

T50T01
Maryland Technology Development Corporation

Executive Summary

The Maryland Technology Development Corporation's (TEDCO) mission is to provide early investment and to help build Maryland-based technology companies.

Operating Budget Data

(\$ in Thousands)

	<u>FY 18</u> <u>Actual</u>	<u>FY 19</u> <u>Working</u>	<u>FY 20</u> <u>Allowance</u>	<u>FY 19-20</u> <u>Change</u>	<u>% Change</u> <u>Prior Year</u>
General Fund	\$19,474	\$19,474	\$36,974	\$17,500	89.9%
Adjustments	0	0	0	0	
Adjusted General Fund	\$19,474	\$19,474	\$36,974	\$17,500	89.9%
Special Fund	7,348	7,714	8,185	470	6.1%
Adjustments	0	0	0	0	
Adjusted Special Fund	\$7,348	\$7,714	\$8,185	\$470	6.1%
Adjusted Grand Total	\$26,822	\$27,189	\$45,159	\$17,970	66.1%

Note: The fiscal 2019 appropriation includes deficiencies, a one-time \$500 bonus, and general salary increases. The fiscal 2020 allowance includes general salary increases.

- The general fund grant to TEDCO grows by \$17.5 million, or almost 90%, nearly all of which is to be used to launch the Maryland Technology Infrastructure Fund (MTIF).
- The corporation does not report personnel data through the State budget system because its employees are not considered State employees. However, TEDCO reports that it has 25 full-time positions and 1 part-time position.

Note: Numbers may not sum to total due to rounding.

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Key Observations

- The fiscal 2020 general fund allowance nearly doubles in order to launch the MTIF, a new program intended to accelerate commercially driven, innovation-related investment and job growth with a focus on life science and cyber-related industries.
- An audit performed by the Office of Legislative Audits revealed significant issues with the operation of the Maryland Venture Fund (MVF), including the investment of funds in companies located outside of the State, the creation of a new advisory committee to supplant a defunct authority set in statute that no longer has members, and that the advisory committee included people involved with venture firms that received MVF money.

Operating Budget Recommended Actions

	<u>Funds</u>
1. Delete funding for the Maryland Technology Infrastructure Fund.	\$16,500,000
2. Restrict funds pending a report on the Maryland Technology Development Corporation's response to a recent audit.	
Total Reductions	\$16,500,000

Updates

- The corporation provides a listing of all of its major grant awards in fiscal 2018.

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Operating Budget Analysis

Program Description

The Maryland Technology Development Corporation (TEDCO) was launched in 1998 to help commercialize the results of scientific research and development conducted by higher education institutions, federal laboratories, and private-sector organizations. TEDCO also aims to promote new research activity and investments that lead to business development in Maryland.

To achieve its goals, TEDCO provides nonequity investments to early-stage technology businesses, and it funds development and patenting of new technologies at research universities. TEDCO also develops linkages with federal research facilities in the State and helps companies pursue research funds from federal and other sources. The corporation's role was expanded in fiscal 2016 with the enactment of Chapter 141 of 2015, to transfer the operation of the Maryland Venture Fund (MVF) and the biotechnology grant program from the Department of Commerce (Commerce).

TEDCO is also authorized to create, manage, and provide funds for the statewide Maryland Technology Incubator Program. Technology business incubators offer startup companies physical office space, research space, and an array of business services in hopes of generating new research and jobs.

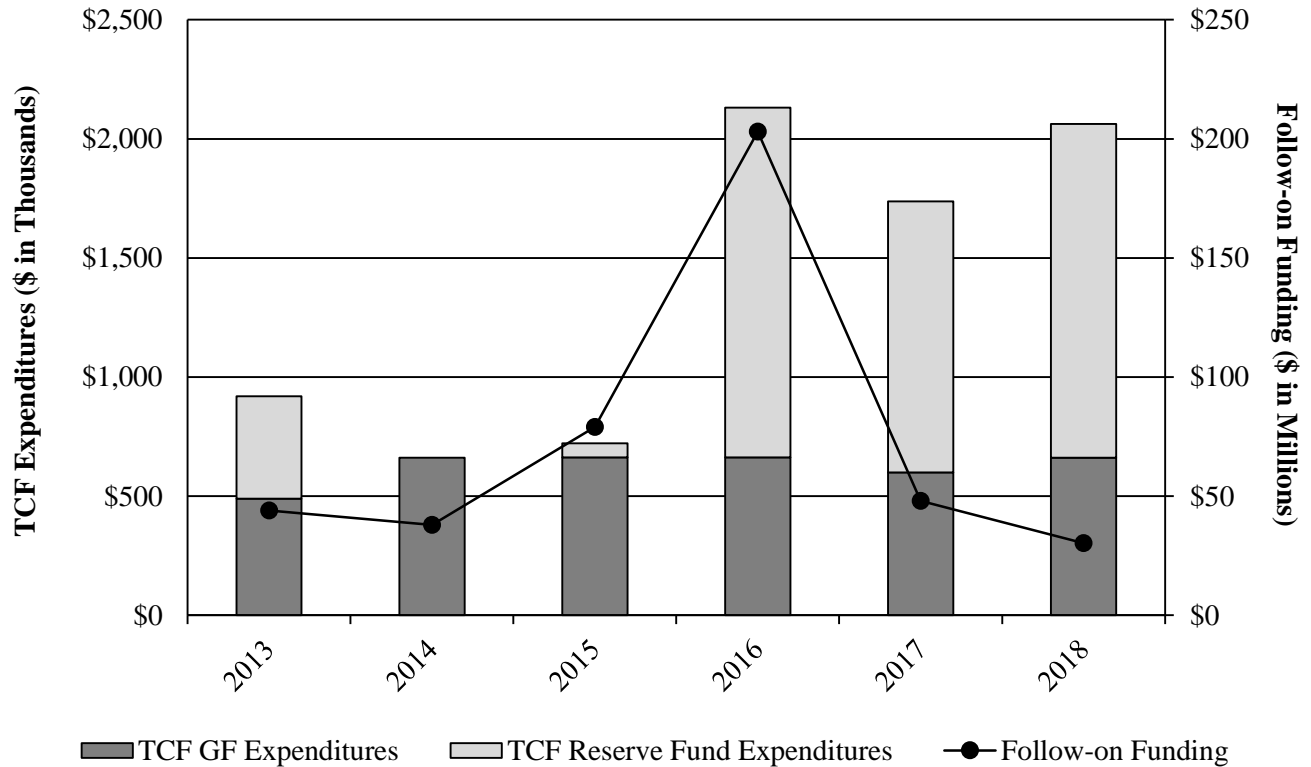
TEDCO supports stem cell research and development at Maryland's research universities and private-sector research corporations in accordance with the Maryland Stem Cell Research Act of 2006. The Maryland Stem Cell Commission established an independent scientific peer review committee to review, evaluate, rank, and rate research based on procedures and guidelines that give consideration to scientific, medical, and ethical implications.

Performance Analysis: Managing for Results

1. Drop-off in Follow-on Funding

The Technology Commercialization Fund (TCF) provides seed investments to early-stage technology companies that are economically viable but do not yet have the scale needed for a venture capital investment. A measure of success for the TCF is the ability of funded startups to obtain follow-on funding for commercialization. The primary sources of follow-on funds include federal grants, venture capital, and other equity investments. TEDCO tracks leveraged funds for at least five years for each TCF recipient. **Exhibit 1** shows follow-on funding for the TCF recipients compared to the amount of investment in the program.

**Exhibit 1
Follow-on Funding for Recipients of TCF Investments
Fiscal 2013-2018**



GF: general funds
TCF: Technology Commercialization Fund

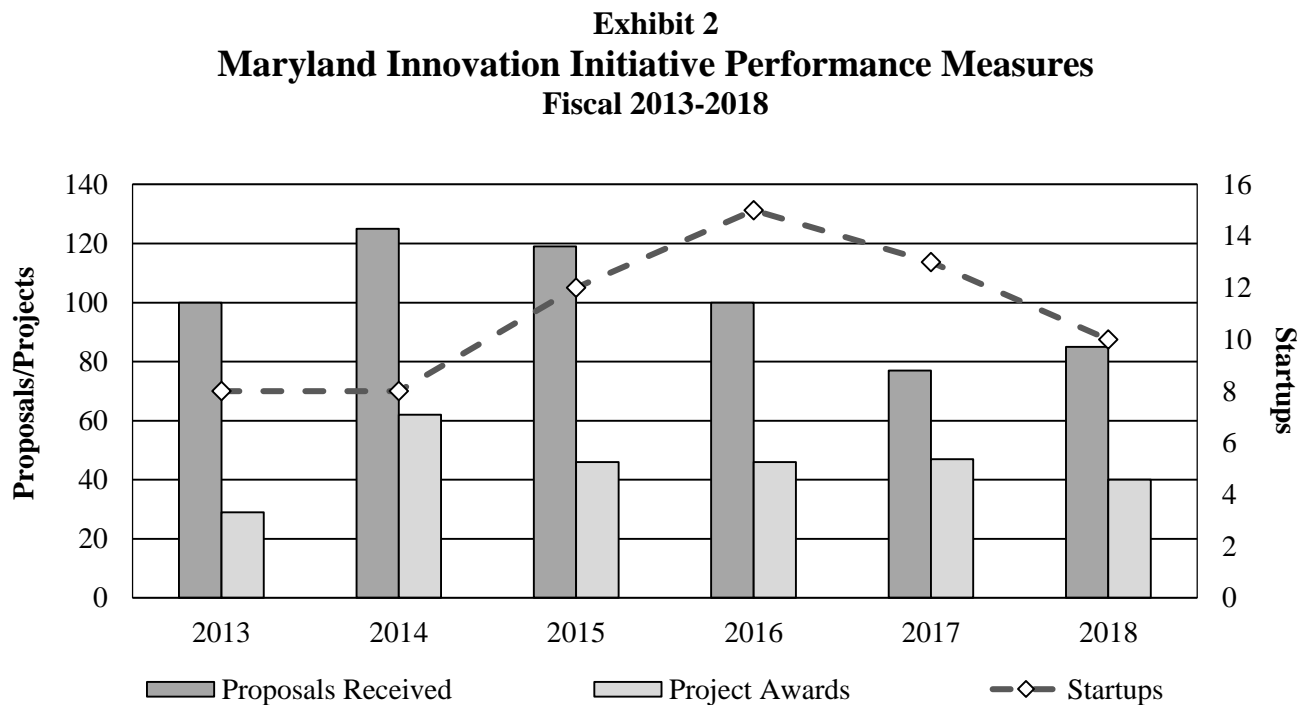
Note: Follow-on funding is measured for companies receiving TCF awards and is tracked over multiple years.

Source: Governor’s Fiscal 2020 Budget Books

This measure is of particular importance to the corporation because success in raising downstream funding is a key criterion in evaluating second award proposals. It should be noted that the TCF program is supplemented by nonbudgeted funds from the corporation’s reserve funds and that follow-on funding reflects the impact of the entire investment by the corporation. As shown in Exhibit 1, general funds have remained consistently between \$600,000 and \$663,000 since fiscal 2014. The corporation has recently increased its reserve fund contribution to the program, adding \$1.4 million in nonbudgeted funds in fiscal 2018. Fiscal 2018 saw about \$30.3 million in follow-on investments into existing TCF companies.

2. Program Encourages Startups

The Maryland Innovation Initiative (MII), created by Chapter 450 of 2012, is designed to combine the technology transfer expertise of TEDCO and the research expertise of the State’s research universities to create opportunities for commercialization. It is meant to encourage a foundation from which startup companies may be formed from university research. **Exhibit 2** shows the number of proposals received under the program, the number of proposals that were awarded funds, and the number of startup companies formed as a result.



Source: Governor’s Fiscal 2020 Budget Books

In fiscal 2018, the number of startups dropped slightly to 10, while the number of proposals received (85) and projects awarded (40) remained stable. It is expected that as the program matures, more innovations will reach the stage of commercialization, thereby increasing the number of startups.

Fiscal 2020 Allowance

While TEDCO’s budget is provided as a grant, the corporation provides its budget data annually. **Exhibit 3** shows TEDCO’s fiscal 2018 actual expenses through the fiscal 2020 allowance. Other than the two new programs and its associated personnel costs, there are no changes to the amount

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of general funds allocated to any of TEDCO's programs. Additional personnel costs for programs funded by the general fund grant total \$500,000.

Exhibit 3
Proposed Budget
Maryland Technology Development Corporation
Fiscal 2018-2020
(\$ in Thousands)

	<u>2018</u>	<u>Working 2019</u>	<u>Allowance 2020</u>	<u>Change</u>
General Funds				
Operations				
Salaries and Wages	\$2,047	\$2,047	\$2,547	\$500
Contractual Services	49	49	49	0
Equipment	15	15	15	0
Other Operational Costs	0	0	0	0
Subtotal	\$2,111	\$2,111	\$2,611	\$500
Programs				
Maryland Technology Infrastructure Fund	\$0	\$0	\$16,000	\$16,000
Stem Cell Research Fund	8,200	8,200	8,200	0
Maryland Innovation Initiative	4,800	4,800	4,800	0
Life Science Investment Fund	1,001	1,001	1,001	0
Builder Fund	0	0	1,000	1,000
Gap Investment Fund	1,000	1,000	1,000	0
Cybersecurity Investment Fund	900	900	900	0
Maryland Technology Commercialization Fund	662	662	662	0
Rural Business Initiative	500	500	500	0
Maryland Industrial Partnership Program	300	300	300	0
Subtotal	\$17,363	\$17,363	\$34,363	\$17,000
General Fund Total	\$19,474	\$19,474	\$36,974	\$17,500
Special Funds				
Enterprise Fund	\$6,000	\$6,000	\$6,500	\$500
Enterprise Fund Administration	1,348	1,714	1,686	-28
Special Fund Total	\$7,348	\$7,714	\$8,186	\$472
Grand Total	\$26,822	\$27,188	\$45,160	\$17,972

Source: Maryland Technology Development Corporation

Maryland Technology Infrastructure Fund

The fiscal 2020 allowance includes \$16 million in general funds for the Maryland Technology Infrastructure Fund (MTIF), a new program intended to accelerate commercially driven, innovation-related investment and job growth with a focus on life science and cyber-related industries. The fiscal 2020 allowance is intended to be the first commitment to an ongoing program. The program would be established by SB 175 or HB 235 of 2019. The program is touted by the Governor in the economic development section of the fiscal 2020 Budget Highlights, as part of the State’s opportunity zone efforts. However, the Administration’s legislation does not include any restrictions on funding in opportunity zones and does not mention opportunity zones at all. The Budget Highlights note that the program would be part of a long-term plan to leverage more than \$500 million in investment over the next 10 years. The legislation would create the Maryland Technology Infrastructure Authority within TEDCO. Under the authority’s guidance, the MTIF would:

- provide capital and operating assistance to public or private institutions, including higher education institutions, to develop large-scale, place-making projects that establish a geographic district to attract talent, foster collaboration, and enable concentration of life science and cyber industries;
- foster public-private partnerships between private industry and higher education institutions and the development of research and commercialization centers, such as an advanced biotechnology commercialization center;
- attract new lead venture capital firms to fund startup and emerging companies; and
- support talent development initiatives to address skill shortage areas in science, technology, engineering, and math fields to meet workforce needs. An example would be co-funding a workforce and skill development center for advanced technology skill development in the cyber, artificial intelligence, or robotics fields;

TEDCO advises that the efforts would be focused on creating spaces for collaboration and innovation in an attempt to allow new and young companies to remain in the State rather than leaving the State when a company grows beyond what the State’s technology infrastructure can sustain. While opportunity zones are not mentioned in the legislation, the corporation notes that early focus would be put on investments in those areas.

Many of the priorities of the MTIF were derived from the efforts of Excel Maryland, an initiative launched in 2017 to focus on developing new collaborative strategies for growth in the life sciences and cybersecurity industries. TEDCO also points to the Georgia Research Alliance, the Ohio Third Frontier, Massachusetts Life Sciences Center Capital Projects, and Massachusetts Tech Collaborative Industry-University Centers as examples for the MTIF to follow.

For example, the Massachusetts Life Sciences Center received a 10-year, \$500 million commitment from the state; since its inception, the program has invested or committed more than

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\$677 million in capital funding, tax incentives, and grants and loans. Based on how the MTIF performs in its initial years, TEDCO has a similarly sized vision for State investment into the new program. The corporation would judge performance based on matching capital investments, business utilization of infrastructure, the retention and growth of the technology ecosystem, and jobs created.

Due to the large and ongoing nature of this new program and the fiscal condition of the State, the Department of Legislative Services (DLS) recommends deleting \$16.5 million in general funds from the corporation’s operating grant intended to fund the program and personnel associated with the program.

Builder Fund (Formerly Minority Pre-seed Investment Fund)

The fiscal 2020 allowance also include an additional \$1 million in general funds for the Builder Fund, a pre-seed stage investment program that was previously targeted at minority-owned companies. That program received \$180,000 from the Reserve Fund in fiscal 2017 and 2018. The Builder Fund is removing the minority focus of this program and is instead targeting startup companies run by people with a socially or economically disadvantaged background and will invest up to \$50,000 in two tranches. The first phase of the program will include one-on-one advisory support, operations support, and networking. The second tranche of funding would be provided after pre-set milestones are met. TEDCO is adding \$550,000 from the Reserve Fund to this program in fiscal 2019. **TEDCO should comment on the shift in focus of the program.**

Maryland Stem Cell Research Program

The Stem Cell Research Fund was established by Chapter 19 of 2006 to support stem cell research and development at Maryland research institutions or private companies. The Stem Cell Research Commission reviews applicant projects and makes recommendations to the TEDCO board about research grant awards. The fiscal 2020 allowance includes \$8.2 million in general funds for the program, the same as the fiscal 2018 appropriation. TEDCO redesigned the program in fiscal 2017 to focus on company formation and moving technology from universities to the commercial market with an ultimate goal of finding cures.

MII

The fiscal 2020 allowance includes \$4.8 million in general funds for the MII. The MII is designed to combine the technology transfer expertise of TEDCO and the research expertise of the State’s research universities to speed commercialization opportunities. To qualify for participation in the initiative, each university must provide funds annually. Funds may be used to (1) provide grant funding to a qualifying university-based entrepreneur or other startup entity to promote the commercialization of technology developed in whole, or in part, by a qualifying university; (2) pursue grant funding for the initiative or its qualifying universities; (3) develop and implement guidelines for the technology transfer; and (4) identify projects at qualifying universities that may be viable for commercialization. TEDCO is providing an additional \$800,000 in nonbudgeted funds.

Life Sciences Investment Fund

The fiscal 2020 allowance includes \$1 million in general funds for the Life Sciences Investment Fund. The fund was formerly a grant program housed under Commerce’s BioMaryland Center. It was transferred to TEDCO through legislation in fiscal 2016. TEDCO has tailored the program to meet the needs of Maryland companies developing products addressing human health that require approval from the U.S. Food and Drug Administration for commercialization. According to TEDCO, the program makes investments that will enable companies to reach critical milestones early in their product development efforts; increase the company’s valuation; and better position the company for follow-on investment, product commercialization, and job creation. Through this program, TEDCO is also providing access to biotechnology market research databases by using its own nonbudgeted funds at a cost of \$93,325 annually.

Gap Investment Fund

The fiscal 2020 allowance includes \$1 million in general funds for the Gap Investment Fund. The program is intended to fill the gap between TEDCO’s traditional seed investment programs and the venture capital programs recently shifted to the corporation from Commerce.

Cybersecurity Investment Fund

The fiscal 2020 allowance includes \$900,000 in general funds for the Cybersecurity Investment Fund (CIF). The CIF provides up to \$200,000 to support projects that advance cybersecurity technology toward commercialization. Specifically, the funds are meant to move their technology further along the commercialization pathway, increase the company’s valuation, and lead to follow-on investment for further growth and sustainability.

TCF

This program awards seed funding to early-stage companies developing technology. The \$200,000 awards are meant to develop and commercialize technology products of Maryland early-stage companies. The fiscal 2020 allowance includes approximately \$662,000 in general funds to support the program.

Rural Business Initiative

The fiscal 2020 allowance includes \$500,000 in general funds for the Rural Business Initiative (RBI). RBI is designed to provide technical and business assistance to small and early-stage technology-based companies that are located in rural Maryland. This assistance is provided by regional business mentors that are contractual staff under TEDCO.

Maryland Industrial Partnership Program

The fiscal 2020 allowance includes \$300,000 in general funds for the Maryland Industrial Partnership program. This program is designed to accelerate commercialization by matching funds for university-based research projects that help companies develop new products.

Special Funds: MVF

Due to the transfer of the MVF from Commerce to TEDCO, the corporation's budget began to include special funds in fiscal 2016. The fiscal 2020 allowance includes \$1.7 million in special funds for the administration of the program and \$6.5 million in special funds for investments of the MVF. The \$8.2 million allowance is a 6.1% increase over the fiscal 2019 working appropriation. This program is discussed in further detail in the Issues section of this analysis.

Issues

1. Maryland Venture Fund Audit Reveals Significant Issues

The Office of Legislative Audits (OLA) recently completed an examination of TEDCO that included three findings, each of which reveal significant issues with how the corporation operates the MVF.

Background

The MVF (formerly known as the Enterprise Fund) was transferred from Commerce to TEDCO in fiscal 2016. The MVF provides capital through equity and convertible debt purchases for startup companies that are developing innovative technologies. Beginning in fiscal 2013, this program also became the means for the implementation of the InvestMaryland program. This is a State-supported venture capital program that was funded through an auction of a tax credit against the insurance premium tax for insurance companies. A portion of these funds are invested directly by TEDCO, and a portion are invested by private venture capital funds on behalf of the State.

Investments Made in Non-Maryland Firms

The audit determined that TEDCO had an inconsistently documented approval process or regulations for the direct investments of the MVF. Additionally, there was a lack of documentation to support how certain investments promoted economic development in the State. This is despite State law requiring the development of regulations for direct investments and requiring that the MVF make investments in businesses that have their principal operations in the State and intend to remain in the State after receiving the investment. OLA tested 10 direct investments and found that 6 investments in four companies, totaling \$4.7 million, were made either in companies with a principal place of business outside of Maryland at the time of the investment or did not remain in Maryland after the investment, as required.

For example, the MVF made an investment of \$1.5 million in a company that informed TEDCO that it would be moving out of State and made a second \$1.5 million investment in the same company a month after it had closed its Maryland facility. The MVF also invested \$1 million in another company in a neighboring state with no indication that the company intended to relocate. It did not.

OLA recommended that TEDCO adopt required regulations for direct investments from the MVF, require investments be made in Maryland companies, and establish a way to evaluate each investment's potential economic impact on Maryland. TEDCO notes in its response to OLA that it drafted regulations in December 2018 that have been reviewed by a newly composed investment committee and that it will finalize the regulations by April 2019.

The MVF Created Its Own Advisory Committee

Under Sections 10-474 through 10-478 of the Economic Development Article, the MVF should be overseen by the MVF Authority. Members of the authority may not have any financial interest in a

purchaser, business, or venture firm and shall file public disclosures of financial interests. However, the terms of all members of the authority have expired, and the positions have gone unfilled. In its place, TEDCO created its own three-member advisory committee to provide investment advice but did not establish any policies and procedures regarding membership to prevent conflicts of interest. The OLA review disclosed that the venture firms of two of the three advisory committee members had received approximately \$21.3 million in funding through the MVF. Advisory committee members were not required to be independent or file financial disclosure statements with the State Ethics Commission. OLA suggests that legislative action may be appropriate to clarify or modify the role of the authority in the MVF program.

OLA recommends that TEDCO establish adequate policies and procedures to ensure the independence of MVF investment decisions, such as developing a formal conflict of interest policy for all MVF programs and requiring financial disclosure statements from those advising on MVF investments. TEDCO has established a new investment committee comprised of current TEDCO board directors to provide investment oversight of the MVF, who will continue to file financial disclosure forms with the State Ethics Commission. The corporation is proposing that this committee replace the defunct MVF Authority.

The MVF Monitoring of Venture Firms Insufficient

The OLA review also found that TEDCO failed to sufficiently monitor the third-party venture firms that received funding through the MVF. The corporation did not have procedures to monitor the accuracy of management fees charged by the firms and did not establish a process to resolve investment shortfalls on a timely basis. For example, Invest Maryland (the MVF predecessor) committed \$10 million to one firm in 2013, but the firm did not invest any of that in Maryland companies. Of the \$10 million, \$5.9 million had been invested outside of Maryland. Despite TEDCO management being aware of the lack of Maryland investments by the firm, TEDCO has taken no action.

OLA recommended that the MVF monitor management fees and ensure that the venture firms report all investment specific information required. It also recommended that the corporation resolve potential shortfalls on a timely basis and evaluate whether the use of clawback provisions is warranted.

Related Legislation

SB 340 and HB 543 of 2019 would require TEDCO to recover investments made from the MVF if a business that received an investment failed to maintain at least 50% of its workforce either living or working in Maryland for at least three years after receiving the MVF funding. Other related legislation has also been introduced.

DLS recommends restricting \$800,000 in special funds to be used for the administration of the MVF pending a report to the budget committees that satisfactorily addresses the findings of the OLA audit.

2. Decline in Reserve Fund Revenue and Assistance

Beginning in 2018, TEDCO began providing detailed information on its Reserve Fund in order to provide the budget committees with a more systemic, consistent, and transparent approach to better inform budget decision making. **Exhibit 4** shows the status of the Reserve Fund, including its revenues, expenditures, and balances from fiscal 2016 through the fiscal 2020 budget. A spike in revenue in fiscal 2018 allowed the corporation to provide additional nonbudgeted assistance to a variety of programs. However, the corporation is estimating a reduction in available funds, and plans to provide only \$3.3 million in fiscal 2019 and \$2.55 million in fiscal 2020, down from \$8.1 million in fiscal 2018.

Exhibit 4
TEDCO Reserve Fund
Fiscal 2016-2020 Est.

	<u>2016</u> <u>Actual</u>	<u>2017</u> <u>Actual</u>	<u>2018</u> <u>Actual</u>	<u>2019</u> <u>Est.</u>	<u>2020</u> <u>Est.</u>
Beginning Balance	\$8,128,372	\$8,754,892	\$10,311,847	\$12,635,150	\$11,532,131
Revenue					
Cash					
MII Program – University Contributions	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000
Repayments from Seed Grants/Investments	485,761	361,539	469,353	800,000	500,000
Event Income (Registration, Sponsorship, etc.)	121,497	112,918	88,147	100,000	100,000
Licensing Agreement Royalty (MII)	29,000	100,000	-7,804	0	0
Interest and Dividend Income	50,255	111,222	125,596	60,000	60,000
Incubator Capital Note Repayment	145,304	137,652	425,000	25,000	25,000
Miscellaneous	56,034	53,078	0	0	0
Noncash					
Increase Value of Investments	608,863	711,432	2,720,568	250,000	250,000
Increase Value of Notes Receivable	577,445	875,232	4,802,610	0	0
Interest on Convertible Notes	475,472	645,353	1,020,560	200,000	150,000
Total Revenue	\$3,349,632	\$3,908,425	\$10,444,031	\$2,235,000	\$1,885,000
Total Available Funds	\$11,478,004	\$12,663,318	\$20,755,878	\$14,870,150	\$13,417,131

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	<u>2016</u> <u>Actual</u>	<u>2017</u> <u>Actual</u>	<u>2018</u> <u>Actual</u>	<u>2019</u> <u>Est.</u>	<u>2020</u> <u>Est.</u>
Expenditures/Encumbrances					
MII Program (Site Miner Costs and Awards)	\$658,000	\$566,909	\$1,662,304	\$800,000	\$800,000
Event Expense (Expo and Stem Cell Symposium)	113,297	141,765	295,564	250,000	250,000
Gap Investment Fund (Awards)	0	0	1,000,000	0	0
Technology Commercialization Funds (Awards)	1,467,493	1,138,000	1,400,000	0	0
Stem Cell awards (Prior Rescinded and Re-awarded)			1,106,687	0	0
Minority Pre-Seed Business Fund (MBPSF)	0	60,000	120,000	0	0
Builder Fund (Previously MBPSF)			0	550,000	0
Executive Exchange (Mentoring Services)	414,322	394,809	339,237	215,000	500,000
Incubation Challenge (Pilot Initiative)	0	0	750,000	0	0
IT Reconfiguration (New CRM and New Website)	0	0	115,507	0	0
New Initiatives	0	0	0	0	0
Tech Validation (Awards)	70,000	49,988	0	0	0
Administrative Support			1,331,429	1,523,019	1,000,000
Total Expenditures/Encumbrances	\$2,723,112	\$2,351,471	\$8,120,728	\$3,338,019	\$2,550,000
Ending Balance	\$8,754,892	\$10,311,847	\$12,635,150	\$11,532,131	\$10,867,131

CRM: customer relationship management

IT: information technology

MII: Maryland Innovation Initiative

TEDCO: Maryland Technology Development Corporation

Source: Maryland Technology Development Corporation

Operating Budget Recommended Actions

	<u>Amount Reduction</u>
1. The allowance includes \$16 million in funding for the new Maryland Technology Infrastructure Fund and \$500,000 in associated personnel costs. This action deletes all funding for the program.	\$16,500,000 GF
2. Add the following language to the special fund appropriation:	

, provided that due to the seriousness of findings in the most recent fiscal compliance audit issued by the Office of Legislative Audits (OLA), \$800,000 of this agency’s special fund appropriation for the administration of the Maryland Venture Fund (MVF) (also known as the Enterprise Investment Fund) may not be expended until the Maryland Technology Development Corporation (TEDCO) submits a report detailing its actions in response to OLA’s findings. This report shall include (1) TEDCO’s criteria for the receipt of investments from this program, including a restriction on investments outside of Maryland; (2) its plans for the reestablishment of the Maryland Venture Fund Authority to oversee the MVF; and (3) what actions TEDCO is, or will be, taking to reclaim investments made in companies that were not in Maryland or that left Maryland less than two years after receiving an MVF investment. The budget committees shall have 45 days to review and comment following the receipt of the report. Funds not expended for this purpose may not be transferred by budget amendment or otherwise to any other purpose and shall be canceled.

Explanation: The budget committees are concerned about the seriousness of the findings of the fiscal compliance audit of TEDCO. This action would restrict a portion of the funds for the administration of the MVF until the receipt of a report detailing actions taken in response to the findings.

Information Request	Author	Due Date
Response to OLA audit findings	TEDCO	45 days prior to the expenditure of funds
Total General Fund Reductions		\$16,500,000

Updates

1. Major Grants

Exhibit 5 shows award recipients for all deals closed or projects approved in fiscal 2018 for all of TEDCO’s programs, including those funded with general, federal, or nonbudgeted funds. Some programs, such as the Stem Cell Research Program, award funds over multiple years, so funding levels do not necessarily match appropriation amounts.

Exhibit 5
Maryland Technology Development Corporation Award Recipients
Fiscal 2018

<u>Recipient</u>	<u>Award Amount</u>
Cyber Investment Fund	
Syncurity Corp	\$200,000
Bandura LLC	200,000
Zuul Inc.	100,000
Ataata Inc.	200,000
TrackOFF LLC	100,000
CyberWire Inc.	100,000
<i>Subtotal</i>	<i>\$900,000</i>
GAP Funding	
RackTop Systems Inc.	\$500,000
CoverMy Test Inc.	500,000
LifeSprout Inc.	500,000
MaxSalesPrice Inc.	499,995
<i>Subtotal</i>	<i>\$1,999,995</i>
Incubator Assistance	
UMBC Research Park Corporation, Inc.	\$28,000
TowsonGlobal Incubator	10,000
Bethesda Green Inc.	12,000
Emerging Technology Center Inc.	17,000
University of Baltimore	6,000

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<u>Recipient</u>	<u>Award Amount</u>
Bowie Business Innovation Center	16,000
Betamore Inc.	10,000
BioHealth Innovation Inc.	10,000
BioHealth Innovation Inc.	10,000
Maryland Center for Entrepreneurship	10,000
Launch Workplaces	5,000
Energetics Technology Center Inc.	5,500
UM Center for Environmental Science	10,000
Sinai Hospital of Baltimore, Inc.	9,900
Frederick Innovative Technology Center, Inc.	12,000
<i>Subtotal</i>	<i>\$171,400</i>

Life Science Investment Fund

Orpheris Corp	\$200,000
Adaptive Phage	100,000
Theraly Fibrosis	200,000
Vixiar Medical	200,000
<i>Subtotal</i>	<i>\$700,000</i>

Maryland Innovation Initiative

Airgility, Inc.	\$150,000
Cellth Systems	150,000
CykloBurn Technologies, LLC	150,000
Freestate Optics, LLC	150,000
Living Canopies, Ltd.	150,000
Johns Hopkins University	2,118,861
Morgan State University	115,000
NextStep Robotics	150,000
Radiopharmaceutical Imaging	150,000
Thermohalt Technology, LLC	149,642
University of Maryland, Baltimore	919,996
University of Maryland, College Park	690,000
University of Maryland, Baltimore County	675,000
<i>Subtotal</i>	<i>\$5,718,499</i>

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<u>Recipient</u>	<u>Award Amount</u>
Minority Business Pre-seed Fund (TEDCO Only Investment)	
PYT Fund	\$20,000
Kweli TV	20,000
PyroDex	20,000
Elite Gaming Live	20,000
RemodelMate	20,000
ScholarMe	20,000
<i>Subtotal</i>	<i>\$120,000</i>
 Rural Business Innovation Initiative	
Plum Dragon	\$25,000
PaverGuide	25,000
Nanobiofab	34,350
GOEFER	28,750
HopFlyt	25,000
NeuroHelmut	7,950
GMBiosciences	8,400
LuckyLunker	8,400
Intrasen	8,400
Veralox	8,400
BetterWay	3,750
Simmbion	8,400
<i>Subtotal</i>	<i>\$191,800</i>
 Stem Cell Research Fund	
Johns Hopkins University	\$4,605,303
LifeSprout	300,000
Longeveron, LLC	750,000
RoosterBio Inc	300,000
Theradaptive, Inc.	299,005
University of Maryland – Baltimore	2,076,410
<i>Subtotal</i>	<i>\$8,330,718</i>

T50T01 – Maryland Technology Development Corporation

<u>Recipient</u>	<u>Award Amount</u>
Technology Commercialization Fund	
Discourse Analytics	\$100,000
Workspace Software	100,000
ValuNAV LLC	100,000
Universal Learning	200,000
ARMR Systems LLC	100,000
Vizual.ai, Inc.	200,000
Eyrus Inc.	100,000
Legends of Learning Inc.	100,000
Halcash North America Inc.	200,000
Pinkaloo Inc.	100,000
Cerebro Capital Inc.	100,000
WhiteBox Technologies Inc.	200,000
BlackPoint Holding LLC	200,000
QxBranch Inc	199,800
<i>Subtotal</i>	<i>\$1,999,800</i>
Total	\$20,132,212

PYT: pay your tuition

UMBC: University of Maryland, Baltimore Campus

UM: University of Maryland

Source: Maryland Technology Development Corporation Award

Appendix 1
Current and Prior Year Budgets
Maryland Technology Development Corporation
(\$ in Thousands)

	<u>General</u> <u>Fund</u>	<u>Special</u> <u>Fund</u>	<u>Federal</u> <u>Fund</u>	<u>Reimb.</u> <u>Fund</u>	<u>Total</u>
Fiscal 2018					
Legislative Appropriation	\$19,474	\$7,348	\$0	\$0	\$26,822
Deficiency/Withdrawn Appropriation	0	0	0	0	0
Cost Containment	0	0	0	0	0
Budget Amendments	0	0	0	0	0
Reversions and Cancellations	0	0	0	0	0
Actual Expenditures	\$19,474	\$7,348	\$0	\$0	\$26,822
Fiscal 2019					
Legislative Appropriation	\$19,474	\$7,714	\$0	\$0	\$27,189
Budget Amendments	0	0	0	0	0
Working Appropriation	\$19,474	\$7,714	\$0	\$0	\$27,189

Note: The fiscal 2019 appropriation does not include deficiencies, a one-time \$500 bonus, or general salary increases. Numbers may not sum to total due to rounding.

Fiscal 2018

The fiscal 2018 legislative appropriation was unchanged.

Fiscal 2019

The fiscal 2019 working appropriation is unchanged from the legislative appropriation.

**Appendix 2
Audit Findings**

Audit Period for Last Audit:	January 7, 2015 – April 10, 2018
Issue Date:	February 2019
Number of Findings:	3
Number of Repeat Findings:	0
% of Repeat Findings:	0%
Rating: (if applicable)	n/a

Finding 1: The Maryland Technology Development Corporation (TEDCO) had not adopted regulations for direct equity investments through the Maryland Venture Fund (MVF), as required by State law, and documentation was lacking to support how certain investments promoted economic development in the State.

Finding 2: TEDCO created a three-member advisory committee related to the MVF to provide investment advice, without establishing adequate policies and procedures regarding the committee’s membership to prevent potential conflicts of interest. We found that the committee included members associated with certain venture firms that received funding from the MVF.

Finding 3: TEDCO’s monitoring of third-party venture firms receiving funding through MVF’s Invest Maryland Program was not sufficient.

*Bold denotes item repeated in full or part from preceding audit report.

**Appendix 3
Object/Fund Difference Report
Maryland Technology Development Corporation**

<u>Object/Fund</u>	<u>FY 18 Actual</u>	<u>FY 19 Working Appropriation</u>	<u>FY 20 Allowance</u>	<u>FY 19 - FY 20 Amount Change</u>	<u>Percent Change</u>
Objects					
08 Contractual Services	\$ 0	\$ 13,440	\$ 12,123	-\$ 1,317	-9.8%
12 Grants, Subsidies, and Contributions	26,822,060	27,175,199	45,146,923	17,971,724	66.1%
Total Objects	\$ 26,822,060	\$ 27,188,639	\$ 45,159,046	\$ 17,970,407	66.1%
Funds					
01 General Fund	\$ 19,474,480	\$ 19,474,480	\$ 36,974,480	\$ 17,500,000	89.9%
03 Special Fund	7,347,580	7,714,159	8,184,566	470,407	6.1%
Total Funds	\$ 26,822,060	\$ 27,188,639	\$ 45,159,046	\$ 17,970,407	66.1%

Note: The fiscal 2019 appropriation does not include deficiencies, a one-time \$500 bonus, or general salary increases. The fiscal 2020 allowance does not include general salary increases.

Appendix 4
Fiscal Summary
Maryland Technology Development Corporation

<u>Program/Unit</u>	<u>FY 18 Actual</u>	<u>FY 19 Wrk Approp</u>	<u>FY 20 Allowance</u>	<u>Change</u>	<u>FY 19 - FY 20 % Change</u>
01 Tech. Development, Transfer and Commercialization	\$ 4,574,480	\$ 4,574,480	\$ 5,074,480	\$ 500,000	10.9%
03 Maryland Stem Cell Research Fund	8,200,000	8,200,000	8,200,000	0	0%
04 Maryland Innovation Initiative	4,800,000	4,800,000	4,800,000	0	0%
05 Cybersecurity Investment Fund	900,000	900,000	900,000	0	0%
06 Enterprise Fund Administration	1,347,580	1,714,159	1,684,566	-29,593	-1.7%
07 Enterprise Investment Fund	6,000,000	6,000,000	6,500,000	500,000	8.3%
08 Second Stage Business Incubator	1,000,000	1,000,000	1,000,000	0	0%
09 Maryland Technology Infrastructure Fund	0	0	16,000,000	16,000,000	n/a
10 Minority Pre-Seed Investment Fund	0	0	1,000,000	1,000,000	n/a
Total Expenditures	\$ 26,822,060	\$ 27,188,639	\$ 45,159,046	\$ 17,970,407	66.1%
General Fund	\$ 19,474,480	\$ 19,474,480	\$ 36,974,480	\$ 17,500,000	89.9%
Special Fund	7,347,580	7,714,159	8,184,566	470,407	6.1%
Total Appropriations	\$ 26,822,060	\$ 27,188,639	\$ 45,159,046	\$ 17,970,407	66.1%

Note: The fiscal 2019 appropriation does not include deficiencies, a one-time \$500 bonus, or general salary increases. The fiscal 2020 allowance does not include general salary increases