



October 19, 2022

Michael Hurley, Clerk of the Senate
Massachusetts Senate
24 Beacon Street, Room 336
State House
Boston, Massachusetts 02133
Email: Michael.Hurley@masenate.gov

Dear Mr. Hurley:

I am pleased to present to you the results of the operations of MassVentures, also known as Massachusetts Technology Development Corporation ("MTDC", "MassVentures" or the "Corporation") for the fiscal year ended June 30, 2022. In June 2012 MTDC started doing business as MassVentures to better reflect the organization's commitment of supporting promising entrepreneurs developing high-growth, technology-driven companies.

Presented below are the significant actions and accomplishments of MassVentures during this past fiscal year. In addition, accompanying this letter are the annual audited financial statements for MassVentures, which are included as part of this annual report that we are submitting pursuant to the requirements of MGL 40G, Section 6.

This report includes the following highlights:

- [Overview of MassVentures' role in the Commonwealth](#)
- [The MassVentures' START program to fuel previously funded SBIR companies](#)
- [Catalyst and Acorn support to fuel innovation in the Commonwealth](#)
- [MassVentures' investment cycle and harvest plan](#)
- [The economic benefits](#)
- [Our investment programs](#)
- [Our exit strategy and financial returns](#)
- [Conclusion](#)

Overview of MassVentures' Role

Since the commencement of its investment program in FY80, MTDC has played a consistent and effective role in the Commonwealth's economic development strategy by assisting the start-up and expansion of promising Massachusetts-based technology companies. These Massachusetts-based technology companies provide both direct jobs and indirect employment for local vendors who sell products and services to these companies.

MassVentures' contributions to the Massachusetts' economy have been accomplished without annual appropriations from the Commonwealth. The Corporation is an "evergreen" organization that is largely funded by the gains generated from past investments. Over its 40+-year history, MassVentures has received \$13.7 million in state funding and \$3.5 million in federal funding. With those funds and its gains from realized investments, MassVentures has invested \$96.9 million in 167 Massachusetts companies. Further, the job creation from these Massachusetts' companies is measured in the thousands. The current portfolio companies together with eleven former portfolio companies that are still doing business in the

Commonwealth, employed over 3,000 people in Massachusetts as of December 31, 2021. In addition, the 105 START Phase 1 winners, as of June 30, 2022, employed 2,884 people in Massachusetts.

MassVentures START Program

In 2012, the Corporation entered into an agreement with The Massachusetts Growth Capital Corporation (“MGCC”) to administer the SBIR Targeted Technologies (“START”) Program. The START program is designed to assist in the commercialization of technologies that were previously awarded federal SBIR grants. Under the terms of the program, MGCC funded the program with \$6,450,000 to be dispersed in three phases. In 2015 that program was extended for an additional 2 years with \$6.45 million in funding. The program was extended again in each year 2017 through 2019 with an additional \$3.225 million of funding in each year. In 2020 and 2021, MassVentures received \$3,225 million from the Commonwealth and awarded \$1,000,000 of Phase I, \$1,000,000 of Phase II and \$1,000,000 of additional Phase III grant awards.

In 2017, the Corporation also entered into an agreement with the Massachusetts Clean Energy Technology Center (“MassCEC”) whereby MassCEC funded the program with \$400,000 to be used to award \$200,000 in Phase I grant awards and \$200,000 in Phase II grant awards. This inter-agency agreement was extended in 2018 whereby MassCEC again funded the program with \$400,000 to be used to award \$200,000 in Phase I grant awards and \$200,000 in Phase II grant awards. In 2019, this inter-agency agreement was extended whereby MassCEC funded the program with \$300,000 to be used to award \$100,000 in Phase I grant awards and \$200,000 in Phase II grant awards. In 2020, MassCEC funded the program with \$100,000 to be used to award \$100,000 in a Phase I grant. The MassCEC funding agreement was not extended for fiscal year 2021. In 2022, MassVentures awarded \$3,000,000 in awards to 17 Massachusetts’ companies.

Also in 2021, MassVentures received an award from the Economic Development Administration (EDA) under its Build to Scale (B2S) program and focused on an expansion of the START program. The award provides reimbursement of certain expenses associated with expansion of the START program up to a total of \$1 million through fiscal 2023. MassVentures has been working on building up a commercialization accelerator platform to expand the START program that will provide an array of resources including videos and other information aimed and providing education and support for entrepreneurs and companies seeking to grow their businesses.

MassVentures and Catalyst Program

In 2021, the Corporation entered into a services agreement with the Massachusetts Clean Energy Technology Center to administer the Catalyst Program. The Catalyst Program provides grants of up to \$65,000 to researchers and early-stage companies looking to demonstrate initial prototypes of their clean energy technologies. This program seeks to advance innovation of clean energy technologies and help to transform new discoveries from the research stage into commercially viable technologies, through grant awards and business mentoring. Funding for the program is provided by MassCEC for a fall and spring cohort each year. As of the fiscal year end June 30, 2022, over \$1,600,000 of grants were distributed to 36 Massachusetts based recipients.



MassVentures and Acorn Program

In 2021, MassVentures entered into an agreement with the University of Massachusetts to administer the Acorn program. The Acorn Innovation Grant supports principal investigators at Massachusetts research universities who seek to demonstrate the viability of their technology. Awards could be used to further develop a prototype, gather additional data to demonstrate proof of concept, or to obtain data that show how the technology compares to existing technologies and what its competitive advantages are. Acorn Awards are up to \$16,250 each designed to fund small, rapidly accomplishable projects that will enable researchers to obtain further funding for additional proof of concept or commercialization. As of the fiscal year end June 30, 2022 \$336,000 of grants were distributed to 25 Massachusetts academic research organizations.

Fiscal 2022 Investment Activity

MassVentures initial investment into companies is most often that company's first round of funding. MassVentures then has the ability to continue to support its portfolio companies in subsequent rounds of financing, up through the company's exit. This investment cycle follows the general pattern of most early-stage venture capital firms. The Corporation applies a portfolio approach, spreading its investment risks across a number of companies in different industries. As an early-stage investor, MassVentures expects that financial returns will generally be realized 7 to 10 years after initial investment in a company and as with typical venture capital returns, the majority of proceeds will come from a small percentage of these investments. Historically, these gains provided over 80% of MassVentures' funding.

In fiscal 2022, MassVentures closed three follow-on investments into existing portfolio companies and nine new company investments totaling \$2,660,191 from its Traditional Investment Fund Program and \$810,000 from its Commonwealth Fund III program into the following companies:

- Aclarity, Inc. of Hadley, MA
- SeaSpire, Inc. of Burlington, MA
- Adden Energy of Waltham, MA
- Concerto BioSciences of Cambridge, MA
- StataDX of Cambridge, MA
- Paerpay, Inc. of Shrewsbury, MA
- InkBit of Medford, MA
- Kytopen of Cambridge, MA
- JetCool Technologies of Littleton, MA
- Content Raven of Framingham, MA
- Detrapel of Framingham, MA
- MVP Robotics of Boston, MA

Economic Benefits

The principal objective of MassVentures' Investment Program has been to assist early-stage technology companies start-up and/or expand in the Commonwealth by commercializing technology developed in local corporations and research institutions. These new Massachusetts firms can become aggressive competitors in the global marketplace very early in their life cycles. By investing at early stage, MassVentures provides seed capital to emerging companies which is critical capital necessary to:

- Create jobs in the Commonwealth;
- Leverage the Commonwealth's intellectual assets to help create the leading companies of tomorrow;
- Drive growth of and employment in the Commonwealth's Economic Target Areas; and
- Build growing companies that are able to leverage outside capital to help drive sustained growth and success.

As a largely self-funded instrumentality of the Commonwealth, MassVentures, through its investment gains, has leveraged \$13.7 million of state funding into \$96.9 million of its own investment into 167 companies. These companies, with the support of MassVentures, have been able to leverage MassVentures' seed capital and commitment to:

- Gain the support, through capital investment, of over 50 venture funds and angel groups; and
- Raise over \$ 2.5 billion in capital from third party investors.

These early-stage companies provide significant employment growth opportunities and long-term value to the Massachusetts economy. As of December 31, 2021, it was estimated that:

- 35 current and former portfolio companies still doing business employed over 3,000 people in the Commonwealth.
- This employment equates to an estimated Massachusetts annual payroll for these companies of \$242 million, and annual estimated payroll-related tax revenue of \$49 million to the Federal government and \$14 million to the State.

Importantly, MassVentures not only provides valuable seed and early-stage capital, but also management assistance, technical assistance, and mentorship to Massachusetts early-stage technology companies. The entrepreneurs launching these companies are usually experienced technologists, but inexperienced businesspeople. Therefore, MassVentures' Management Assistance Program focuses on strategies to increase the visibility and successful presentation of these companies to potential investors. Our active involvement with these management teams, helps them develop the skills and experience necessary to become effective business leaders. We also work with them to help provide introductions to prospective capital providers, customers, business partners and senior management talent. These introductions and partnerships help in the development of a seed-stage company, comprised of a founding team and raw technology, to become a successful Massachusetts enterprise with a growing employee base and revenue source for the Commonwealth.

MassVentures Commonwealth Fund Investment Program

The Commonwealth Fund Investment Program (CF) serves as a vehicle for MassVentures to help finance the growth stage of new technology enterprises in the Commonwealth while at the same time seeking attractive financial returns. Under the CF, MassVentures manages an investment pool comprised of funds from MassVentures and private co-investors. MassVentures distributes a share of net realized gains from its portion of the Program to the General Fund of the Commonwealth of Massachusetts.

The CF has previously raised two investment pools with outside private co-investors. The Commonwealth Fund I Program I was launched in FY1995 with \$2,000,000 of outside capital. Since that time the funds have been fully invested and the investments exited. That program is now closed.



During FY2001, the Commonwealth Fund Investment Program II was launched with the goal of creating a \$15 million investment pool. MassVentures committed \$12 million, BancBoston Investments Inc. committed \$2 million and Essex Regional Retirement Board committed \$1,000,000. Since that time the funds have been fully invested and the investments exited. That program is now closed.

In FY2012, MassVentures announced that it was launching Commonwealth Fund III in collaboration with MassDevelopment's Emerging Technology Fund whereby MassDevelopment committed \$5 million to the program. The objective of the program is to fill capital gaps not adequately served by the private investment community such as: (1) emerging market segments; (2) first-time entrepreneurs; and (3) companies transitioning from seed to Series A funding. The program is in the process of deploying its \$5.1 million of committed funds.

Exit Strategy and Financial Returns

As of June 30, 2022, MassVentures had exited or begun to exit, 139 of the 167 companies in which it had invested. Positive returns came from 18 companies that had become publicly traded and 44 had either been merged with or had been acquired by other firms, settled through litigation, or bought back their securities from MassVentures. Losses were realized from 36 companies that were acquired and 41 that ceased operations. The active portfolio at year-end included 26 companies.

MassVentures' total realized and unrealized gain in FY22 totaled \$8,460,338. Cumulative realized gains on investments since 1980 totaled \$ 85,782,541 while cumulative realized losses totaled \$46,064,570, for total realized net gains of \$39,717,971. The funds provided from these realizations continue to support the Corporation's operating expenses and replenish the Investment Fund such that MassVentures can continue to invest in promising seed stage technology companies in the Commonwealth and further support its mission.

Conclusion

MassVentures continues to play a unique role among the economic development organizations of the Commonwealth. The financial performance of the MassVentures Portfolio has provided the Corporation with a base level of investment funds to continue to support the growth of Massachusetts-based companies and to create jobs. MassVentures has continued to accomplish this successful endeavor for the Commonwealth of Massachusetts with limited state funding.

Additional funding would enable MassVentures to expand its reach and impact in the innovation economy. As such, MassVentures continues to explore new funding sources through expansion of the Commonwealth Fund program and additional funding by the State. By steadily pursuing its long-term investment strategy, MassVentures continues to successfully serve its shareholders, the citizens of the Commonwealth.

Sincerely,

A handwritten signature in blue ink, appearing to read "Charles Hipwood".

Charles Hipwood
President & CEO

Enclosure

cc: MassVentures Board of Directors