

**D06E0201**  
**Board of Public Works – PAYGO**  
**Maryland Technology Development Corporation**

***Technology Development Investment Fund (Statewide)***

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<b>GO Bonds</b>	<b>\$1,000,000</b>	<b>Recommendation:</b>	<b>Reduce PAYGO</b>
<b>PAYGO GF</b>	<b>2,000,000</b>		<b>general funds \$500,000</b>

**Bill Text:** Provide funds to support the design, construction, and equipping of business incubators.

**Program Description:** Appropriations to the Technology Development Investment Fund are intended to help promote the commercialization of technology developed through university and federal research facilities. The fund may be used to validate technical feasibility, provide patent protection, produce prototypes, and demonstrate market potential. In addition, the fund can make investments in technology companies and support the development and operation of business incubators.

**Year Program Began:** 2001

**Comments:** The fiscal 2004 allowance provides \$3 million to the Maryland Technology Development Corporation (TEDCO) to be utilized as follows:

- \$1 million in general obligation (GO) bonds to support the business incubator program;
- \$500,000 in general funds for the University Technology Development Fund; and
- \$1.5 million in general funds for the Maryland Technology Transfer Fund.

Prior appropriations to TEDCO were PAYGO funds.

- ***Incubator Facilities Program:*** Formally established by Chapter 597, Acts of 2001, TEDCO's incubator facilities program provides matching grants for the development of new technology-related business incubators throughout the State. A recipient must provide matching funds or an in-kind contribution that equals the amount of the grant unless the board waives this requirement in whole or in part for good cause. The board may not award more than \$1.0 million in any fiscal year for incubator projects within a single county or within Baltimore City unless otherwise approved by a two-thirds vote of the membership of the board. This program was first funded in fiscal 2002 and has received a total appropriation of \$5,750,000. TEDCO reports that it has approved three investments totaling \$2,775,000 (nearly half of its total appropriation). The approved investments have leveraged

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private funds at a ratio of 3:1 or \$8,749,000. Another six projects that would total to a State cost of \$4,975,000 are in the pipeline in various stages of readiness. These projects are expected to leverage an additional \$13,725,000 in outside investment. With the proposed \$1.0 million in GO bond funds for fiscal 2004, TEDCO advises that the incubator program will only require an additional \$1.0 million in State funds to complete the build-out of the State's incubator network. **Exhibit 1** shows the incubator projects that have received State funding commitments as well as those projects in the program pipeline.

**Exhibit 1**

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**TEDCO Incubator Facilities Program Committed and Pending Projects**

<u>Committed Projects</u>	<u>Committed TEDCO Funding</u>	<u>Leveraged Match</u>
Hopkins Eastern High School Project	\$1,000,000	\$5,670,000
Silver Spring Innovation Center	1,000,000	2,304,000
University of Maryland at Baltimore County Tech-Center	775,000	775,000
<b>Total State and Leveraged Funds</b>	<b>\$2,775,000</b>	<b>\$8,749,000</b>

  

<u>Prospective Projects</u>	<u>Projected TEDCO Funding</u>	<u>Minimum Match*</u>
University of Maryland at Baltimore	\$1,000,000	\$1,000,000
University of Maryland at College Park	1,000,000	1,000,000
Anne Arundel County Incubator	1,000,000	1,000,000
Frederick County Incubator	500,000	500,000
Johns Hopkins University – Biopark	1,000,000	1,000,000
National Federation of the Blind	475,000	475,000
<b>Total Projected State and Leveraged Funds</b>	<b>\$4,975,000</b>	<b>\$4,975,000</b>

\*This shows the minimum 1:1 match – TEDCO anticipates funded projects will receive a 3:1 match or \$13,725,000 in leveraged private contributions.

Source: TEDCO

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- **University Technology Development Fund (UTDF):** UTDF provides investments of up to \$100,000 to support the development and commercialization of university-owned intellectual property. Since inception and through the second quarter of fiscal 2003, TEDCO has received 44 proposals for investment financing from the UTDF. TEDCO has approved funding for 20 projects totaling \$1,262,954, and another 5 proposals totaling \$267,070 may receive funding approval during fiscal 2003 once clarification or revisions to the business proposal are received. Two projects totaling \$200,000 have been received and are awaiting review. TEDCO anticipates using the additional \$500,000 proposed in the fiscal 2004 budget to fund additional project proposals and provide follow-up funding investments to promising projects which have already received initial funding through the

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program. This is one of several changes to the program the corporation's advisory committee has adopted. The follow-up funding anticipates that projects will require supplemental funding in order to effectively demonstrate commercial potential.

- ***Maryland Technology Transfer Fund (MTTF):*** This program provides seed State investments of up to \$50,000 in very early stage companies to encourage technology transfer from universities and federal laboratories. MTTF awards have a repayment obligation in the event of commercialization and will require in-kind matching funds depending upon the size of the company. In December 2001, TEDCO staff completed the detailed design of the new Maryland Technology Transfer Fund (MTTF) - formerly known as Maryland Industrial Partnerships Program (MIPS). Prior to TEDCO's administration, this program was funded through the Department of Business and Economic Development's (DBED) Enterprise Fund at approximately \$200,000 annually. TEDCO piloted the revised MTTF program during fiscal 2002 utilizing a \$460,000 grant from DBED's Enterprise Fund. Beginning in fiscal 2003, the program was expanded to include all universities and federal labs in Maryland and is supported at the \$1.0 million level consisting of \$800,000 from TEDCO's operating budget grant provided from the Enterprise, and an additional direct grant from the Enterprise Fund in the amount of \$200,000. Through the second quarter of fiscal 2003, TEDCO has received 33 project proposals totaling \$1,650,000 in requested funds. TEDCO has committed \$750,000 for 15 projects, another \$800,000 for eight projects is recommended after some project clarification and revision takes place, three projects totaling \$150,000 are under review, and seven projects representing \$350,000 have been rejected by the TEDCO Federal Laboratory Technology Transfer Advisory Committee.

By the close of fiscal 2003, TEDCO expects to make commitments sufficient to fully encumber the \$1.0 million provided in the fiscal 2003 budget. For fiscal 2004 the corporation is requesting \$1.5 million to fund MTTF investments. The request for additional funds over the amount provided for fiscal 2003, represents a significant enhancement to a program funded at only \$460,000 in fiscal 2002 and just \$200,000 annually prior to fiscal 2002. **In light of the State's fiscal condition, DLS recommends level funding this program for fiscal 2004 at \$1.0 million.**

## Fund Data

### Fund History

	<i>FY 2002 Actual</i>	<i>FY 2003 Estimated</i>	<i>FY 2004 Estimated</i>
<b>Beginning Balance</b>	\$0	\$1,777	\$4,787
<b>REVENUE</b>			
General Funds	3,750	3,000	2,000
GO Bonds	0	0	1,000
Investment & Other Income	27	10	10
<b>TOTAL REVENUE</b>	3,777	3,010	3,010
<b>TOTAL AVAILABLE</b>	3,777	4,787	7,797
<b>ENCUMBRANCES</b>			
Loans	2,000	4,787*	3,010
Operating Expenses	0	0	0
<b>TOTAL ENCUMBRANCES</b>	2000	0	3,010
<b>Ending Balance</b>	\$1,777	\$4,787	\$4,787

\*Grants made as of 12/31/02 = \$1,443,044

### (\$ in Millions)

<i>Description</i>	<i>2002* Approp.</i>	<i>2003 Approp.</i>	<i>2004 Request</i>	<i>2005 Estimate</i>	<i>2006 Estimate</i>	<i>2007 Estimate</i>	<i>2008 Estimate</i>
PAYGO GF	\$3.750	\$3.000	\$2.000	\$2.000	\$3.000	\$3.000	\$3.000
GO Bonds	0.000	0.000	1.000	1.000	0.000	0.000	0.000
<b>Total</b>	<b>\$3.750</b>	<b>\$3.000</b>	<b>\$3.000</b>	<b>\$3.000</b>	<b>\$3.000</b>	<b>\$3.000</b>	<b>\$3.000</b>

\*The original appropriation was \$5.0 million but was reduced through the embargo of \$1,250,000

## ***Issues***

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### **1. Operating Budget Support**

#### **Statutory History**

TEDCO was established by Chapter 661, Acts of 1998 to stimulate the creation of and investment in new scientific research and technologies for economic development in the State. The enabling legislation allows the corporation to (1) accept loans, grants, or assistance from federal, State, or local governments, colleges or universities, or private sources; (2) acquire, construct, develop, manage, market, manufacture, license, sublicense, reconstruct, rehabilitate, improve, maintain, equip, lease, repair, and operate any project in the State; (3) acquire, purchase, hold, lease, and use any franchise, patent, license, or real, personal, mixed, or tangible or intangible property; (4) sell, lease, transfer, license, sublicense, assign, and dispose of any property; (5) acquire any lands, structures, property, rights-of-way, franchises, easements for the construction, improvement, rehabilitation, or operation of a project; (6) set rates, rentals, fees, and charges for services and resources; (7) do all things necessary to carry out the powers granted, and (8) exercise any power not in conflict with the Constitution and the law of the State.

TEDCO is also exempt from (1) State and local taxes; (2) oversight by the Board of Public Works and the laws governing procurement under the General Procurement Law; (3) laws governing the State personnel management system; (4) laws regarding attendance of the public at open sessions; (5) laws related to Executive Departments. TEDCO, its board, and employees are subject to the public ethics law and the Public Information Act. The debts, claims, obligations, and liabilities of TEDCO or its subsidiaries, if any, may not be considered a debt of the State or a pledge of its credit.

Chapter 13, Acts of 2000 amended certain parts of the TEDCO statute, including changing the name from the Maryland Science, Engineering, and Technology Development Corporation to the Maryland Technology Development Corporation or TEDCO, expanding the board from 11 to 15 members, and authorizing the corporation to make grants and equity investments in technology-based businesses. Finally, TEDCO's statutory authority was further amended by Chapter 364, Acts of 2002, to allow the corporation to be a member of or create a non-profit for for-profit entity that meets the eligibility requirements for the receipt of certain federal grants.

#### **Funding History**

Although funds were not provided at the time the corporation was created, TEDCO received a grant of \$642,000 from the Enterprise Fund to provide start-up funds for staff and operations during fiscal 2000. The fiscal 2001 through 2003 budgets provided operating subsidies funded from the Enterprise fund in the amounts of \$2.0 million, \$2.25 million, and \$2.75 million, respectively. The fiscal 2004 allowance provides TEDCO with an operating subsidy of \$2.0 million, or \$750,000 less than what it received for fiscal 2003. In addition, the fiscal 2004 budget for the first time supports TEDCO with State general funds rather than through a special fund grant from DBED's Enterprise Fund. The funds are budgeted as a general fund grant through the Board of Public Works under budget code D05E01.10 Miscellaneous

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Grants to Private Nonprofit Groups. **Exhibit 2** provides a breakdown of TEDCO’s operating funding history and utilization.

**Exhibit 2**

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**TEDCO Operating Budget  
Fiscal 2001 through 2003 Actual and Fiscal 2004 Proposed**

<u>Programs/Purpose</u>	<u>Fiscal 2001</u>	<u>Fiscal 2002</u>	<u>Fiscal 2003</u>	<u>Fiscal 2004</u>
Technology Benchmarking	\$300,000	\$521,000	\$481,423	\$217,000
Technology Transfer Programs & Services	425,000	704,000	1,575,079	1,255,100
Technology Commercialization & Incubation	500,000	581,000	360,414	192,600
Program Services	533,000	0	0	0
Executive Management	242,000	444,000	333,084	335,300
<b>Total</b>	<b>\$2,000,000</b>	<b>\$2,250,000</b>	<b>\$2,750,000</b>	<b>\$2,000,000</b>

Note: These figures do not include \$200,000 received from DBED as a grant to support the MTTF program for fiscal 2003

Source: TEDCO

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TEDCO has indicated that it intends to focus its resources on the most productive activities in the face of reduced funding. Specifically, TEDCO intends to do the following:

- Reduce funding for technology benchmarking and program strategy activities. Over the next six months TEDCO will complete and issue reports including the eReadiness Assessment, biotechnology strategy for the State, a series of studies on the genealogy of Maryland technology companies, and an analysis of the demand for commercial wet lab space.
- Eliminate funding for the Business Incubation Program other than the \$1.0 million of proposed GO bond funds provided in the Governor’s allowance. In prior years TEDCO has funded “best practice” grants and feasibility studies through its operating budget, but this practice will be discontinued for fiscal 2004.
- Reduce staffing levels from 11.5 positions (8 State-funded and 3.5 non-State-funded) to 9.0 positions (6 State-funded and 3 non-State-funded). Total funding for TEDCO’s executive management remains at the fiscal 2003 level because the corporation has already reduced its staffing levels and is also absorbing additional health care costs.

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Despite reduced funding levels, TEDCO intends to implement one new program initiative during the upcoming fiscal year. TEDCO proposes utilizing \$500,000 of its fiscal 2004 operating funds to pilot a three-year \$1.5 million patent program to encourage more University System of Maryland (USM) faculty to bring forth inventions for commercialization. TEDCO will partner with USM's technology licensing offices to raise Maryland's institutions to the national average by increasing the number of patent applications by 150 or nearly 50% above current levels. TEDCO and USM intend to assist faculty with obtaining patents for their ideas. By increasing the amount of funds devoted to obtaining patents, the partners believe that more faculty will be encouraged to patent inventions with commercial application in the marketplace. In order to ensure that USM and TEDCO remain even partners in the program and discourage USM from creaming off the best patent ideas for itself, TEDCO intends to require that all patent assistance be funded jointly. This will also ensure that both partners share equally in the risks and rewards associated with the program.

The impetus behind the Patent Program stems from the results of a study conducted by TEDCO on the State's technology transfer programs conducted in accordance with committee narrative included in the 2001 *Joint Chairman's Report*. TEDCO's assessment of the State's technology commercialization and transfer programs, prepared during the summer of 2002, concludes that while ranking very high in terms of access to federal research and development funds, Maryland ranks near the middle of states in terms of commercializing research. Moreover, the studies of the regions technology and commercialization efforts indicate that the State is not fully leveraging its proximity to stimulate the commercialization of research discoveries made in the State. TEDCO believes that a well-funded and institutionally supported technology licensing office is a necessary component of a successful university technology commercialization program. The goal of this new initiative is to bring USM institutions' performance on quality patent applications from the bottom half of universities nationally to the national average.

**DLS supports the new initiative as a necessary component of the State's efforts to increase the commercialization of new technologies and inventions discovered within the State's university and federal laboratories. DLS recommends that TEDCO further brief the committees on the benefits that the program is expected to have and how the program fits into a larger State plan for increasing the commercial application of inventions and ideas taking place in Maryland. However, DLS recommends that the program funding be reduced to \$250,000 for fiscal 2004. This will maintain \$250,000 of State funds and enable TEDCO to implement the program and begin the process of leveraging funds from USM in its partnership during fiscal 2004. This recommendation will be formally made in the Board of Public Works budget under budget code D05E01.10 where TEDCO's operating grant is budgeted.**

## **2. Biotechnology Industry Strategic Plan Has Not Been Completed**

Maryland is considered to have the third largest biotech cluster in the nation. According to a recent MdBIO report, which provides statistics through calendar 2000, there are 258 biotechnology companies operating in Maryland. These companies employ approximately 16,000 people with average salaries of \$52,605, which equates to approximately \$841 million in payroll. The General Assembly has expressed a good deal of interest in providing innovative programs to support the State's biotech industry. However, recent legislative proposals introduced during the 2001 legislative session to establish a tax credit program

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(HB 1098/SB 801) and sales and use exemption (HB 1137/SB792) failed. In addition, a resolution proposed during the 2001 session that would have requested the Maryland Economic Development Corporation (MEDCO) and DBED to study the feasibility of modifying existing programs and creating a State-sponsored venture capital program for biotechnology also failed. The resolution aimed to explore mechanisms for increasing the availability and access to venture capital in all regions of the State where existing and newly formed biotech research and industry centers are located.

During the 2001 interim, the budget committees continued an examination of the biotechnology industry. Of particular interest were issues concerning technology transfer, coordination among and between the public higher education system and economic development agencies, and the needs of start-up biotechnology companies. In order to get a full assessment of the capacity to improve the State's biotechnology industry, both TEDCO and DBED are required to prepare a strategic plan that addresses the needs of the industry. Committee narrative was included in the *2002 Joint Chairman's Report*. The report was initially due to the committees on or before November 1, 2002. The committees granted a request for an extension of the reporting deadline to January 1, 2003. TEDCO and DBED advise that an interim overview will be presented to the committees. **DLS recommends that a representative of TEDCO and DBED brief the committees on the status of the report and any early findings that their efforts have generated.**

## ***Recommended Actions***

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	<b><u>Amount Reduction</u></b>
1. Reduce general funds for Maryland Technology Transfer Fund (MTTF) investments. The Maryland Technology Development Corporation (TEDCO) intends to utilize \$1.5 million of its \$2.0 million proposed PAYGO general fund appropriation to support project investments for start-up companies through MTTF. The recommended reduction would provide \$1.0 million for MTTF investments during fiscal 2004 which is the same amount supporting the program during fiscal 2003.	\$ 500,000 GF
<b>Total General Fund Reductions</b>	<b>\$ 500,000</b>

## ***Fiscal 2004 Proposed Projects***

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For fiscal 2004, TEDCO intends to provide \$1.0 million in grants for the development of three technology-related business incubators. The corporation also intends to provide \$500,000 in investments through the UTDF program and an additional \$1.5 million in seed stage investments for up to twenty-five early stage start-up companies through the MTTF program.

## ***Fiscal 2003 Project Status***

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<u>Project</u>	<u>Location</u>	<u>Amount</u>	<u>Status</u>
<b>Incubator Facility Program</b>			
UMBC Incubator	Baltimore County	\$1,000,000	Approved
UMB Incubator	Baltimore City	775,000	Committed
UMCP Incubator	Prince George's County	1,000,000	Approved
Anne Arundel Incubator	Anne Arundel County	1,000,000	Approved
<b>University Technology Development Fund</b>	Statewide	\$1,262,954	Committed
<b>Maryland Technology Transfer Fund</b>	Statewide	\$750,000	Committed

Object/Fund Difference Report  
 Maryland Technology Development Corporation - PAYGO

<u>Object/Fund</u>	<u>FY02 Actual</u>	<u>FY03 Working Appropriation</u>	<u>FY04 Allowance</u>	<u>FY03 - FY04 Amount Change</u>	<u>Percent Change</u>
<b>Objects</b>					
12 Grants,Subsidies,Contr	\$ 3,750,000	\$ 3,000,000	\$ 2,000,000	-\$ 1,000,000	-33.3%
14 Land & Structures	0	0	0	0	0.0%
<b>Total Objects</b>	<b>\$ 3,750,000</b>	<b>\$ 3,000,000</b>	<b>\$ 2,000,000</b>	<b>-\$ 1,000,000</b>	<b>-33.3%</b>
<b>Funds</b>					
01 General Fund	\$ 3,750,000	\$ 3,000,000	\$ 2,000,000	-\$ 1,000,000	-33.3%
<b>Total Funds</b>	<b>\$ 3,750,000</b>	<b>\$ 3,000,000</b>	<b>\$ 2,000,000</b>	<b>-\$ 1,000,000</b>	<b>-33.3%</b>

Note: Fiscal 2003 appropriations and fiscal 2004 allowance do not include cost containment and contingent reductions.

Fiscal Summary  
Maryland Technology Development Corporation - PAYGO

<u>Unit/Program</u>	<u>FY02 Actual</u>	<u>FY03 Legislative Appropriation</u>	<u>FY03 Working Appropriation</u>	<u>FY02 - FY03 % Change</u>	<u>FY04 Allowance</u>	<u>FY03 - FY04 % Change</u>
01 Public Works Capital Appropriation	\$ 3,750,000	\$ 0	\$ 3,000,000	-20.0%	\$ 2,000,000	-33.3%
<b>Total Expenditures</b>	<b>\$ 3,750,000</b>	<b>\$ 0</b>	<b>\$ 3,000,000</b>	<b>-20.0%</b>	<b>\$ 2,000,000</b>	<b>-33.3%</b>
General Fund	\$ 3,750,000	\$ 0	\$ 3,000,000	-20.0%	\$ 2,000,000	-33.3%
<b>Total Appropriations</b>	<b>\$ 3,750,000</b>	<b>\$ 0</b>	<b>\$ 3,000,000</b>	<b>-20.0%</b>	<b>\$ 2,000,000</b>	<b>-33.3%</b>

Note: Fiscal 2003 appropriations and fiscal 2004 allowance do not include cost containment and contingent reductions.