MassDevelopment

Emerging Technology Fund (ETF)

Quarterly Report to the Legislature

January 1, 2021 to March 31, 2021

ETF Quarterly Activity Summary

As of March 31, 2021, the ETF has made loans and guarantees to 56 companies totaling $94,397,115. Potential loans of another $12.65 million with eight companies were in the ETF pipeline as of March 31, 2021. Additional loans totaling $2.5 million with two companies were previously approved by the MassDevelopment Board of Directors and were in the closing process as of March 31, 2021. While the Agency has closed 63 loans and guarantees over the lifetime of the ETF, 34 of those have been paid off in full and are no longer in the portfolio. The Fund also received partial proceeds after liquidation of certain assets on loans provided to eight companies in the portfolio and charged off $6,517,005. Seven of the companies involved have ceased to exist. Using data from the annual survey, as of December 31, 2020, nine current portfolio companies created 134 additional new jobs utilizing funding from the Emerging Technology Fund.

Featured Company

MedMinder Systems, Inc.

MedMinder™

Accelmed Partners ("Accelmed"), a private equity firm focused on acquiring and investing in U.S. commercial stage, lower middle market HealthTech companies, announced on March 22, 2021 that it led a $40 million investment in MedMinder Systems Inc. ("MedMinder"), the leading fully integrated, end-to-end pharmacy, medication adherence, and connected care solution for elderly and polypharmacy patients.

Founded in 2007 by Eran Shavelsky, MedMinder is uniquely positioned to meet the needs of elderly and chronically ill patients who require more comprehensive pharmacy service and better engagement with clinical teams. The company's touch screen-enabled, automatic pill dispenser is the first solution on the market capable of delivering medications from its pharmacy directly to patients' doors in pre-organized daily trays for the entire month. In doing so, MedMinder empowers thousands of patients to live more independently in their homes while improving their adherence to prescribed medications. The pill dispenser unlocks only at the specific time a medication should be consumed, monitors the consumption of medications, and allows remote monitoring of drug adherence by caregivers and case managers on behalf of payors as well as telemedicine with physicians, providing peace of mind for families and remote clinical teams.

Closed Loan Activity

Loans Closed

Company	Loan Amount	Date Closed	Municipality	Industry
Dive Technologies	$1,300,000	6/30/2020	Quincy	Autonomous Underwater Vehicle Manufacturer
Armored Things	$2,250,000	6/3/2020	Boston	Software
MentorWorks Education Capital	$1,000,000	3/20/2020	Boston	Financial Technology
DynamiCare Health	$1,250,000	12/5/2019	Cambridge	Digital Health
Massachusetts Materials Technologies	$1,000,000	8/30/2019	Waltham	Advanced Manufacturing
Algorex Health Technologies	$1,250,000	7/30/2019	Boston	Software
First Light Diagnostics	$2,500,000	5/31/2019	Chelmsford	Medical Device
Nano-C	$2,400,000	11/10/2018	Westwood	Advanced Material Manufacturer
Vyasa Analytics	$1,800,000	6/27/2018	Newburyport	Analytics Software
6K	$2,000,000	6/30/2017	North Andover	Advanced Material Manufacturer
Sub-Total	$16,750,000			

Loans Closed and Repaid in Full

Company	Loan Amount	Date Closed	Paid Off	Municipality	Industry
XRHealth USA	$2,000,000	11/16/2020	3/22/2021	Brookline	Digital Health
Lionano	$2,500,000	2/1/2019	11/25/2019	Woburn	Battery Material Manufacturer
Zylotech	$500,000	8/15/2018	1/20/2021	Boston	Analytics Software
MedMinder Systems	$1,500,000	5/11/2018	3/16/2021	Needham	Medical Device
Lexington Medical	$2,500,000	2/22/2017	6/12/2019	Billerica	Medical Device
Atentiv Holdings and Atentiv	$3,000,000	3/4/2016	6/17/2017	Waltham	Medical Device
Biomedical Research Models (Replacement Facilities)	$500,000 and $500,000 (Guarantee)	12/29/2015	10/30/2019	Worcester	Contract Research (Biotechnology)
Dynamo Micropower	$175,000	1/30/2015	5/12/2016	Somerville	Fuel Flexible Turbine Power
Ginkgo Bioworks	$1,000,000	12/15/2014	10/5/2016	Boston	Biotech Engineering
Biomedical Research Models (Replacement Facilities)	$500,000 and $200,000 (Guarantee)	10/29/2014	10/30/2019	Worcester	Contract Research (Biotechnology)
Scencio Systems	$650,000	8/18/2014	8/1/2019	Boxborough	Telemedicine
Persimmon Technologies	$1,500,000	10/1/2013	12/18/2015	Wakefield	Vacuum Robotics
PoroGen Corporation	$1,000,000	4/1/2013	10/2/2015	Woburn	Industrial Filtration
TeraDiode	$2,000,000	12/6/2012	3/7/2017	Wilmington	Industrial Lasers
InVivo Therapeutics Corporation	$2,000,000	10/5/2012	3/1/2019	Cambridge	Medical Device
Fusion Optix	$1,500,000	8/30/2012	11/5/2018	Woburn	CleanTech
CryoXtract Instruments	$800,000	5/15/2012	4/21/2017	Woburn	Medical Device
PowerHouse Dynamics	$1,000,000	3/30/2012	3/1/2018	Newton	CleanTech
Court Square Group	$500,000	3/28/2012	9/30/2016	Springfield	Software & IT
Quiet 3PF (formerly Quiet Logistics)	$2,500,000	1/26/2012	12/28/2018	Devens	eCommerce and Fulfillment
ConforMIS	$1,445,000	6/28/2011	12/23/2016	Burlington	Medical Device
T2 Biosystems	$1,687,500	5/9/2011	12/30/2016	Lexington	Medical Device
Acacia Communications	$3,000,000	2/25/2011	5/14/2015	Maynard	Information Technology

Loan Closed and Repaid in Full (continued)

Company	Loan Amount	Date Closed	Paid Off	Municipality	Industry
Biomedical Research Models	$500,000 and $200,000 (Guarantee)	11/17/2010	10/30/2019	Worcester	Contract Research (Biotechnology)
Qteros	$2,000,000	10/29/2009	11/22/2010	Chicopee	Biofuel Developer
Premium Power Corporation	$2,500,000	5/28/2009	4/13/2012	North Reading	POS Battery Manufacturer
E-Ink Corporation	$1,000,000	5/15/2007	8/31/2009	Cambridge	Electronic Display
Luminus Devices	$2,500,000	4/26/2007	8/22/2013	Billerica	Lighting
Nuvera Fuel Cells	$2,500,000	1/31/2007	12/22/2010	Billerica	Hydrogen Fuel Cell Developer and Manufacturer
Valeritas	$2,500,000	1/12/2007	5/19/2014	Shrewsbury	Medical Device
Middleton Aerospace Corporation	$2,000,000	8/11/2006	8/31/2016	Haverhill	Military and Commercial Aircraft Component Manufacturer
BioVex Group	$2,500,000	6/30/2006	3/1/2011	Woburn	Biotechnology
RenaMed Biologics	$2,300,000	6/14/2006	12/29/2006	Westborough	Bioreplacement Therapies
Hyaluron	$1,000,000	12/19/2005	6/14/2010	Burlington	Contract Manufacturer (Biopharma)
Blue Sky BioTech	$150,000	9/28/2005	7/9/2007	Worcester	Contract Research
MicroTest Laboratories	$799,340 (Loan) $367,500 (Mortgage Guarantee)	7/6/2005	7/31/2012	Agawam	Contract Manufacturer (Biopharma)
Cytonome	$600,000	6/30/2005	2/27/2009	Boston	Medical Devices
Aspen Aerogels	$1,500,000	1/12/2005	12/2/2011	Northborough	Advanced Materials
Celldex Therapeutics (formerly Avant)	$903,657	12/12/2003	3/30/2011	Fall River	Biopharmaceutical
Sub-Total	$60,277,997				

Loans Closed and Principal Partially Charged Off

Company	Loan Amount	Date Closed	Charge Off Date	Municipality	Industry
N12 Technologies	$2,500,000	12/12/2014	10/29/2019	Cambridge	Composite Materials
Advanced MicroSensors	$2,000,000	10/13/2011	3/31/2014	Shrewsbury	Electronics
Lilliputian Systems	$2,500,000	11/13/2009	6/30/2014	Wilmington	Portable Fuel Cell Power Developer
Konarka Technologies	$2,500,000	2/11/2009	11/25/2013	New Bedford	Solar Power Consumer Product Manufacturer
Beacon Power	$2,500,000	6/30/2008	3/7/2012	Tyngsboro	Renewable Energy
ECI BioTech	$630,000	11/16/2007	1/31/2016	Worcester	Health Care Products
Spherics	$2,500,000	7/12/2005	11/19/2008	Mansfield	Pharmaceutical
WorkshopLive	$239,118	5/26/2005	6/30/2012	Pittsfield	Music Software and Technology
Acusphere	$2,000,000	8/16/2004	5/19/2009	Tewksbury	Specialty Pharmaceutical
Sub-Total	$17,369,118				
Total	$94,397,115				

Financial & Technical Assistance

MassDevelopment assisted Acusphere, Celldex Therapeutics (formerly Avant Immunotherapeutics), and Cytonome in finding suitable facilities in the Commonwealth. All loan applicants received assistance in structuring financing for their projects with MassDevelopment and other lenders.

Uncommitted Fund Balance

Between January 1, 2021 and March 31, 2021, the ETF received $3,036,224 in loan repayments, interest income, and fees. Operating expenses were $153,539. The uncommitted balance of the Fund on March 31, 2021 is $21,966,978.

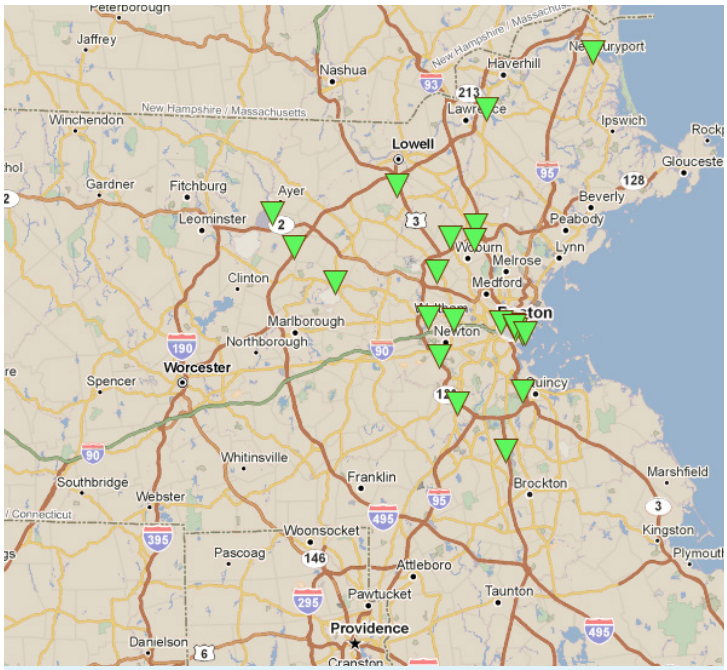
As of 3/31/20	
Beginning Fund Balance	$ 24,750,000
Fund Recapitalization	10,000,000
Fund Recapitalization	15,000,000
Total Funding	**49,750,000**
Cash Activity (accumulated):	
Net Loan Disbursements*	(14,681,035)
Operating Income	10,749,102
Operating Expenses	(7,194,572)
Transfer to MGCC	(15,000,000)
Investment Income	9,095,954
Non-Operating Income	5,517,234
Accrued Expenses	1,328
Accrued Interest Income	(81,802)
Prepaid Insurance	(8,749)
Investment in Warrants	(432,417)
Deferred Income	0
Investment in Common Stock	(140,999)
Investment in Privately Held Companies	(641,339)
Equity Investment - Contributions	(3,973,164)
Cash Balance	**33,241,539**
Less: Cash Commitments:	
Reserved for Guarantees Closed	0
Undisbursed Loans and Guarantees	(7,747,724)
Approved Loans and Guarantees (not closed)	(2,500,000)
Available Committed Equity - MTDC	(1,026,837)
Uncommitted Cash Balance:	**21,966,978**
Less:	
Current Pipeline - Potential New Loans	(12,650,000)
Cash Exceeding Current Pipeline	**$9,316,978**
* Total loan write-offs as of 3/31/21	$6,517,005

Geographic Distribution

From the program's inception through March 31, 2021, the ETF has closed loans and guarantees with companies in each of the Commonwealth's five geographic regions as follows:

Region	Closed Loans	# of Companies
North	$ 20,300,000	9
South	$ 7,203,657	4
Central	$ 13,980,000	7
West	$ 3,905,958	4
Greater Boston	$ 49,007,500	32
Total	**$ 94,397,115**	**56**

Current ETF Portfolio



There are 17 current portfolio companies. A portfolio company is defined as a company with an active loan, warrant, or equity position.

Program History

The mission of the Emerging Technology Fund (ETF) is to create jobs in Massachusetts by providing financing for facilities, equipment, and working capital that leverages private financing to growing companies employing or commercializing emerging technologies.

Since its creation in 2003, the ETF has helped cutting-edge companies locate or expand in the Commonwealth, providing jobs and strengthening the innovation economy. The ETF has leveraged private investment for companies and maintained its ability to serve as an "evergreen fund," providing unconventional risk capital in the form of debt to development-stage emerging technology companies seeking to commercialize their products. In an effort to increase both employment and production, the Commonwealth passed legislation in 2010 that allowed MassDevelopment to offer a working capital term loan product from the Fund to help growing companies address staffing and other working capital needs. This new capability has been well-received especially in light of new technological developments in Deep Tech, Digital Health, and Artificial Intelligence (AI).

The ETF was recapitalized in 2007, and in 2010, the Legislature transferred $15 million to launch the Massachusetts Growth Capital Corporation. Since then, the Fund has taken various measures to ration capital. These measures, as well as early loan payoffs from successful portfolio companies, have stabilized the Fund's liquidity position. The Fund has restored its maximum loan size to $2.5 million and can now support larger expansions. The ETF, however, continues to rely on loan repayments to capitalize new loans and may need recapitalization if new investments for business expansions and relocations outpace loan repayments.

Emerging Technology Fund Advisory Committee

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