



Commonwealth of Massachusetts
Office of the State Auditor
Suzanne M. Bump

Making government work better

Official Audit Report – September 16, 2015

MassVentures

For the period July 1, 2012 through June 30, 2014





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Office of the State Auditor
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Making government work better

September 16, 2015

Mr. Walter Bird, President
MassVentures
308 Congress Street, Fifth Floor
Boston, MA 02210

Dear Mr. Bird:

I am pleased to provide this performance audit of MassVentures. This report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, July 1, 2012 through June 30, 2014. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

I would also like to express my appreciation to MassVentures for the cooperation and assistance provided to my staff during the audit.

Sincerely,

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

Suzanne M. Bump
Auditor of the Commonwealth

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
OVERVIEW OF AUDITED ENTITY	2
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY	6
DETAILED AUDIT FINDINGS WITH AUDITEE’S RESPONSE.....	8
1. The jobs-created information reported by MassVentures continues to be of questionable accuracy.	8
APPENDIX	13

LIST OF ABBREVIATIONS

DOR	Department of Revenue
MV	MassVentures
SBIR	Small Business Innovation Research
START	Small Business Innovation Research Targeted Technologies

EXECUTIVE SUMMARY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor has conducted an audit of certain activities of MassVentures (MV) for the period July 1, 2012 through June 30, 2014.

In this performance audit, we reviewed and assessed selected financial and management activities of MV, including the criteria it used in making venture-capital investments; its management of these investments to ensure an appropriate return; grant awards that it administered on behalf of other funding programs; and the collection, verification, and reporting of data regarding jobs created in Massachusetts as a result of its capital investments.

Below is a summary of our findings and recommendations, with links to each page listed.

Finding 1 Page 8	In our prior audit, we found that MV needed to improve its methods of collecting and verifying data about jobs created in Massachusetts as a result of its investments, which it reports annually to the Legislature. During our current audit, we determined that MV had implemented our prior audit recommendation to include only jobs that were created in Massachusetts in these reports. However, MV still has not established other effective processes to collect and verify employment information from its venture-capital companies.
Recommendations Page 10	<ol style="list-style-type: none">1. MV should take measures to ensure that all of the companies in its investment portfolio complete and submit its Annual Employment, Payroll, and Tax Survey. For example, MV may want to consider making this a contractual requirement that will affect any future funding for companies that do not submit this information.2. MV should establish a process for verifying the jobs-created data that it receives from the companies in its investment portfolio. For example, it could require in its contracts with companies that they send it copies of their WR-1 tax forms, or it could consider conducting periodic site reviews to verify jobs-created data.3. MV should specifically define what it means by “jobs created” on its Annual Employment, Payroll, and Tax Survey to ensure consistent reporting of actual jobs created.

OVERVIEW OF AUDITED ENTITY

Chapter 497 of the Acts of 1978¹ established the Massachusetts Technology Development Corporation, now MassVentures (MV), as a quasi-public corporation to provide financial assistance to startup companies in Massachusetts, with the primary purpose of increasing employment in the state. Although MV was initially funded by federal and state sources, its investments and other revenue have allowed it to finance its own operations since fiscal year 1988. MV is governed by an 11-member board of directors, 8 of whom are appointed from the private sector by the Governor and 3 of whom are public officials. According to MV records, from its inception in 1978 through December 2014, MV invested \$87 million in 139 Massachusetts companies that collectively employed more than 7,500 people in the Commonwealth.

MV's initial funding came from the Economic Development Administration of the United States Department of Commerce (\$2,972,000) and an appropriation from the Commonwealth (\$5,200,000). The Commonwealth subsequently appropriated \$5,000,000 to MV in fiscal year 2004 and an additional \$2,500,000 to MV's investment fund in later years (\$2,250,000 for fiscal year 2007 and \$250,000 for fiscal year 2008), bringing the cumulative amount of MV's Commonwealth appropriations to \$12,700,000 as of the end of our audit period. Currently, MV uses revenue from its investments, as well as management fees earned by administering grants, as the primary source of funds for future investments.

MV usually invests in technology companies across various industries. The typical initial investment size is \$250,000–\$500,000, and MV may also provide subsequent funding. In return for this funding, MV gets stock or notes from the company. All companies in which MV invests must maintain a significant portion of their operations in Massachusetts.

1. MassVentures' enabling and governing legislation is Chapter 40G of the Massachusetts General Laws, as amended in 1993 and 2002.

**MV's Capital Sources and Investment Fund Balance
 As of June 30, 2014**

Economic Development Administration of the U.S. Department of Commerce, Net of Startup Costs	\$ 2,972,000
Commonwealth of Massachusetts	12,700,000
Subtotal	<u>15,672,000</u>
Realized Gains on Sales of Equity Securities Allocated to General Support Fund	65,112,664
Portion of Gains Used for General Support Activities	(26,649,694)
Subtotal (Transferred to the Restricted for Investment Programs Fund)	<u>38,462,970</u>
Total Funds Available for Investment	<u>\$ 54,134,970</u>
Realized Losses of Investments	(36,352,681)
Distributions to the U.S. Department of Commerce	(407,839)
Unrealized Net Gain on Investments	2,447,932
Subtotal (Restricted for Investment Programs Fund Balance)	<u>\$ 19,822,382</u>

MV's website describes its investments as follows:

MassVentures will invest in technology-driven companies across a broad range of industries. In recent years, MassVentures has invested in green technology, healthcare IT, industrial automation and robotics, internet and digital media, and mobile.

In 1992, state legislation modified MV's charter so it could access more private investment capital. In addition to the available investment funds shown above, MV manages an investment vehicle composed of funds from MV and private co-investors. This investment vehicle, the Commonwealth Fund, has two components: Program I and Program II. By law, the investment criteria for capital managed under the Commonwealth Fund are less restrictive than those of MV's traditional programs. For example, the investment criteria for capital managed under the Commonwealth Fund would allow MV to make additional investments in companies that might have adequate private capital, rather than having to justify the investment based on the company's need for capital. As of June 30, 2014, each program had two co-investors, who together had contributed a total of \$2 million to Program I and \$3 million to Program II since the programs' inception. MV's cumulative capital contributions to the two programs totaled \$12,700,000; the balance of the two programs is included in the \$19,822,382 Restricted for Investment Programs Fund Balance shown above.

MV's operating revenue and expenses during fiscal years 2013 and 2014 were as follows:

	Fiscal Year 2013	Fiscal Year 2014
Operating Revenue	\$936,160	\$7,842,963
Operating Expenses	\$3,376,021	\$4,448,852

During our audit period, MV made two new investments from the investment fund (together totaling \$700,000) and also invested \$2,826,041 from this fund in 14 of its existing venture-capital companies. The two new investments were in one company that had developed a new approach to securing file distribution for software and another that had created a platform for storing, organizing, processing, and sharing biomedical data.

During our audit period, MV also made a \$25,000 new investment in one company from the MassChallenge Fast Track Program, which was initiated by MV in fiscal year 2010. This program is a collaboration between MV and MassChallenge, the world's largest nonprofit startup accelerator, which provides no-strings-attached seed capital to early-stage entrepreneurs. The Fast Track Program seeks to identify and fund high-potential startups that have previously received MassChallenge startup funds.

In fiscal year 2012, MV signed a contract with Massachusetts Growth Capital Corporation to administer the Small Business Innovation Research Targeted Technologies (START) Program to help growing companies produce and sell technologies that were developed under federally funded Small Business Innovation Research (SBIR) contracts. In return for administering the grant process, MV receives a management fee of 6.25% of the total grants awarded. Grants awarded under this program support activities that include protecting intellectual property, performing market and competitive research, investigating regulatory requirements, building commercial prototypes, and writing business plans to attract additional capital. According to MV's website,

[MV] will initiate the START program with Stage I grants of up to \$100,000 each to 10 Massachusetts applicants that have won Phase II SBIR contracts and whose technology innovations have prospects for creating high-growth commercial products or services. Based on progress demonstrated over the first year, an additional Stage II grant of up to \$200,000 will be awarded to the five most promising companies. At the end of the second year, two companies will be chosen for a \$500,000 investment based on their potential for growth and profitability. The program is open to any Massachusetts applicant that has received Phase II SBIR contracts within the last 3 years. Life sciences and energy/clean-tech will not be considered under START as other Massachusetts programs support them.

Under this program, MV agreed to award \$6,300,000 in grants to START Program winners through established guidelines. MV awarded the following START Program grants in fiscal years 2013 and 2014:

- In fiscal year 2013, MV awarded 5 \$200,000 grants, for a total of \$1,000,000, to Phase II winners and 10 \$100,000 grants, for an additional \$1,000,000, to new Phase I grant winners.
- In fiscal year 2014, MV awarded 3 \$400,000 grants, totaling \$1,200,000, to Phase III winners; 4 \$200,000 grants, totaling \$800,000, to Phase II winners; and 10 \$100,000 grants, totaling \$1,000,000, to new Phase I winners.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of MassVentures (MV) for the period July 1, 2012 through June 30, 2014.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is a list of our audit objectives, indicating each question we intended our audit to answer; the conclusion we reached regarding each objective; and, if applicable, where each objective is discussed in the audit findings.

Objective	Conclusion
1. Did MV comply with its stated investment criteria for all venture-capital investments made during our audit period?	Yes
2. Did MV manage its investments appropriately to realize appropriate financial returns that would ensure its financial self-sufficiency?	Yes
3. Did MV comply with established award criteria and process guidelines in administering grants awarded in its Small Business Innovation Research Targeted Technologies (START) Program and MassChallenge Fast Track Program?	Yes
4. Did MV successfully implement the recommendations of our prior audit report (No. 2009-0136-3A) to improve its collection, verification, and reporting of Massachusetts employment data from its venture-capital investments?	No; see Finding 1

To achieve our audit objectives, we conducted audit testing in the following areas:

- We reviewed MV's policies and procedures.
- We interviewed MV's senior management and determined the investment processes and specific criteria used by MV.
- We reviewed the two new capital investments MV made during the audit period, including each company's submitted Business Strategy and Application for Financing as well as MV's Summary of Basis for Statutory Findings submitted to the board for review and approval.

- We reviewed the 13 proposals made by companies for additional investments in MV's active portfolio. These proposals included financial highlights, investment summaries, and details of stock ownership as well as recommendations made to the board.
- We interviewed MV's controller regarding the corrective actions MV had taken to implement our prior audit recommendations to improve its collection, verification, and reporting of jobs created as a result of its investments.
- We reviewed and evaluated MV's efforts to gather job data from its investment companies through its annual job survey and checked the accuracy of the number of jobs reported by MV by comparing it to the 14 surveys returned for each of the calendar years 2013 and 2014 from survey respondents.
- We obtained board minutes and traced all venture-capital investments made during the audit period to the actual board votes authorizing such investments.
- We reviewed the award MV made under its MassChallenge Fast Track Program during our audit period for compliance with established program guidelines and selection criteria. We verified that the designated winner was recommended by MV's investment committee and approved by a vote of the board of directors.
- We reviewed the evaluation, selection, and award process for the START Program awards made during fiscal years 2013 and 2014 for compliance with established program guidelines and selection criteria.
- We reviewed MV's independent auditor's reports for fiscal years 2013 and 2014 regarding MV's ability to finance its own operations and found no qualifications or concerns in this area.

We obtained revenue and expenditure information from information systems maintained by MV. Because the financial data are used for background purposes, we did not assess the reliability of these data. Whenever sampling was used, we applied a non-statistical approach, and as a result, we were unable to project our results to the population.

DETAILED AUDIT FINDINGS WITH AUDITEE'S RESPONSE

1. The jobs-created information reported by MassVentures continues to be of questionable accuracy.

During our previous audit, we determined that MassVentures (MV) needed to improve its collection and verification of data regarding jobs created as a result of some of its activities. We made a number of recommendations for improving this data collection. In our current audit, we determined that MV had implemented one of these recommendations, but that its collection and verification of data still needed improvement. As a result, MV lacks an effective process to accurately measure its overall effectiveness in creating jobs in Massachusetts, which calls into question the accuracy of the jobs-created information MV is reporting to the Legislature.

In order to determine the overall effectiveness of its investments in creating new jobs in the Commonwealth, MV sends an Annual Employment, Payroll, and Tax Survey to each of its active and former portfolio companies still operating in Massachusetts. This survey requests that each firm provide the most recent calendar year's employment figures for full- and part-time employment for both in-state and out-of-state workers. These firms are also asked to provide MV with their gross payroll W-2 earnings for in-state and out-of-state workers, the taxes withheld for each worker, and the Massachusetts unemployment taxes paid for the current year. MV collects, analyzes, and summarizes this information and uses it to measure total employment and job creation from its investments. MV's survey results indicate that companies that received funding from MV created a total of 535 and 559 full-time jobs in Massachusetts in 2012 and 2013, respectively.

Our prior audit report (No. 2009-0136-3A) noted that MV needed to improve its methods of collecting and verifying data regarding the number of jobs created in Massachusetts as a result of its venture-capital investments. Contrary to sound business practices, MV had not established the necessary procedures to ensure that this reported job information was accurate. We recommended that MV attempt to obtain from the Massachusetts Department of Revenue (DOR) the Employer's Quarterly Report of Wages Paid (Form WR-1) for each of the companies in its investment portfolio in order to obtain a verifiable employee count, total of wages paid, and total of withholdings made for Massachusetts-based employees. This information could then be verified with the information provided to MV by these companies in response to the Annual Employment, Payroll, and Tax Survey. Moreover, we recommended that companies that did not provide the requested job information in response to

MV's annual survey be notified that noncompliance with reporting requirements might put future funding requests in jeopardy. Finally, we recommended that MV report only jobs created in Massachusetts.

During our current audit, we determined that MV had implemented our prior audit recommendation to include only jobs created in Massachusetts in its reports to the Legislature. However, because of tax-privacy concerns, MV was unable to obtain WR-1s from DOR as recommended, and it has not established any other process to verify the employment information it receives from its venture-capital companies. Although it is not required to do so, we believe that MV should verify this information because the number of jobs created is a key metric for accurately measuring program effectiveness.

Further, MV has not reminded the firms that did not provide the requested data that noncompliance may jeopardize future applications for investment. In addition, the information that MV uses to generate its reports to the Legislature is still incomplete. Specifically, in 2012 and 2013, MV sent surveys to 17 companies in its active investment portfolio. However, in both years, only 14 out of the 17 (82%) of the companies returned the completed surveys to MV. If a company does not respond in a timely manner, MV does follow up with telephone calls and e-mails to obtain the data; however, if MV is still unsuccessful, it takes no further action, and there is no penalty for companies that do not provide this information and therefore no incentive for them to complete the survey. Finally, in its survey, MV has not defined what "jobs created" means, and MV officials acknowledged during the audit that different companies might be interpreting this term differently.

Authoritative Guidance

Chapter 40G, Section 6, of the Massachusetts General Laws states, in part,

[MV] shall annually submit a complete and detailed report of [its] activities within ninety days after the end of the fiscal year to the clerk of the house of representatives and to the clerk of the senate. The report shall contain the number of additional jobs created and the number of persons hired as a result of the activities of the corporation.

In order to fulfill this responsibility effectively, MV must have systems in place to ensure that all the information needed to generate these reports is accurate, consistent, and complete.

Reasons for Noncompliance

MV officials indicated that they recognized the need for improvements to the present system so that it could collect accurate and timely employment and payroll data. They identified delays in the receipt of data, and MV's inability to verify data received from third parties, as some of the obstacles to improving job data. MV also identified some causes for inconsistencies in its jobs-created data: for instance, companies may temporarily use independent contractors, or new company owners may replace laid-off staff members with new workers, but they may count those jobs as jobs created.

Recommendations

1. MV should take measures to ensure that all of the companies in its investment portfolio complete and submit the Annual Employment, Payroll, and Tax Survey. For example, MV may want to consider making this a contractual requirement that will affect any future funding for companies that do not submit this information.
2. MV should establish a process for verifying the jobs-created data that it receives from the companies in its investment portfolio. For example, it could require in its contracts with companies that they send it copies of their WR-1s, or it could consider conducting periodic site reviews to verify jobs-created data.
3. MV should specifically define what it means by "jobs created" on its Annual Employment, Payroll, and Tax Survey to ensure consistent reporting of actual jobs created.

Auditee's Response

The [report] noted that MassVentures "lacks an effective process to accurately measure its overall effectiveness in creating jobs in Massachusetts, which calls into question the accuracy of the jobs-created information MV is reporting to the Legislature." We disagree with this statement as we believe the existing procedures would prevent an error that would materially change an assessment of the MassVentures effectiveness in creating jobs. While we acknowledge that our process does have the chance for error, we also feel there are several mitigating factors that reduce this risk as follows:

- *MassVentures annually requests and receives its data via survey from its portfolio companies. As funding of portfolio companies is not linked to employment figures there is no incentive for these companies to falsify or overestimate data.*
- *MassVentures investment staff are actively involved with these portfolio companies to various degrees, including attending board meetings, company visits and meetings with other investors and management. Precise headcount figures are typically part of a company's standard report to their board or investors. As such, the investment staff typically have an accurate sense of the overall employment figures of the company that serves as a reasonableness test of the employment data.*

- *All MassVentures employment data is labeled as estimated data when reported to acknowledge any assumptions made for non-responses or chance for error.*

As a result of these mitigating factors, MassVentures is confident that the job information it reports on its current portfolio is materially accurate.

Also noted in the report was that "MV has not reminded the firms that did not provide the requested data that noncompliance may jeopardize future application for investment" and that in our 2012 and 2013 survey process "only 14 out of the 17 (82%) of the companies returned the completed surveys." We disagree that these are relevant points since the companies that did not respond to the survey are either no longer in operation or are acquirers of previous MassVentures portfolio companies. In total these companies represented only 5% of the employment figures. Often times MassVentures portfolio companies will be purchased by other private companies for stock of that company. MassVentures will then hold shares of the new parent company in its portfolio until it has an opportunity to exit. In these situations MassVentures will lose some of its investor rights and represents a much smaller ownership, which means it has less ability to influence these companies to report. Typically MassVentures will invest little to no further funds into these successor companies other than to protect its own investment.

The Audit Report also noted three recommendations for improving the employment measurement process. The first such recommendation was to make the employment survey a contractual obligation of the company as part of the investment financing documents. While we don't see a disadvantage to attempting to negotiate this in future financing documents, it would not assist us in forcing former portfolio companies or successor companies through acquisition from providing this information. As noted earlier, it is typically successor companies that fail to respond to requests. Additionally finance documents are negotiated terms among many parties including other investors, which may make this recommendation a difficult one to implement. We will attempt to include this provision in new investment documents.

An additional recommendation was to request copies of the company WR-1 state filing as verification of the survey. In connection with this request we recently met with one [of] the largest employers in our current portfolio to discuss methods to verify employment figures. Based on this discussion we have outlined a new survey process that we will put into a trial for the 2015 calendar year data collection. This new process will involve requesting state and federal filings made either by them directly or through their payroll providers. We believe there may be some variability in the form of the summary tax filing reports supplied by the payroll providers that could complicate the process. After the [trial] is completed we will assess if additional adjustments are required.

Finally, it was recommended that MassVentures define employment on the annual survey to ensure consistent reporting. While we feel this would be a good improvement to the report, we also feel that it should be a definition that is consistent with other state government entities reporting jobs creation. From our conversation, such a standard does not exist. We suggested that a poll of other state agencies reporting this data may serve as a basis to form a best practices document in collecting and reporting this data. Unfortunately as one of the smaller quasi-public state agencies with limited resources and back office personnel this would be a difficult task for MassVentures to take on.

Auditor's Reply

We concur with MV that errors in the jobs-created data that it obtains through its annual surveys can occur, but we do not agree that the mitigating factors that MV details in its response effectively reduce the risk of material errors in the data. Rather, in our opinion, the lack of a standard definition of "jobs created" and MV's inability to independently verify this information create a higher-than-acceptable risk that the reported jobs-created figures may contain material errors. In its response, MV indicates that its new survey process, which will be implemented for data collection for calendar year 2015, will involve requesting state and federal filings to verify employment figures. We believe that this is an important step in ensuring the accuracy of the jobs-created information that MV reports.

We believe that the facts that MV has not reminded nonresponding firms that noncompliance may jeopardize any future application for investment, and that not all of the companies in MV's active investment portfolio that were surveyed in 2012 and 2013 returned the completed surveys, are relevant to this finding. Each of these issues, regardless of the percentage of companies involved, has a bearing on the completeness and accuracy of the jobs-created figures that MV reports to the Legislature. We recognize that as investment companies mature and ownership circumstances change, MV may have less leverage in influencing these companies to report their employment results. This is why we are recommending that MV consider making its Annual Employment, Payroll, and Tax Survey a contractual obligation for venture-capital companies with any future funding requests. In its response, MV states that it will attempt to include this provision in all new investment documents, which should address our concerns in this area.

Finally, since MV believes that there is no standard definition of "jobs created" in the Commonwealth for job-creating agencies such as MV, it should seek guidance from the Commonwealth's Executive Office for Administration and Finance on determining what criteria should be used to define a full-time position for its annual job survey and its reporting to the Legislature. Once this is done, MV should detail this definition in its annual survey to ensure consistent reporting by the companies in its investment portfolio and should include this definition in its reports to the Legislature.

APPENDIX

Board of Directors As of June 30, 2014

Director	Board Term Information
Ex Officio: Gregory Bialecki (Chair)	Appointment is coterminous with the Governor's
Anita Brearton (Vice Chair)	Term expires October 12, 2018
Kanasha S. Herbert, Esq. (Secretary)	Term expires October 12, 2016
Valerie A. Mosley (Treasurer)	Term expires October 12, 2018
Jeremy Halpern, Esq.	Term expires October 12, 2014
Lita L. Nelsen	Term expires October 12, 2014
Vinit Nijhawan	Term expires October 12, 2014
Joel Schwartz	Term expires October 12, 2018
Ex Officio: Glen Shor	Appointment is coterminous with the Governor's
Ex Officio: Steven Grossman	Appointment is coterminous with the Governor's
Jack Turner	Term expires October 12, 2014