December 31, 2014

William F. Welch
Senate Clerk
Office of the Clerk of the Senate
24 Beacon Street
Room 335–State House
Boston, MA 02133

Steven T. James
House Clerk
Office of the Clerk of the House
24 Beacon Street
Room 145–State House
Boston, MA 02133

Dear Sirs:

MassDevelopment is pleased to submit this third annual report of the Advanced Manufacturing Futures Program (“AMFP”) as required by Chapter 238 of the Acts of 2012, An Act Relative to Infrastructure Investment, Enhanced Competitiveness and Economic Growth in the Commonwealth. This report will summarize the significant progress that MassDevelopment has made on the goals of the program during FY14 as well as the first two quarters of FY15.

Under the Act, MassDevelopment designs and implements the AMFP this program in consultation with the Secretary of Housing and Economic Development and the Advanced Manufacturing Collaborative (AMC). Throughout the year, MassDevelopment also worked with industry representatives as well. The AMFP facilitates the growth and competitiveness of the Commonwealth’s manufacturing sector through grants, contracts, and loans.

In December 2013, MassDevelopment received $9,375,000 of the $18,500,000 from the FY14 state budget to capitalize the AMFP. From this initial capitalization, the AMFP continues to operate and to address the five strategic areas of focus identified by the AMC:

1. Promote Manufacturing
2. Workforce and Education
3. Technical Assistance and Innovation
4. Access to Capital Resources
5. Cost of Doing Business

The following pages discuss the FY14 initiatives as they align with the five strategic foci.

Sincerely,

Marty Jones
President and CEO
1. Promoting Manufacturing

**Statewide and Regional Advanced Manufacturing Summits** – On April 29, 2014, at the DCU Center in Worcester, MassDevelopment hosted this event attended by hundreds of manufacturers who heard three opening speakers, a plenary on workforce issues, twelve panel presentations, and luncheon remarks by Governor Patrick and Reshoring Initiative Founder Harry Moser. To learn more about the program, please visit [http://ampitupma.com/summit/2014/Summit2014_ProgramBook.pdf](http://ampitupma.com/summit/2014/Summit2014_ProgramBook.pdf). On December 15, a Pioneer Valley Advanced Manufacturing Summit took place in Amherst. About 75 people attended the program, which featured a 30-minute speed round of resources that help manufacturers with key challenges; a roundtable with Senator Stan Rosenberg, Secretary Greg Bialecki, and Secretary Rachel Kaprielian; and a presentation by the MIT Industrial Performance Center.

**AMP it up!** – MassDevelopment runs a promotional campaign to encourage young people and their adult influencers (family members, guidance counsellors, and teachers) to pursue advanced manufacturing careers. The campaign has issued matching grants to partnerships of regional employment and workforce investment boards; advanced manufacturers; chambers of commerce and development councils; community colleges; and youth-serving organizations. The community-based programs receiving the awards offer tours of advanced manufacturing companies, career awareness workshops, as well as teacher and guidance counselor information sessions, and externships with manufacturers. In 2012, MassDevelopment made $92,736 in matching grants to 10 partnerships; in 2013, MassDevelopment made $108,950 in matching grants to 11 partnerships; and in 2014, MassDevelopment made $88,633 in matching grants to 9 partnerships.

**MassMEDIC** – In July 2014, MassDevelopment announced a $75,000 grant to MassMEDIC, the professional association of the Commonwealth’s medical device cluster. The grant will unite Original Equipment Manufacturers (OEMs) with small and medium-size manufacturing companies so that more product components are supplied by Massachusetts companies rather than out-of-state or international suppliers. OEMs will learn about in-state resources at events, in a directory, and via a new online search engine. Showcase events will be held regionally for MedTech OEM purchasers and local suppliers. Suppliers will tour OEM facilities to gain a better understanding of their needs. The results of this program will be used to develop other mechanisms to increase the Massachusetts supply chain.

**Manufacturing Day** – National Manufacturing Day took place on Friday, October 3, 2014. MassDevelopment provided an online listing of a dozen events and tours throughout the Commonwealth. In Devens, MassDevelopment hosted a trade show featuring manufacturers and advocacy organizations like Vitasoy, Eglomisé Designs, MassMEP, and Response Microwave. Students at the Francis W. Parker Charter Essential School also attended this event.
2. Workforce and Education

**Massachusetts Advanced Manufacturing Regional Partnership Academies (AMRPA)** – MassDevelopment granted $326,000 to UMass Dartmouth for AMRPA to accelerate the adoption of best practices, build capacity, and increase regional industry engagement in workforce development. AMRPA brings together manufacturers, workforce investment boards, and academics to develop sustainable and effective partnerships that respond to industry needs. The outcomes, at amrpa.wordpress.com, include:

- Four regional events for manufacturing partnerships
- Employer needs assessment
- Regional manufacturing profiles
- Documentation of best practices for partnerships
- Development of an approach to measuring progress towards meeting the needs of advanced manufacturers, especially their workforce needs.

**MACWIC Program** - In December 2014, MassDevelopment announced a grant of $747,160 to MassMEP to expand and continue the Manufacturing Advancement Center Workforce Innovation Collaborative, or MACWIC, for two years. MACWIC offers competency testing and certification to students at vocational schools and community colleges that have advanced technology programs. Passing students can then show potential employers that they have the requisite skills as validated by a common certification standard. MACWIC also provides curriculum materials and professional development for teachers via its partnership with Worcester Polytechnic Institute. MACWIC operates with the input of an advisory group of 161 member manufacturers and educational institutions.

3. Technical Assistance and Innovation

**Massachusetts Medical Device Development Center (“M2D2”)** – In July 2014, MassDevelopment extended a $400,000 grant to UMass Lowell for the development of an Innovation Center at M2D2 that supports the development, launch, and commercialization of technology-based innovations and companies with expertise in materials, flexible electronics, and robotics. The grant will link startup companies in the new center with prototype development and manufacturing facilities.

**MassChallenge Inc.** – In August 2014, MassDevelopment announced a grant of $200,000 to help to launch “MADE@MassChallenge,” a makerspace for current and former start-ups clients of MassChallenge. The space will be adjacent to MassChallenge’s headquarters at 21 Drydock Avenue in Boston. Lightspeed Manufacturing in Haverhill will provide equipment and mentorship for the makerspace. The grant will support staffing and leasing costs for one year.

**Manufacturing Innovation Center Program** – In September 2014, MassDevelopment issued an RFP for innovation centers to help small and medium-sized manufacturers address complicated technical problems that can impede growth. Innovation centers include nonprofit facilities, educational institutions, and
for-profit manufacturers that have sophisticated human and equipment resources that small companies do not have in-house. The program will encourage manufacturers to use the resources of designated centers by subsidizing the cost of their contracts (for up to $1,500,000) for services.

**University of Massachusetts at Amherst** – In May 2014, MassDevelopment approved a grant of $625,000 to UMass Amherst contingent on award of a National Science Foundation Grant to create the NEXT Engineering Research Center. As of December 2014, UMass Amherst had not yet received the NSF grant.

**Greentown Labs** – In October 2014 MassDevelopment extended a grant of $267,500 to Greentown Labs to work with start-up companies and Massachusetts manufacturers to communicate best practices and to create a network for commercializing innovation in the Commonwealth. This program will support the launching and scaling up of products developed by start-ups by using the expertise and resources of established manufacturers.

**MIT Industrial Performance Center** – In June, MassDevelopment issued an AMFP grant of $297,145 to MIT for a project titled “Building Innovative Capacity Among Massachusetts Manufacturers.” The project will study the impacts of “deverticalization” by OEMs on supply chain companies and identify pathways to innovation that successful smaller companies have employed to meet the needs of OEM customers. Understanding these issues and best practices will help to identify support needed by smaller companies to increase their sales to OEMs.

4. **Access to Capital Resources**

**Working Capital Loan Guarantees** – In FY13, MassDevelopment introduced a Working Capital Loan Guarantee product from the AMFP. This product allows banks to increase their working capital loans to manufacturers by providing a guarantee of up to 25% of the loan. This program responds to many small/medium enterprises that said that an inability to access the amount of working capital they needed hampered their growth. Two manufacturers have taken advantage of this program to date.

**Manufacturers Resource Web Portal** – MassDevelopment created RAMPMA.com, a searchable portal to help manufacturing companies access state resources. A search wizard directs users to agency/program websites according to industry, stage, and need criteria.

5. **Cost of Doing Business**

**MassMEC** – In March 2014, MassDevelopment announced the formation of MassMEC, an energy purchasing consortium primarily for manufacturers. MassMEC membership is free to companies who will receive energy advisory services, access to bulk power purchasing, and energy efficiency consulting. MassMEC is managed by Early Bird Power, a private energy consulting firm chosen by MassDevelopment.
following a highly competitive RFP process. More than one hundred companies have joined MassMEC.