for funding is also a reflection of the maturation of the ecosystem as the program's applicants become increasingly savvy in technology commercialization.

Without the type of support MII provides, there is zero obligation for these pioneering innovations to stay in Maryland.

FY2022 MII Statistics

- # of proposals - 60
- # of awards/investments – 38 (36 awards / 2 MII investments)
- # of start-up companies formed - 17
- # of start-up companies funded – 2
- Total amount granted and invested - \$4,509,765

MIl Pilot Program

TEDCO's MII was given a pilot program, established by legislation in 2021 (Chapter 697), to expand its model to entrepreneurial activities at two of the State's four-year public comprehensive universities, Bowie State University and Frostburg State University. The MII is now in the second year of pursuing the vision of promoting entrepreneurship and technology commercialization at two pilot universities. The Program is designed to poise these universities as formidable anchor institutions for their respective regions and communities and expose these comprehensive universities to the knowledge and resources available at the major research institution partners in the main MII program, thus knitting the university entrepreneurship ecosystem together.

The efforts at each university are designed to address their needs and challenges while leveraging their individual strengths. The efforts at Bowie State university are focused on creating intellectual property-based entrepreneurship and tech transfer whereas the efforts at Frostburg University focus on attracting industries to explore innovation potential of the students and faculty at the university. TEDCO anticipates that these pilots will provide the breadth of metrics to determine successful programs that could be applied to other comprehensive universities in the State in future years.

Builder Fund

As the analysis reflects, the Pre-seed Builder Fund (or Builder Fund) increases by \$1.2 million to a total of \$6.2 million in FY24, a result of legislation passed in 2022 and support from the Governor's budget. TEDCO thanks the Maryland General Assembly and Governor for the

support for this program. This funding supports our pre-seed funds and TEDCO's efforts to reach an even greater population (at an even earlier stage) that lacks access to friends and family and/or personal wealth.

The 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 hindering their 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 that are 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. Of the four awards TEDCO made in FY2021, 100% were minority and/or female owned businesses (2 minority, 1 minority/female, and 1 female).

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.

FY2022 Builder Statistics

- # of investments - 10
- # of jobs in funded companies - 19
- \$ awarded - \$825,000

Seed Funds – TCF, CIF, LSIF & Gap

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 start-up 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.

FY2022 TCF Statistics

- # of investments - 3
- # of jobs in funded companies – 12
- Total \$ invested - \$600,000

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.

FY2022 CIF Statistics

- # of proposals received - 14
- # of investments - 6
- # of jobs in funded companies - 17
- Total \$ invested-\$1,200,000
- Annual amount of follow-on funding for active CIF portfolio - \$14,353,714

Life Science Investment Fund

The Life Science Investment Fund 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.

FY2022 LSIF Statistics

- # of investments - 3
- # of jobs in funded companies - 12
- Total \$ invested- \$600,000

Gap Investment Fund

The Gap Investment Fund seeks to make disbursements to start-up 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.

FY2022 Gap Investment Fund Statistics

- # of investments – 2
- # of jobs in funded companies - 33
- \$ awarded - \$800,000

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 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 fiscal 2022, it was announced that TEDCO would receive up to \$50 million from Governor Hogan's small business relief plan that was approved for funding from the U.S. Treasury Department's State Small Business Credit Initiative (SSBCI). TEDCO will allocate the funds into four existing programs targeting technology-based Maryland businesses and entrepreneurs through SSBCI. Three programs—the Venture Equity Fund, Venture Capital Limited Partnership Equity program, and Seed Funds Equity program—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.

Technology Incubator Programs

Business Assistance Fund

To support the incubator network in Maryland, TEDCO provides the Maryland Business Innovation Association (MBIA) with business assistance, funding to assist individual incubators in providing innovative programming to their tenant and affiliate companies. The individual incubator grant amounts are determined through a competitive application process.

The funding is used for a variety of business assistance services that these incubators would not have been able to provide in-house. This includes, but is not limited, to the following types of assistance:

- negotiating strategic investments or partnerships
- raising venture funding
- recruiting top management
- reviewing business plans
- analyzing cash flow projections
- developing marketing strategies
- reviewing budget assumptions, cost structure and financial statements
- discussing potential public relations opportunities and researching media coverage
- identifying business opportunities with the federal government

Entrepreneur and Ecosystem Empowerment (E3)

TEDCO's Entrepreneur and Ecosystem Empowerment's (E3) number of programs has expanded, the programs' goals remain focused on assisting start-up companies with key milestones that are designed to accelerate growth. Our E3 programs and services take several different forms, depending on the stage of the company and an assessment of its likely path

forward. The TEDCO E3 Team collaborates with the start-up company and its other advisors to create an advisory solution that complements and augments the other assistance being received by the entrepreneur. The types of services provided are described below.

Rural Business Innovation Initiative

The FY23 Appropriation provided a \$140,000 funding enhancement for the Rural Business Innovation Initiative (RBII), that flows through TEDCO's general funds. With this funding, TEDCO was able to scale this program by increasing mentor hours and project grants. This funding is sustained in the FY24 Governor's Allowance. Studies conducted by the United States 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 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). 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 start-up companies.

In fiscal 2022, Business Mentors mentored 35 new companies, resulting in 1,430 hours of mentoring. Three companies received pre-seed investments and five 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 operate its annual virtual I-Corp course in conjunction with UMD. To increase participation, while primarily focused on rural companies, this course was also opened to include companies from other TEDCO programs.

In FY 2018, the RBII program launched a Rural Pre-Seed Investment Fund which invests \$25K in rural companies in the RBII program. As of FY 2022, a total of thirteen investments have been made totaling \$325,000. This diverse group of founders and companies have gone on to raise over \$32M in follow-on investment.

Urban Business Innovation Initiative

In FY21, the E3 team 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 FY22, UBII representatives mentored 15 new companies with a total of 442 mentoring hours and 1,508 hours of outreach. In addition, the program approved four project grants to start-ups. 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.

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 start-up companies – the entire effort is dedicated to helping the State's technology-based entrepreneurs reach their full potential. Network Advisors typically provide 2 – 3 hours of pro bono advising to individual companies multiple times a year. In FY22, this program grew to over 100 Network Advisors.

Loaned Executives

In certain cases, companies that have already received, or are likely to receive, an investment from TEDCO, 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 FY2022, TEDCO funded 13 loaned executive projects. Projects have demographically and geographically spanned the state and range from designing a pathway for FDA approval to closing enterprise level clients.

Prelude Pitch

Each month, TEDCO invites start-up companies to give their pitch in front of our team members and experienced mentors (Network Advisors) to receive valuable feedback and an introduction to TEDCO. In FY22, TEDCO held multiple virtual Prelude Pitch events which provided 34 companies an opportunity to pitch their ideas. During this time, 24 Network Advisors volunteered their time for these events and a few events were held in conjunction with local accelerators. Due to high demand for the Prelude Pitch, an online registration form and waiting list was established.

Roundtables

The CEO Roundtable groups 10 to 12 non-competitive portfolio entrepreneurs around a common theme – industry vertical, demographic, or stage of development. It is expected that each roundtable will continue to operate as long as it remains relevant. Participants are asked to make a soft commitment of one year to the roundtable, but turnover is anticipated, and once established, the facilitator and roundtable group will approve new members. In FY 2022, there were five Roundtables including the CEO Sales Roundtable, Women's Roundtable, AI Roundtable, SaaS Roundtable, and HealthIT Roundtable.

On-line Educational Resources

While several educational materials on entrepreneurship can be found on-line, the current thinking around best practices in entrepreneurship revolves around the lean start-up 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 on-line educational resources including several focused on the lean start-up approach. To add to these educational resources, in FY22, TEDCO held Investor Readiness Workshops, a Start-Up Orientation, and an Accounting 101 Workshop.

Maryland Entrepreneur Hub

In FY21, TEDCO partnered with Commerce and 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 underserved 12 founders). In FY22, this platform was upgraded to include additional resources and a new user interface design. Additional updates and new features are planned.

Market Search Databases

Many start-up 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.

Due to Covid, the Market Search Services provided by TEDCO were made 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.

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 National Institute of Standards and Technology (NIST) as they explore entrepreneurial careers.

The Program is focused on commercialization of research performed at NIST by employees nearing the end of their term of employment (including graduating post docs) that 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. Thirteen awards have been made with funding available for approximately nine more. TEDCO did not grant any N-STEP funding in FY22. One project was funded in FY23 and another application is under consideration. This program is supported by funding directly from NIST.

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 teamed with the GovCon Incubator and the Small Business Development Center (SBDC) on a Small Business Administration FAST grant. The current grant has been renewed for the current fiscal year (FY23). TEDCO will apply for an renewal of the FAST grant in the summer to continue the program. The output of the program has been an increase in the win rate for first time SBIR/STTR proposals from Women Owned, Small Disadvantaged, and Rural Maryland businesses.

This program, now in its fifth year, supports companies in the cohort, allowing them to work closely with TEDCO experts on preparing polished proposals for up to \$275,000 in federal awards through the SBIR/STTR Phase 1 program. The companies in the recently announced 2023 cohort include 24 Maryland companies, encompassing a variety of technology disciplines, from medical devices to quantum computing to even biomanufacturing.

Companies selected to participate in TEDCO’s Proposal Lab and submit proposals are, on average, seeing an award rate of 39%. This is more than double the national average of 15% for Phase 1 SBIR awards.

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 23rd 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 in order to achieve their highest potential
- 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 really telling our 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.