



Annual Reports FY 2019-2021





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TO: Michael D. Hurley, Clerk, Massachusetts Senate

Steven T. James, Clerk, Massachusetts House of Representatives

FROM: Massachusetts Technology Collaborative

CC: Senate President Karen E. Spilka

Speaker Ronald Mariano

RE: 2019 - 2021 Annual Reports of the Massachusetts Technology Collaborative

Pursuant to the requirements of Section 8 of Chapter 40J of the Massachusetts General Laws, please find attached the annual reports for fiscal year 2019, 2020, and 2021 from the Massachusetts Technology Park Corporation, doing business as the Massachusetts Technology Collaborative (MassTech). The reports include the activities of MassTech's five divisions: the Innovation Institute, Massachusetts Broadband Institute (MBI), Massachusetts eHealth Institute (MeHI), the Massachusetts Center for Advanced Manufacturing (CAM), and the MassCyberCenter. This report also satisfies MassTech's additional reporting requirements under:

- Subsection (b) of Section 4G of Chapter 40J of the Massachusetts General Laws regarding the Scientific and Technology Research and Development Matching Grant Fund
- Subsection (a) of Section 6A of Chapter 40J of the Massachusetts General Laws regarding the activities of the John Adams Innovation Institute
- · Subsection (k) of Section 6B of Chapter 40J of the Massachusetts General Laws regarding the activities of the MBI
- Subclause (K) of subsection (c) of Section 6D of Chapter 40J of the Massachusetts General Laws regarding the
 activities of the MeHI
- Item 7002-1508 of Section 2 of Chapter 154 of the Acts of 2018 (FY19 General Appropriations Act) regarding the paid internship and entrepreneurship programs
- Item 7002-1508 of Section 2 of Chapter 41 of the Acts of 2019 (FY20 General Appropriations Act) regarding the paid internship and entrepreneurship programs
- Item 7002-1508 of Section 2 of Chapter 227 of the Acts of 2020 (FY21 General Appropriations Act) regarding the paid internship and entrepreneurship programs

Digital copies of this report shall be submitted, and copies will be forwarded to the relevant Committee Chairs.

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FY2019 Agency Overview

The Massachusetts Technology Park Corporation does business as the Massachusetts Technology Collaborative ("MassTech Collaborative" or "MassTech"). MassTech is an innovative public agency that works to accelerate technology adoption and use, enhance economic growth in the Massachusetts technology sector, and support research collaborations among industry, academia, and government.

MassTech is advancing economic development in key areas such as digital health technology, information technology, broadband deployment, advanced manufacturing, cybersecurity, and other emerging sectors such as robotics and the Internet of Things (IoT). Over its 37-year history, MassTech has managed numerous complex projects, overseeing more than \$618 million in public funding by providing grants, loans, and other financial assistance to thousands of projects across the Commonwealth of Massachusetts (the "Commonwealth"). Through its three major divisions - the Innovation Institute, the Massachusetts eHealth Institute ("MeHI"), and the Massachusetts Broadband Institute ("MBI"), MassTech is stimulating economic activity throughout the Commonwealth. MassTech brings together leaders from industry, government, and academia to advance technology-based solutions that strengthen regional economies, improve the healthcare system, expand high-speed internet access, and stimulate cluster growth.

The Innovation Institute at MassTech

The Innovation Institute at MassTech is chartered to support the economic conditions for growth for the Commonwealth's technology and innovation-based economy. The Innovation Institute works closely with key stakeholders in academia, industry, public and nonprofit sectors to strengthen capacities in research, technology and business development, talent, and capital which lead to new business formation and job growth in the state's innovation economy. These efforts help create, attract, and grow companies in emerging and established technology sub-sectors such as robotics, IOT, advanced manufacturing, and cybersecurity.

The Innovation Institute engages in grant activities; manages projects and provides direct services for civic, industry and nonprofit organizations. The Institute also:

- Supports rigorous, collaborative, interdisciplinary research and development partnerships at Massachusetts universities;
- Enhances the ability of the Commonwealth's academic research centers to compete for millions of dollars in federal research awards;
- Secures the economic benefits of downstream production and employment for the Commonwealth as new research and technologies are commercialized in the marketplace;
- Analyzes the Massachusetts innovation economy;
- Partners with and invests in novel talent development initiatives such as internship support and targeted higher education and adult education technology training programs;
- Supports the growth of entrepreneurs in Massachusetts through business accelerator and mentorship programs
 as well as its direct support for the novel Global Entrepreneurs in Resident Program (GEIR), a program targeted
 toward qualifying international students for H-1B visas in Massachusetts. The Innovation Institute sponsors a GEIR
 Communities of Best Practice stakeholder group:
- Strengthens technology and business development by aligning technology capacities at our research institutions with the needs of industry;
- Provides business assistance services targeted toward firms in the technology sector. The Innovation Institute
 provides referrals to state resources as well as helps startup entrepreneurs and tech firms leverage other resources
 in the tech ecosystem; and
- Supports regional innovation economies and cluster growth through its regional priority grant program. Through this
 program the Innovation Institute supports high value innovation based economic development activities including
 support of targeted cluster growth opportunities in the Tech Sector; facilitation of the Massachusetts Tech Hub
 Collaborative, analysis of opportunities for growth in technology clusters such as robotics, IoT, Artificial Intelligence,
 FinTech, and autonomous vehicles; and convening key stakeholders in promising clusters to develop consensus
 around targeted action agendas.

Developing Talent through MassTech Programs

Three other programs of the Innovation Institute include the MassTech Intern Partnership and the Massachusetts Innovation Mentoring Initiative.

Mentorships

In FY19, the Innovation Institute met its goal of engaging with 12 new entities in 6 new communities/regions, and participated in 15 programs/conferences/showcases/exhibits/events. MassTech continued to engage the Entrepreneurial Ecosystem across the Commonwealth attending conferences, demo days, pitch contests, promotional events, etc. It also interacted with many entities in this space and entered into partnerships with new entities/programs in the North Adams, Worcester, Holyoke, Cape Cod, Beverly, Springfield, Boston and engaged with entities in other regions across the Commonwealth. In addition, MassTech is working with EOHED and the ACTION Network on a large-scale mapping exercise that will track and map all assets within the region's Entrepreneurial Ecosystem.

MassTech's Entrepreneur Mentoring effort is designed to support regional entrepreneur mentoring activities in underserved regions of the state through support for organizations that provide seasoned mentors to emerging startups. In October 2018, the Innovation Institute made four grant awards to support select organizations in expanding and enhancing their programs and activities to reach more people, target diverse communities, and increase their impact.

Global Entrepreneur In Residence (GEIR)

Through the GEIR, universities partner with the Commonwealth to provide valuable, relevant part-time work opportunities which initiate a cap-exempt H-1B visa application process. Participating universities act as the "sponsor" for filing cap-exempt H-1B petitions for graduates with advanced degrees who want to grow their companies but cannot due to a lack of available H-1B visa slots. This part-time employment authorization enables the entrepreneur's start-up company to apply for the entrepreneur's work authorization, also in a cap-exempt visa category, and ultimately will allow the company, and new high-skill jobs, to grow in Massachusetts.

In FY19, 25 entrepreneurs in residence were funded, from 42 applications during the first half of 2019, and 80 applications in 2018. A total of eight new businesses were started, creating approximately 220 jobs and \$138M in venture capital raised. [NOTE: UMass Boston GEIR reporting includes graduate companies in job and venture capital totals, not just current participants]

Internships

The MassTech Intern Partnership pays matching stipends to small- and medium-sized technology companies in Massachusetts to support the hiring of two- and four-year college students as interns.

Grants to companies, in FY19, resulted in199 internships, including 57 first time participant companies. Both companies and interns report individually that internships have led to subsequent employment. Data collected is not statistically significant to draw conclusions as post-internship survey responses have yielded response rates of less than 20%.

Creating New Programmatic Opportunities

In response to the evolving needs of the Commonwealth, MassTech and its Innovation Institute supported the development of new programs:

The MassCyberCenter was launched in September 2017 with a vision to enhance opportunities for the Massachusetts cybersecurity ecosystem to compete as the national cybersecurity leader while strengthening the 'cyber resiliency' of the Commonwealth's municipalities, public infrastructure, and private companies. The second annual Cybersecurity Forum was held in September of 2018 and brought together public and private sectors leaders to focus on expanding cybersecurity leadership, business growth, talent and workforce, and advancing technology in the global cybersecurity arena. The forum lead to the convening of a new group, called 'Cyber Resilient Massachusetts', which brought together public and private sector leaders to identify ways the Commonwealth's innovative technology firms can help Massachusetts municipalities and critical institutions protect sensitive data, increase cybersecurity awareness, and respond to emerging threats.

As a mechanism to drive growth in industry clusters, the Innovation Institute administers a \$65 million **Collaborative Research Matching Grant Program** which was created by the Massachusetts Legislature and recapitalized in 2016 as part of the economic development bill, "An Act Relative to Job Creation and Workforce Development". This program provides matching capital funds for scientific or technology research and development projects sponsored by the University of Massachusetts, research universities, non-profit entities, or non-profit research institutions in the Commonwealth. To

date, six awards have been made under this fund for a total of \$25 million of capital investment to fund and help develop large-scale, long-term collaborative research projects sponsored by Massachusetts-based research entities. The Innovation Institute strengthens research capacity in the Commonwealth through these research investments and by convening the Directors of its eleven research centers to share best practices and to promote partnerships with key industry partners.

The Baker/Polito Administration established the **Massachusetts Manufacturing Innovation Initiative (M2I2)** in fiscal year 2016 as a key pillar of their innovation growth strategy for Massachusetts and established oversight of this initiative at MassTech. This initiative represents a substantial commitment to develop manufacturing infrastructure within the state's academic, research and manufacturing industry, and is a direct response to Manufacturing USA, a national network of federally sponsored, collaborative communities, each with the mission of securing the future of their respective technologies. The M2I2 is a state-sponsored collaboration of manufacturing innovation institutes in Massachusetts that are affiliated with the Manufacturing USA and leverages the leading Massachusetts research universities to strengthen the Commonwealth's research-to-manufacturing infrastructure. It boosts economic development by supporting job creation and growth in existing and emerging industry clusters across Massachusetts. During fiscal year 2019, more than \$10 million in grants were award to nine grantees bringing the total program awards to over \$50 million to date.

Massachusetts eHealth Institute

Through MeHI, MassTech is working to accelerate the growth and adoption of technologies that save lives and reduce costs in healthcare. MeHI was created through the passage of Chapter 305 of the Acts of 2008, tasked to improve healthcare quality and increase efficiency through the increased adoption of innovative technologies. Chapter 224 of the Acts of 2012 enhanced MeHI's charge to expand its focus on key priorities including the statewide implementation of electronic health records ("EHRs") in all provider settings, helping providers connect these EHRs to the Commonwealth's health information exchange, the Mass Hlway, identify and promoting technologies with the potential to improve the quality and reduce the cost of healthcare; helping providers continue to evolve their use of EHRs to comply with future meaningful use stages; and promoting the understanding of the benefits of Health Information Technology ("Health IT") to providers, patients, and the general public. This law also created a requirement that providers implement and use electronic health record technology in order to continue to practice in the Commonwealth. MeHI helps providers comply with this requirement through educational programs, technical support, and grants to support implementation of EHRs in healthcare delivery settings. In 2016, MeHI's mission was further expanded through enacted state economic development legislation which charged MeHI with supporting the growth of a digital health industry sector within the Commonwealth.

MeHI also serves as the implementing agency of the Massachusetts Digital Health Initiative, which was launched in 2016 to position Massachusetts as the leading global ecosystem for digital health innovation. Digital Health is among the fastest growing industry sectors in the country and Massachusetts is positioned at the forefront of this growth, combining its strengths in both healthcare and technology to drive digital health innovation. Massachusetts is already home to more than 350 digital health companies and aims to increase the growth of these firms. MeHI connects policymakers, healthcare experts, physicians, and business leaders, helping to break down the barriers to widespread integration of these advanced technologies.

MeHI's Medicaid Services team provides enrollment and validation services relating to the Medicaid Incentive Program. MeHI also provides HIway Adoption and Outreach Services intended to provide development and delivery of services to promote Health Information Exchange adoption and utilization among healthcare providers under agreements with the Commonwealth of Massachusetts Executive Office of Health and Human Services.

In addition to the above services provided under contract with the Executive Office of Health and Human Services, MeHI's program focus in fiscal year 2019 was on the growth of the Commonwealth's digital health ecosystem and supporting innovation in aging and caregiving.

As the implementing agency for the Massachusetts Digital Health Initiative, MeHI's activities in FY19 included:

- Awarding \$250,000 in additional grant funding for the Commonwealth's two primary digital health accelerators:
 MassChallenge HealthTech in Boston and TechSpring at Baystate Health in Springfield. With this funding, the two accelerators provided targeted support for over 40 digital health startups, helping them grow and compete;
- Owning, maintaining, and enhancing the MassDigitalHealth.org web portal, including creation of the only statewide digital health job board in the United States with over 330 companies and more than 1,700 open digital health jobs;
- Awarding \$80,000 to sponsor the first HealthTech newsletter developed by STAT, the national healthcare
 publication, and run it for a year to promote the Mass Digital Health Initiative. The new HealthTech newsletter
 has national and international reach, distributed weekly to a growing audience of thousands of digital health and
 healthcare stakeholders;
- Focus on supporting innovation in aging and caregiving in alignment with one of the Baker-Polito Administration's

- priorities. This included awarding \$100,000 in seed funding to help establish AGENCY@CIC, a co-working innovation hub focused on supporting entrepreneurs in the aging cluster;
- Launching the Digital Health Sandbox Grant Program. This grant program supports Massachusetts digital health
 companies in accessing testing and validation opportunities at Massachusetts sandboxes. The program launched
 with PracticePoint at Worcester Polytechnic Institute and will expand to include additional sandboxes in FY20.

To coordinate a shared strategy across the Baker-Polito Administration and private sector stakeholders around the direction of the Mass Digital Health Initiative, MassTech continued to provide support to the Governor's Digital Health Advisory Council, including the re-launch of a communications working group consisting of marketing and public relations staff from top hospitals, accelerators, and digital health companies.

Massachusetts Broadband Institute

The MBI was created as a division within MassTech in 2008. The MBI makes strategic and targeted public investments with the goal of expanding broadband access within unserved and underserved communities in Massachusetts.

In August 2014, \$50 million of capital bond funding was authorized by the Commonwealth for MBI to develop last mile solutions designed to bring broadband from centralized hubs to individual end users ("Last Mile"). In fiscal year 2018, an additional \$45 million in bond authorization was approved by the Commonwealth. The additional funding was authorized to ensure that all Last Mile towns will have a funded solution, including access to a contingency fund for possible make ready cost overages for municipally-owned, fiber-to-the home projects, as well as funds for required investments in MBI's middle mile broadband network, *MassBroadband 123*.

During fiscal year 2019, MBI continued to identify solutions and award funds for the remaining unserved towns. As of the end of the fiscal year, all but three towns have been awarded funds for a broadband solution. Of these three towns, two are seeking MBI funds to expand the coverage of an existing privately- owned broadband network. That leaves one remaining town that does not yet have a path forward and MBI is working on a potential solution for this last town.

As of the end of the fiscal year, of the original 53 last mile towns (including underserved towns), 15 are completed and have fully operational broadband networks and 10 others are partially lit, with premises connected as construction and hooks ups are completed on a rolling basis.

The Last Mile Infrastructure Grant Program, launched by the Executive Office of Housing and Economic Development (EOHED) in April 2017, was modeled after their existing MassWorks grant program and was designed to provide funding for eligible unserved towns which will develop and build municipally-owned broadband networks. The program empowers communities to use these grants to fund design and engineering, and construction services directly, as they would other local infrastructure projects. The EOHED is administering the Last Mile Infrastructure Grant Program, with up to \$20 million in MBI's bond funds as approved by the MBI Board of Directors. To date, EOHED has awarded grants to 22 towns, totaling approximately \$19.5 million and approximately \$4.8 million from the additional funding authorized in 2018 for Make Ready-related overages.

The MassBroadband 123 network, which has been fully operational since early 2014, created a robust 'middle mile' fiber-optic network that stretches over 1,200 miles and directly connects approximately 1,100 key community facilities in over 120 communities. MassBroadband 123 provides these communities with the ability to enhance education, drive healthcare innovation, and strengthen public safety through the direct connection to this 21st Century fiber-optic network. The MassBroadband 123 network also creates an essential foundation to connect homes and businesses currently unserved by broadband, the so-called Last Mile of connectivity highlighted above.

Campus Operations

MassTech owns, manages, and develops its Westborough, Massachusetts headquarters as the Massachusetts Technology Park Corporation. The use of the 36-acre campus reflects MassTech's mission to promote partnerships among industrial, educational, and governmental sectors. The basic financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") as applied to government entities. The Governmental Accounting Standards Board ("GASB") is the accepted standardsetting body for establishing governmental accounting and financial reporting principles.

Fiscal Year 2019 Goals & Targets - Overall MassTech Collaborative

Goal: Enhance economic growth: Foster dynamic, innovative businesses in the Commonwealth, accelerating the creation and expansion of firms in technology-growth sectors, increasing profitability, and generating more jobs for people in Massachusetts.

1

Measurement: Impact will be delivered by executing high impact programs and services to support economic growth within the following clusters: Digital Health, Cybersecurity, Robotics Analytics, Advanced Manufacturing, and the Internet of Things.

Impact: Executed programs and services in the clusters of Digital Health (Digital Health Incubator), Cybersecurity (Cybersecurity Forum), Robotics (Emerging Tech Vertical Study, Robotics Initiative and Steering Committee), Advanced Manufacturing (Manufacturing Training) and the Internet of Things (Innovation Institute cluster development, MassTech Intern Partnership, Emerging Tech Vertical Study).

2

Goal: Accelerate technology use and adoption: Promote statewide connectivity and competitiveness through widespread adoption of innovative technology in academia, business, and government across the Commonwealth.

Measurement: MassTech will accelerate technology use and adoption by supporting existing technology companies that are looking to bring new technologies to market and by helping to increase the number of technology startups and expansions.

Impact: 300+ interactions with existing technology companies, technology startups, and technology entrepreneurs via Innovation Institute Ecosystem Development, Global Entrepreneur in Residence, Massachusetts Manufacturing Innovation Initiative, MassCyberCenter, Digital Health Initiative, MassTech Intern Partnership, Technology Sector Business Assistance, and MassTech Mentorship Program Support, as well as the MassTech work with cluster-focused working groups and councils (such as Robotics Steering Committee, Cybersecurity Strategy Council, Mass Digital Health Council).

Goal: Harness the value of research: Strengthen capacity for innovation and commercialization at research institutions in the Commonwealth, enhancing research capabilities and encouraging greater collaboration with industry to address relevant research questions and bring ideas to market.

3

Measurement: MassTech will measure its support of the Commonwealth's Research Enterprise by tracking the research activity and the industry/university research engagements at its six MassTech-funded University Research Centers and the four Research Institutes associated with MassTech's Massachusetts Manufacturing Innovation Initiative (M2I2).

Impact: 58 industry partnerships and grants through the Collaborative Research and Development Matching Grant Program (38) and Massachusetts Manufacturing Innovation Institute (20).

4

Goal: Find solutions for all unserved towns in the Commonwealth to achieve last mile broadband access.

Measurement: The number of towns either under contract with the Executive Office of Housing and Economic Development or are the subject of a contract between MassTech and a private provider.

Impact: 45 towns with solutions and only 1 remaining town (New Braintree) without a solution.

Goal: Achieve the goals of health reform (better health, better care, and lower costs) through better information exchange and among healthcare providers.

Measurement: Number of organizations transacting on the Hlway; Number of Eligible Providers participating in the Meaningful Use Electronic Health Record Incentive Program.

Impact: 1,244 organizations transacting on the HIway; 1,293 Eligible Providers participating in the Meaningful Use Electronic Health Record Incentive Program.

COLLABORATIVE RESEARCH & DEVELOPMENT MATCHING GRANT PROGRAM (M.G.L. Chapter 40J, Section 4G)

MassTech administers the Collaborative Research and Development Matching Grant Program to support large-scale, long-term projects that have the potential to spur innovation, promote workforce and cluster development, and grow jobs by investing in critical research and development (R&D) infrastructure. These investments support R&D partnerships that bring together the Commonwealth's world-class research institutions and class-leading companies.

1

Goal: Develop and implement additional program functionality via revised program web page.

Measurement: Discrete web pages that are interoperable at least via hyperlinks to all R&D Fund portfolio centers.

Impact: 3 of the R&D Fund supported University Research Centers have individual pages that provide users with a point of contact at the Center and provides information about each Center's activities. This will be a priority to complete in FY20.

2

Goal: Foster a culture of Innovation and Entrepreneurship

Measurement: Business Starts, Partnerships, Research Projects with Private Sector, Technologies Licensed.

Impact:

- 3 Business Starts (1 at UMass, 1 at WPI, 1 at Northeastern)
- 38 Key Partnerships (30 at WHOI, 3 at WPI, 3 at Northeastern, and 2 at UMass Amherst)
- 12 Research Projects with Private Sector (6 at UMass Amherst, 3 at Northeastern, 3 at WPI)
- 9 Technologies Licensed (1 at Northeastern, 8 at WHOI)

MASSTECH INTERN PARTNERSHIP (Item 7002-1508 of Section 2 of Chapter 47 of the Acts of 2017)

The MassTech Intern Partnership (MTIP) program provides stipends to digital technology companies that are starting and scaling-up across Massachusetts to directly support internships for Massachusetts college and graduate students. The program enables eligible companies to hire eligible interns, helping drive innovation and keep our tech sector dynamic, vibrant, and growing across the Commonwealth. Companies can be reimbursed for up to 50% of the intern's hourly wage up to \$8 per hour for a total of \$3,200/year per individual intern.

1

Goal: Subject to the availability of funds, (1) meet or exceed the number of intern stipends reserved for Summer 2018, and (2) therefore increase the number of students hired by the companies at which they are interning.

Measurement: (1) Number of interns for which stipends are reserved; (2) percentage of interns hired full- or part-time by their participating company

Impact: 200 stipends reserved, 27% of interns hired at the end of internships. As of October, not all reimbursement requests received and as a result, the final number of interns hired could increase.

2

Goal: Better tracking of the impact of MTIP funded summer internships on the ability of students to get a job in the tech sector

Measurement: Survey of summer interns

Impact: 33 survey responses so far (16.5%). However, the survey will remain open so the number of responses could increase.

INNOVATION INSTITUTE ECOSYSTEM DEVELOPMENT (M.G.L. Chapter 40J, Section 6A)

The Innovation Institute works to align state support for the research, technology and business development, capital, talent and other infrastructure needs necessary for vibrant ecosystems for innovation across the Commonwealth. The institute undertakes targeted projects and initiatives, in close collaboration with leaders within the industry, academic, public and non-profit sectors of our economy, that are designed to improve conditions for growth within the Innovation Ecosystem. These efforts are often focused on:

Regional Support - We engage new and well-established institutions and other community partners in growing regional innovation economies through new and novel programs that address proven demand and need or proven programs that demonstrate their ability to mature and scale.

Entrepreneurship and Start-Up Support - We see entrepreneur mentoring (often found within collaborative workspaces) as a means to build and support strategies that help create the conditions for growth within regional entrepreneurship ecosystems.

Cluster Development - Using industry clusters as an organizing concept the Innovation Institute continuously concentrates its support on growth conditions for emerging clusters. FY19 priority clusters include: Cybersecurity, Robotics and the Internet of Things (IoT).

The Innovation Institute also produces and publishes the Annual Index of the Massachusetts Innovation Economy, the Commonwealth's tool for benchmarking the status and progress of our innovation economy. Since 1997, the Index has provided users with a wealth of data and information for assessing the performance and progress of the Commonwealth's innovation sectors. Through an analysis of 22 economic indicators, the Index offers a comprehensive view of several dimensions of the innovation ecosystem.

Through a contract with the Executive Office of Housing and Economic Development's Seaport Economic Council, the Innovation Institute also supports grand challenges that leverage the Internet of Things (IoT) to support and enhance competitiveness of the Commonwealth's Blue Economy.

Goal: Collaborate closely with regional stakeholders to generate economic growth increasing their competitiveness in the Commonwealth and beyond by addressing unique needs.

Measurement: Number of unique regional engagements, number of programs, conferences, showcases, exhibits, and events.

Impact: MassTech engaged in all regions in the Commonwealth with new initiatives in North Adams, Worcester, Cape Cod and Holyoke. Engagements continued in Springfield, Beverly, Falmouth, New Bedford, Boston and Lowell. Major events and programming occurred in the areas of Entrepreneurship, Marine Technology, Robotics, Flexible Electronics, and Sensor Development.

Goal: Support growth in clusters that comprise the state's digital economy.

Measurement: The number of cluster-based economic development projects supported by MassTech, number of strategies developed.

Impact: The Emerging Technology Verticals study identified and outlined plans for cluster development activities in 7 emerging areas. In addition, cluster development activities and projects continued in Marine Technology, Flexible Electronics, Sensor Development, Data Science, Open Cloud Computing and Health Technology.

GLOBAL ENTREPRENEUR IN RESIDENCE (FY19 Line Item 7002-1509)

The Massachusetts Global Entrepreneur in Residence program is an initiative intended to help qualified international students to stay in the Commonwealth after graduation to start or grow a high potential business in Massachusetts. By partnering with the University of Massachusetts and sponsoring these entrepreneurs under its nonprofit research institution exemption from the H-1B cap, the Global Entrepreneur in Residence program helps international student entrepreneurs stay in the United States and continue to build their startup companies.

1

Goal: (1) Facilitate Global Entrepreneur in Residence placement as university part-time employee or venture center residency in support of university mission to petition for H-1B visa; (2) conduct outreach to the technology, start-up, venture capital, legal, and university communities to develop a pipeline of potential candidates.

Measurement: (1) Number of entrepreneurs successfully in residence at UMass Boston Venture Development Center; (2) Number of entrepreneurs in the pipeline.

Impact: 25 entrepreneurs in residence. 42 entrepreneur applications during the first half of 2019 and 80 applications in 2018.

2

Goal: Foster a Culture of Innovation and Entrepreneurship

Measurement: Number of business starts, jobs created, and venture capital invested from participating global entrepreneurs.

Impact:

- 8 new companies221 jobs
- \$138M in venture capital raised
- UMass Boston GEIR reporting includes current and graduate companies in job totals and venture capital totals.

TECHNOLOGY SECTOR BUSINESS ASSISTANCE

MassTech offers a one-stop "front door" web portal with concierge-style capabilities for tech firms. Companies can access a directory of business resources and programs available in the Commonwealth based on their business size and maturity, including state incentives, real estate programs, data, pitch decks, and programs to help tech companies thrive within the Commonwealth's innovation economy. Tech firms can also benefit from in-house business assistance from MassTech staff by making direct inquiries for guidance, partnership support, and channels of opportunity to leaders in the local innovation ecosystem.

1

Goal: Serve 300 tech companies in Massachusetts

Measurement: The number of events, support requests, and interactions MassTech staff have with companies seeking business assistance support, number of business relationships.

Impact: The number of requests for support via the Business Assistance web form and views on the webpage, as well as the number of business relationships and meetings held by MassTech and the Innovation Institute meet this target.

2

Goal: Formally launch the Business Assistance program, taking it from pilot to full statewide rollout.

Measurement: A single major launch event for the Business Assistance program. Efforts to raise awareness for the program around the state via incubators, accelerators, co-working spaces, and partners.

Impact: The Business Assistance program was soft-launched, and efforts were made to raise awareness among partners in the ecosystem, but there was no single major launch event held.

MASSTECH MENTORSHIP PROGRAM SUPPORT (Item 7002-1508 of Section 2 of Chapter 47 of the Acts of 2017)

The Innovation Institute supports entrepreneur mentoring as means to build regional start-up ecosystems and communities of innovation across Massachusetts. The opportunity to engage in a strong mentoring relationship builds the confidence and success of new businesses and plays a crucial role in lowering the barriers to entry for owning and running a business. In addition to the impact they have on individual entrepreneurs, mentors are a key part of a healthy entrepreneurship ecosystem, both inspiring new business leaders through their example and bringing needed expertise on the business development process. The Innovation Institute sees entrepreneur mentoring as a means to build, driving the development of a new phase in support for strategies to help create the conditions for growth.

Goal: Assess economic development models for scaling the companies of successful startup entrepreneurs and pilot awards.

Measurement: Program Analysis and subsequent awards

Impact: The focus on scaling was shifted instead towards the need for a dedicated resource to work in Entrepreneurial Ecosystems. There is currently an open position within the Innovation Institute to fill this need, and there is an open Entrepreneurial Ecosystem Assessment to partner with the Innovation Institute to further inform the needs of the ecosystem, including scaling.

Goal: Number of new institutions and community partners engaged (business relationships), business starts and programs/conferences/showcases/exhibits/events.

Measurement: Business Starts, Partnerships, Research Projects with Private Sector, Technologies Licensed.

Impact: Continued engagement with the Entrepreneurial Ecosystem across the Commonwealth by attending conferences, demo days, pitch contests, and promotional events. The Innovation Institute entered partnerships with new entities/programs in North Adams, Worcester, Holyoke, Cape Cod, Beverly, Springfield, Boston and engaged with entities in other regions across the Commonwealth. In addition, we are working with EOHED and the ACTION Network on a large-scale mapping exercise that will track and map all assets within the region's Entrepreneurial Ecosystem.

MassCyberCenter (FY19 Line Item 7002-1512)

The vision of the MassCyberCenter is to enhance opportunities for the Massachusetts cybersecurity ecosystem to compete as the national cybersecurity leader while strengthening the resiliency of the Commonwealth's public and private communities. The MassCyberCenter will enhance conditions for economic growth through outreach to the cybersecurity ecosystem of Massachusetts while fostering cybersecurity resiliency within the Commonwealth.

1

Goal: Convene the different groups in the cybersecurity ecosystem (private sector, academia, public sector) to catalyze action.

Impact: A Cybersecurity Forum convened private sector, public sector, and academia. The event included 6 sessions focused on topics including R&D, defense, talent and workforce, and resilience.

2

Goal: Organize Resiliency Working Group to develop a comprehensive cyber resiliency plan for the Commonwealth. Implementation of the plan is contingent upon acceptance by key partners in the Commonwealth.

Measurement: The number of key partners involved with the Resiliency Working Group and by the recommendations developed.

Impact:

- Cyber Resilient Massachusetts Working Group was convened and held 5 meetings, including 5 sub-working group meetings and 1 tabletop exercise.
- Recommendations for government resiliency plan are underway and continue to be developed.

MASSACHUSETTS MANUFACTURING INNOVATION INITIATIVE (FY19 Line Item 7002-8007 of Section 2A of Chapter 219 of the Acts of 2016)

The Massachusetts Manufacturing Innovation Initiative (M2I2) provides capital cost shares for projects and discovery centers located within the Commonwealth's borders, as part of the state's ongoing commitment to the Manufacturing USA program put forth by the federal government. The M2I2 program builds upon the state's existing assets, including strong academic presence, a national leadership in research and development, the depth of the innovation ecosystem of the state, and a long history of manufacturing strength. M2I2 acknowledges that innovation is key to the future of manufacturing within the state. M2I2 deepens and connects these assets, to further the innovations and job growth within the state by connecting companies, universities, national labs, government, incubators, accelerators and other academic and training institutions.

1

Goal: Identify and co-develop collaborative projects that advance Massachusetts' manufacturing innovation ecosystems.

Measurement: Number of partnerships formed.

Impact: Over 20 partnerships, calculated on grants announced during FY19.

2

Goal: (1) Enable new jobs, and (2) create new training programs in the advanced manufacturing sector.

Measurement: (1) Enable new jobs, and (2) create new training programs in the advanced manufacturing sector.

Impact: (1) Jobs: Approximately 100 jobs will be created or saved near over next 3 years, potential of many more longer term; (2) Training: over 140 students and teachers trained in first year; expect similar levels to continue annually Both metrics calculated on grants announced during fiscal year.

Fiscal Year 2019 Goals & Targets – MassBroadband Institute at MassTech Collaborative

MASSBROADBAND 123 (Chapter 231 of the Acts of 2008)

The MassBroadband 123 network provides last mile connectivity to hundreds of public facilities in Western and North Central Massachusetts. The network provides services to local Internet Service Providers (ISPs) that may offer consumer services in the region.

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Goal: Develop multi-year capital plan for the *MassBroadband 123* Network to upgrade network electronic equipment; initial requirements in this plan will be procured and implemented.

Measurement: The completion of a capital plan for the *MassBroadband 123* network.

Impact: Partially complete plan; KCST, the operator of the *MassBroadband 123* Network, has submitted a multi-year capital plan, which is under review by MassBroadband Institute. The submission of the capital plan was delayed due to the bankruptcy proceedings involving KCST.

2

Goal: Foster a Culture of Innovation and Entrepreneurship

Measurement: Number of business starts, jobs created, and venture capital invested from participating global entrepreneurs.

Impact:

- 8 new companies221 jobs
- \$138M in venture capital raised
- UMass Boston GEIR reporting includes current and graduate companies in job totals and venture capital totals.

LAST MILE PROGRAM (M.G.L. Chapter 40J, Section 6B)

Last Mile supports and co-invests in broadband solutions for the 45 Massachusetts towns that have lacked residential broadband service. This program includes grants to private broadband service providers and directly to municipalities.

Goal: Execute and manage additional grant agreements for final 12 towns under the Flexible Grant Program.

1

Measurement: Number of towns that are the subject of an executed agreement between MassTech and a private provider; Grant agreements in place to cover the final 12 towns

Impact: Agreements are in place for 9 of the final 12 towns. MBI is actively working to finalize broadband solutions for Egremont, Monterey and New Braintree. Egremont and Monterey have a path forward with an incumbent private provider that is serving a portion of each town. New Braintree is the only town that does not have a path forward and MBI has commissioned a study to develop cost estimates for a fixed wireless network to serve New Braintree.

2

Goal: Of the 45 last mile towns, 17 will be providing customers with internet service and the remaining 28 will be in the build stage.

Measurement: Project status reports

Impact: 16 towns have a broadband network that is either fully operational or partially lit (construction of the network is ongoing but some customers are already receiving broadband service). Of the 28 remaining towns, 20 are in the make ready or build stage.

Fiscal Year 2019 Goals & Targets – Massachusetts eHealth Institute at MassTech Collaborative

MASS DIGITAL HEALTH INITIATIVE (M.G.L. Chapter 40J, Section 6D (g))

The Mass Digital Health Initiative is a public-private partnership working to establish Massachusetts as the leading ecosystem for digital health innovation, for the purpose of economic growth and improved healthcare quality and costs. Through the initiative, MassTech is investing in and helping to organize a more accessible digital health marketplace for the Commonwealth.

Goal: Provide s	uppo	ort to high-potential startups across Massachusetts						
Measurement:	•	Number of startups in the MassChallenge Health Tech accelerator program						
	•	Number of TechSpring innovation projects						
	•	Number of jobs created at 10 Massachusetts high-potential scaling companies						
Number of digital health companies in the Massachusetts ecosystem								
	•	Number of events sponsored or hosted by the eHealth Institute or its grantees						
Impact:	•	31 companies in the MassChallenge HealthTech program						
	•	27 TechSpring innovation projects						
	•	163 jobs created at 8 Massachusetts high-potential scaling companies						
	•	380 MA-based digital health companies						
	•	141 sponsored or hosted events						

2

Goal: Understand diversity of presenters at events hosted by MeHI and our grantees so that we can report on and improve on that diversity in future years.

Measurement: Percentage of speakers (including moderators, panelists, and individual speakers) who are women and/or persons of color at events that we organize and/or host.

Impact:

- 55% of speakers at events hosted by MeHI or its grantees were women
- 16% of speakers at events hosted by MeHI or its grantees were people of color

MEDICAID ELECTRONIC HEALTH RECORD INCENTIVE PAYMENT PROGRAM (M.G.L. Chapter 40J, Section 6D)

The Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs provide financial incentives to Eligible Hospitals and Eligible Professionals to adopt, implement, upgrade and demonstrate Meaningful Use (MU) of Certified Electronic Health Record Technology (CEHRT). MassHealth has contracted MassTech to support and process the incentive applications in the Commonwealth.

1

Goal: Maintain processing efficiency and cycle time for the validation of Medicaid Electronic Health Record Incentive applications.

Measurement: Data from MeHI's Salesforce CRM (Customer Relationship Management System); 2,000 applications

Impact: 1,929 applications processed from PY17 and prior years

2

Goal: (1) Provide education in Meaningful Use of Electronic Health Record systems, change management, and process improvement to support providers in Meaningful Use compliance; and (2) stimulate participant retention, and renew participation by providers who have dropped out of the incentive program.

Measurement: (1) Number of outreach events including Medicaid Electronic Health Record Incentive Program webinars, Meaningful Use Learning Collaboratives, and Meaningful Use workshops; (2) Number of retained and renewed participants.

Impact: 12 group webinars; 110 individual webinars; 1 learning collaborative; 4 workshops; 961 PY17 retained participants; 332 renewed participants for PY18

Fiscal Year 2019 Goals & Targets – Massachusetts eHealth Institute at MassTech Collaborative

MASS HIWAY OUTREACH AND ADOPTION SUPPORT

The Hlway, Massachusetts' statewide health information exchange, offers doctors' offices, hospitals, laboratories, pharmacies, and other healthcare organizations a way to securely and seamlessly transmit vital data electronically. The Executive Office of Health and Human Services has contracted MassTech to provide outreach, account management, and consulting services to target and assist healthcare providers in meaningfully adopting and using health information exchange to improve quality of care and reduce costs.

1

Goal: Provide Health Information Exchange Adoption and Utilization Services (HAUS) to MassHealth Accountable Care Organizations (ACOs) and their community partners (CPs), and community service agencies (CSAs) to promote the use of the HIway to support care coordination.

Measurement: Number of organizations enrolled in Health Information Exchange Adoption and Utilization Services (HAUS) Percentage of HAUS organizations implementing a care coordination use case with at least one trading partner

Impact:

- 22 organizations enrolled in HAUS services; EOHHS shifted priorities from HAUS services to HIway 2.0 migration and 2018/2019 HIway connection requirements
- 23% of enrolled organizations implementing a care coordination use case

2

Goal: Develop and present educational webinars, learning collaboratives, and workshops to assist organizations in connecting to and meaningfully using the HIway and Health Information Exchange (HIE). These outreach and education activities will cover the HIway attestation process, migration to HIway 2.0, HIE-enabled change management and process improvement, and Health Information Exchange Adoption and Utilization Services (HAUS) participation.

Measurement: Number of the following types of convenings - Webinars, Health Information Exchange learning collaboratives, and change management and process improvement workshops

Impact: 11 webinars and 5 workshops; Learning collaboratives were not held due to outreach efforts focused on Hlway migration

INVESTMENTS AND GRANTS AWARDED OR PROVIDED BY THE AGENCY DURING FISCAL YEAR 2019

Investments and Grants awarded or provided by MassTech and its divisions.

	Award Overview					Award Address Information where project/award is located				
Name of Award Program - or - Investment	Name of Recipient	Description of Award or Investment	Amount (if applicable)	St. #	Street Name	Street Ending Avenue, Street, Lane	Municipality of Recipient *if regional or state- wide, please indicate			
Cybersecurity Growth and Development Center	DayBlink Consulting, LLC	MassCyber Center Resiliency Working Group Support	\$80,000.00				Statewide			
Cybersecurity Growth and Development Center	Bay Path University	Cyber Talent Challenge Award	\$250,000.00	588	Longmeadow	Street	Longmeadow			
Cybersecurity Growth and Development Center	MassHire Greater New Bedford Workforce Board	Cyber Talent Challenge Award	\$74,690.00	1213	Purchase	Street	New Bedford			
Cybersecurity Growth and Development Center	STEMatch	Cyber Talent Challenge Award	\$61,178.00	6	Monroe	Road	Wellesley			
Cybersecurity Growth and Development Center	MassHire Greater New Bedford Workforce Board	Cyber Talent Challenge Award-Additional Funds	\$15,000.00	1213	Purchase	Street	New Bedford			
Innovation Institute	UMass - Boston	Global Entrepreneur In Residence award	\$50,000.00	100	Morrissey	Boulevard	Boston			

Innovation Institute	UMass - Dartmouth	Global Entrepreneur In Residence award	\$50,000.00	285	Old Westport	Road	North Dartmouth
Innovation Institute	Worcester Polytechnic Institute	Global Entrepreneur In Residence award	\$50,000.00	100	Institute	Road	Worcester
Innovation Institute	Valt (Mindburner Inc.)	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	85	Main	Street	North Adams
Innovation Institute	Quant- University, LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	5	Middlesex	Avenue	Somerville
Innovation Institute	Bare Tree Media Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	279	East Central	Street	Franklin
Innovation Institute	DeepHealth Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	23	Oak	Street	Belmont
Innovation Institute	Visible Systems Corporation	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	711	Atlantic	Avenue	Boston

Innovation Institute	WatchRx, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	10	Barker	Road	Acton
Innovation Institute	AutoGuide Mobile Robots	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	2	Omni	Way	Chelmsford
Innovation Institute	Admetsys Corporation	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	4	South Market	Street	Boston
Innovation Institute	Perceptive Automata Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	230	Somerville	Avenue	Somerville
Innovation Institute	Armored Things	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	4	Liberty	Square	Boston
Innovation Institute	Dexai Robotics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	444	Somerville	Avenue	Somerville
Innovation Institute	Loro	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	125	Western	Avenue	Allston
Innovation Institute	Southie Autonomy Works, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	12	Channel	Street	Boston
Innovation Institute	DeepHealth Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	23	Oak	Street	Belmont

Innovation Institute	UbiCare (TPR Media LLC)	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	281	Amory	Street	Jamaica Plain
Innovation Institute	Absolute Robot Corporation	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	33	Southgate	Street	Worcester
Innovation Institute	Wellist	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	100	City Hall	Plaza	Boston
Innovation Institute	Square Robot	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	21	Drydock	Avenue	Boston
Innovation Institute	Privy, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	201	South	Street	Boston
Innovation Institute	GenoSpace, LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	27	School	Street	Boston
Innovation Institute	BrainCo, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	120	Beacon	Street	Somerville
Innovation Institute	RailPod, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	371	Dorchester	Avenue	Boston
Innovation Institute	Autonodyne LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	320	Congress	Street	Boston
Innovation Institute	Covered Security, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	170	Milk	Street	Boston
Innovation Institute	EnergySage	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	101	Arch	Street	Boston

Innovation Institute	Mesodyne, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	15	Ward	Street	Somerville
Innovation Institute	Bare Tree Media Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	279	East Central	Street	Franklin
Innovation Institute	Kaon Interactive, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	3	Mill and Main		Maynard
Innovation Institute	Tulip Interfaces	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	561	Windsor	Street	Somerville
Innovation Institute	Trace Matters Scientific LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	444	Somerville	Avenue	Somerville
Innovation Institute	Iterative Scopes	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	10	Ware	Street	Cambridge
Innovation Institute	Segterra Inc. dba Inside- Tracker	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	101	Main	Street	Cambridge
Innovation Institute	Clinical Research IO (CRIO, Inc)	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	1	Main	Street	Cambridge
Innovation Institute	Cuseum, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	51	Melcher	Street	Boston
Innovation Institute	NeuroScouting LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	374	Somerville	Avenue	Somerville
Innovation Institute	Trilio Data, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	20	Speen	Street	Framingham

Innovation	1UpHealth	Intern Stipend Grants	\$3,200.00	225	Center	Street	Boston
Institute		to technology start-up companies participating in the MassTech Intern Partnership Program					
Innovation Institute	ACTnano Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	100	Morrissey	Boule- vaRoad	Boston
Innovation Institute	Aday Technologies, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	36B	School	Street	Brighton
Innovation Institute	Dive Technologies Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	23	Governor Andrew	Road	Hingham
Innovation Institute	ISEE, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	501	Massachusetts	Avenue	Cambridge
Innovation Institute	Lever, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	85	Main	Street	North Adams
Innovation Institute	Monotony.ai, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1151	Walnut	Street	Newton
Innovation Institute	NODAR Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	12	Channel	Street	Boston
Innovation Institute	OpenRounds, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	359	Newbury	Street	Boston
Innovation Institute	Orbita, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	51	Melcher	Street	Boston
Innovation Institute	Phood LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	21	Drydock	Avenue	Boston

Innovation Institute	Veo Robotics, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	411	Waverley Oaks	Road	Waltham
Innovation Institute	E-Green LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	14	Concord	Avenue	Cambridge
Innovation Institute	AutoGuide Mobile Robots	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	2	Omni	Way	Chelmsford
Innovation Institute	Greensight Agronomics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	12	Channel	Street	Boston
Innovation Institute	Buoy Health	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	883	Boylston	Street	Boston
Innovation Institute	CareAcademy	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	55	Court	Street	Boston
Innovation Institute	Fairmarkit, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	125	Kingston	Street	Boston
Innovation Institute	FloDesign Sonics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	380	Main	Street	Wilbraham
Innovation Institute	RightHand Robotics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	237	Washington	Street	Somerville
Innovation Institute	Spiro Technologies, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	334	Boylston	Street	Boston
Innovation Institute	CAIDE Systems, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	116	John	Street	Lowell
Innovation Institute	Changing Environments, Inc. dba Soofa	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	24	Thorndike	Street	Cambridge

Innovation Institute	Day Zero Diagnostics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	127	Western	Avenue	Allston
Innovation Institute	DynamiCare Health, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	6	Liberty	Square	Boston
Innovation Institute	FamilyID, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1050	Waltham	Street	Lexington
Innovation Institute	Health Innovators Inc dba Daytoday Health	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	120	St. James	Avenue	Boston
Innovation Institute	Jebbit, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1	Cambridge Center		Cambridge
Innovation Institute	Raptor Maps, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	444	Somerville	Avenue	Somerville
Innovation Institute	Vee24	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	745	Atlantic	Avenue	Boston
Innovation Institute	Watchtower Robotics Co	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	12	Channel	Street	Boston
Innovation Institute	GenoSpace, LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	27	School	Street	Boston
Innovation Institute	Kaon Interactive, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	3	Mill and Main		Maynard
Innovation Institute	invisaWear Technologies LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	44	Stedman	Street	Lowell
Innovation Institute	Visible Systems Corporation	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	711	Atlantic	Avenue	Boston

Innovation Institute	Senscio Systems, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	1740	Massachusetts	Avenue	Boxborough
Innovation Institute	Barrett Technology LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	73	Chapel	Street	Newton
Innovation Institute	LeveragePoint Innovations Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	10	Cabot	Road	Medford
Innovation Institute	Orientier, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	18	Mount Vernon	Street	Lynn
Innovation Institute	GreatHorn, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	260	Charles	Street	Waltham
Innovation Institute	Z Imaging Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	125	Western	Avenue	Boston
Innovation Institute	Phood LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	21	Drydock	Avenue	Boston
Innovation Institute	Ava Robotics Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	180	Fawcett	Street	Cambridge
Innovation Institute	CSP Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	175	Cabot	Street	Lowell
Innovation Institute	Brain Power, LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	245	Main	Street	Cambridge
Innovation Institute	3XR, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	16	Spaulding	Street	Wakefield
Innovation Institute	Artaic LLC dba Artaic- Innovative Mosaic	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1	Design Center	Place	Boston

Innovation Institute	Corero Network Security Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	225	Cedar Hill	Street	Marlboro
Innovation Institute	K logix LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1319	Beacon	Street	Brookline
Innovation Institute	Triton Systems Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	200	Turnpike	Road	Chelmsford
Innovation Institute	OpenRounds, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	359	Newbury	Street	Boston
Innovation Institute	Advanced Continuing Education Association, Inc. (ACEA)	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	71	Commercial	Street	Boston
Innovation Institute	DipJar, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	110	Chauncy	Street	Boston
Innovation Institute	Solstice Power Technologies, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	700	Massachusetts	Avenue	Cambridge
Innovation Institute	Virtudent, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	665	Beacon	Street	Boston
Innovation Institute	6AM Health	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	318	Bear Hill	Road	Waltham
Innovation Institute	Blackburn Energy	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	11	Chestnut	Street	Amesbury
Innovation Institute	Cazena, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	1601	Trapelo	Road	Waltham
Innovation Institute	DeepHealth Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	23	Oak	Street	Belmont

Innovation Institute	E-Green LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	14	Concord	Avenue	Cambridge
Innovation Institute	Lever, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	85	Main	Street	North Adams
Innovation Institute	Leuko Labs Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	8	St. Mary's	Street	Boston
Innovation Institute	Disruptor Beam, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	100	Pennsylvania	Avenue	Framingham
Innovation Institute	HelloTeam Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	745	Atlantic	Avenue	Boston
Innovation Institute	Optumi Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	345	Stow	Road	Harvard
Innovation Institute	Shoobx, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	150	Cambridge- Park	Drive	Cambridge
Innovation Institute	InMotion Systems, LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	24	Kendall	Drive	Westborough
Innovation Institute	MedMinder Systems, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	30	Wexford	Street	Needham
Innovation Institute	Northland Creative Wonders	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	800	Main	Street	Holden
Innovation Institute	DeepHealth Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	23	Oak	Street	Belmont
Innovation Institute	Moltin Holdings Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	137	Portland	Street	Boston

Innovation Institute	Changing Environments, Inc. dba Soofa	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	24	Thorndike	Street	Cambridge
Innovation Institute	DynamiCare Health, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	6	Liberty	Square	Boston
Innovation Institute	Blustream Corporation	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	20	Franklin	Street	Worcester
Innovation Institute	Embr Labs Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	285	Washington	Street	Somerville
Innovation Institute	OnHand LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	200	Portland	Street	Boston
Innovation Institute	Bitome, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	18	Park	Lane	Boston
Innovation Institute	Cuseum, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	51	Melcher	Street	Boston
Innovation Institute	Cleo Robotics Labs Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	12	Channel	Street	Boston
Innovation Institute	SI2 Technologies, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$6,400.00	267	Boston	Road	N. Billerica
Innovation Institute	Bluefin Technology Partners, LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	20	Franklin	Street	Worcester
Innovation Institute	Compt Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	8	Museum	Way	Cambridge
Innovation Institute	Imaginostics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	245	Main	Street	Cambridge

Innovation Institute	Logan Data Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	2	Lan	Drive	Westford
Innovation Institute	NextShift Robotics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1001	Pawtucket	Boulevard	Lowell
Innovation Institute	Ovation, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	32	Pearl	Street	Cambridge
Innovation Institute	Persistence Plus LLC	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	43	Soley	Street	Charlestown
Innovation Institute	Pliant.io, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	745	Atlantic	Avenue	Boston
Innovation Institute	ISEE, Inc	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	501	Massachusetts	Avenue	Cambridge
Innovation Institute	FamilyID, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	1050	Waltham	Street	Lexington
Innovation Institute	Fortifyedge, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	18	Ellery	Square	Cambridge
Innovation Institute	Rediker Software, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	2	Wilbraham	Road	Hampden
Innovation Institute	Vecna Robotics, Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$9,600.00	425	Waverley Oaks	Road	Waltham
Innovation Institute	AllSpice Inc.	Intern Stipend Grants to technology start-up companies participating in the MassTech Intern Partnership Program	\$3,200.00	15	N Beacon	Street	Allston
Innovation Institute	Cape Cod Young Professionals	Mentoring Soliciation Award: EforAll@CCYP (Barnstable)	\$100,000.00	PO Box 634			Barnstable

Innovation Institute	North Shore InnoVentures	Mentoring Soliciation Award: Peer Mentoring Expansion Project (Beverly, Peabody, Woburn)	\$100,000.00	100	Cummings	Center	Beverly
Innovation Institute	Valley Venture Mentors	Mentoring Solicitation Award: VVM 2.0 Mentorship Project (Springfield)	\$80,000.00	1500	Main	Street	Springfield
Innovation Institute	Worcester Roots	Mentoring Solicitation Award: Cooperative Business Mentorship Initiative (Worcester)	\$80,000.00	4	King	Street	Worcester
Innovation Institute	Entre- preneurship for All (EforAll)	Mentoring Solicitation Award: SPARK (Holyoke)	\$80,000.00	175	Cabot	Street	Lowell
Innovation Institute	Entre- preneurship for All (EforAll)	Entrepreneurship support in the Southcoast region	\$171,715.00	175	Cabot	Street	Lowell
Innovation Institute	Education Development Center, Inc.	Implement and manage the MassCAN	\$222,000.00				Statewide
Innovation Institute	Tech Foundry	Pilot program to provide flexible training to individuals seeking a career in the Pioneer Valley IT industry	\$50,000.00	1391	Main	Street	Springfield
Innovation Institute	Woods Hole Oceano- graphic Institute	Support for early phase marine technology start-ups	\$200,000.00	86	Water	Street	Woods Hole
Innovation Institute	Tech Foundry	Tech Foundry Business Development/Employer Engagement	\$50,765.00	1391	Main	Street	Springfield
Innovation Institute	Northern Light Productions	Robotics Video Montage	\$46,675.00				Statewide
Innovation Institute	New Bedford Port Authori- ty-New Bedford Ocean Cluster	SEC Grand Challenge Award - Harvesting and Applying Data About the Sea (New Bedford)	\$250,000.00	52	Fisherman's	Wharf	New Bedford
Innovation Institute	Lobster Foundation of Mass.	SEC Grand Challenge Award - LobsterNet (Gloucester)	\$133,156.00	8	Otis	Place	Scituate
Innovation Institute	Mass.Maritime Academy	SEC Grand Challenge Award - Marine Hydrokinetic Oceanographic Data Portal (Buzzards Bay)	\$69,600.00	101	Academy	Drive	Buzzards Bay
Massachusetts Broadband Institute	WiValley Broad- band	Flexible Grant Program Award - wireless network for the Towns of Florida, Hawley, Monroe and Savoy	\$2,315,461.00				WiValley

Massachusetts Broadband Institute	Comcast (Comcast of Mass. II, & Comcast of Mass/Virginia, Inc.)	Flexible Grant Program Award - broadband service for Middlefield	\$1,007,680.00				Middlefield
Massachusetts Broadband Institute	Charter Communica- tions	Princeton additional make ready costs	\$91,000.00				Princeton
Massachusetts Broadband Institute	Charter Com- munications	Flexible Grant Program Award - broadband ser- vice for Sandisfield	\$2,607,800.00				Sandisfield
Massachusetts Broadband Institute	Comcast of Mass./ Virginia, Inc ("Comcast")	Flexible Grant Program Award - broadband service for the Town of Tolland	\$2,125,412.00				Tolland
Massachusetts Broadband Institute	Tolland, Town of	Flexible Grant Program Award - pole installation	\$150,000.00	241	West Granville	Road	Tolland
Massachusetts Broadband Institute	Charter Com- munications	Flexible Grant Program Award - broadband ser- vice for the Town of New Marlborough	\$3,150,000.00				New Marlborough
Massachusetts Broadband Institute	Petersham, Town of	Flexible Grant Program Award fi- ber-to-the-premises GPON broadband network	\$880,000.00	3	South Main	Street	Petersham
Massachusetts Broadband Institute	Princeton, Town of	Princeton Make Ready Reimbursement	\$100,000.00	6	Town Hall	Drive	Princeton
Massachusetts Broadband Institute	Interisle Consulting Group	Development of a cost estimate for a wireless broadband network for the Town of New Brain- tree	\$18,625.00				New Braintree
Massachusetts eHealth Institute	Massachusetts Institute of Technology	2018 HUBweek Sponsorship	\$16,500.00	77	Mass.	Avenue	Cambridge
Massachusetts eHealth Institute	Monday, Inc.	Development of MA Digital Health Jobs Board Platform	\$11,100.00				Statewide
Massachusetts eHealth Institute	Medstro, LLC	Medstro Data Challenge	\$5,000.00	2	Clarke	Drive	Cranbury
Massachusetts eHealth Institute	Foley Hoag LLP	Digital Health Council Advisory Services	\$100,000.00	155	Seaport	Boule- vaRoad	Boston
Massachusetts eHealth Institute	Mass- Challenge Inc.	Summer 2019 Digital Health intern	\$3,960.00	1	Marina Park	Drive	Boston

Massachusetts		3	\$80,000.00	1	Marina Park	Drive	Boston	
eHealth	Challenge Inc.	Newsletter						
Institute		Sponsorship and Support						



FY2020 Agency Overview

The Massachusetts Technology Park Corporation does business as the Massachusetts Technology Collaborative ("MassTech Collaborative" or "MassTech"). MassTech strengthens the competitiveness of the tech and innovation economy by driving strategic investments, partnerships, and insights that harness the talent of Massachusetts.

MassTech is advancing economic development in key areas such as digital health technology, information technology, broadband deployment, advanced manufacturing, cybersecurity, and other emerging sectors such as robotics and the Internet of Things (IoT). Over its 38 year history, MassTech has managed numerous complex projects, overseeing more than \$626 million in public funding by providing grants, loans, and other financial assistance to thousands of projects across the Commonwealth of Massachusetts (the "Commonwealth"). Through its major divisions and centers - the Innovation Institute, the Massachusetts eHealth Institute ("MeHI"), the Massachusetts Broadband Institute ("MBI"), the MassCyberCenter, and the Center for Advanced Manufacturing - MassTech is stimulating economic activity throughout the Commonwealth.

MassTech brings together leaders from industry, government, and academia to advance technology-based solutions that strengthen regional economies, improve the healthcare system, expand high-speed internet access, and stimulate cluster growth.

The Innovation Institute at MassTech

The Innovation Institute at MassTech is chartered to support the economic conditions for growth for the Commonwealth's technology and innovation-based economy. The Innovation Institute works closely with key stakeholders in academia, industry, public, and nonprofit sectors to strengthen capacities in research, technology and business development, and talent, which lead to new business formation, and job creation. These efforts also attract and grow companies in emerging and established technology sub-sectors such as robotics, FinTech, advanced manufacturing, computing, and cybersecurity.

The Innovation Institute engages in grant activities, manages projects, develop initiatives and provides direct services for civic, industry and nonprofit organizations. The Institute also:

- Supports rigorous, collaborative, interdisciplinary research and development partnerships at Massachusetts universities:
- Enhances the ability of the Commonwealth's academic research centers to compete for millions of dollars in federal research awards and aligns technology capacities at our research institutions with the needs of industry;
- Secures the economic benefits of downstream production and employment for all regions of the Commonwealth as new research and technologies are commercialized in the marketplace;
- Analyzes the Massachusetts innovation economy through the development of the annual Index of the Massachusetts Innovation Economy as well as sector and regional specific analyses;
- Partners with and invests in novel talent development initiatives such as internship support and targeted higher education and adult education technology training programs with a focus on diversity and inclusion;
- Provides business assistance services targeted toward firms in the technology sector with the goal of helping businesses relocate to or expand in the Commonwealth. The Innovation Institute provides referrals to state resources as well as assisting startup entrepreneurs and tech firms leverage other resources in the tech ecosystem;
- Develops regional innovation economies and cluster growth through its regional priority grant program by supporting
 high value innovation based economic development activities including support of targeted cluster growth
 opportunities in the Tech Sector; facilitation of the Massachusetts Tech Hub Collaborative, analysis of opportunities
 for growth in technology clusters such as robotics, IoT, Artificial Intelligence, FinTech, and blockchain; and convening
 key stakeholders in promising clusters to develop consensus around targeted action agendas; and
- Facilitates the Massachusetts Tech Hub Collaborative, analysis of opportunities for growth in technology clusters such as robotics, IoT, Artificial Intelligence, FinTech, and autonomous vehicles; and convening key stakeholders in promising clusters to develop consensus around targeted action agendas.

As a mechanism to drive growth in industry clusters, the Innovation Institute also administers a \$65 million Collaborative Research Matching Grant Program which was created by the Massachusetts Legislature and recapitalized in 2016 as part of the economic development bill, "An Act Relative to Job Creation and Workforce Development". This program provides matching capital funds for scientific or technology research and development projects sponsored by the University of Massachusetts, research universities, non-profit entities, or non-profit research institutions in the Commonwealth. Four new awards were made under this program in FY20. To date, ten awards have been made under this fund for a total of \$28.3

million of capital investment to fund and help develop large-scale, long-term collaborative research projects sponsored by Massachusetts-based research entities. This program enables the Innovation Institute to strengthen research capacity in the Commonwealth through these research investments and by convening the Directors of research centers to share best practices and to promote partnerships with key industry partners.

Two other programs contribute to the goals of the Innovation Institute including the MassTech Intern Partnership and the Massachusetts Innovation Mentoring Initiative. The MassTech Intern Partnership pays matching stipends to small- and medium-sized technology companies in Massachusetts to support the hiring of two- and four-year college students as interns. MassTech's Entrepreneur Mentoring effort is designed to support regional entrepreneur mentoring activities in underserved regions of the state through support for organizations that provide seasoned mentors to emerging startups. In FY20 the Innovation Institute participated in 11 regional entrepreneur support initiatives helping to expand and enhance programs and activities to reach more people, target diverse communities, and increase the impact.

Mentorships

In FY20, MassTech participated in 11 regional entrepreneur support initiatives including existing initiatives in Springfield, Boston, Cape Cod, Holyoke, Haverhill, Fall River/New Bedford and Lowell, as well as new and emerging regional initiatives in Beverly, Gardner, North Adams and Worcester. In FY20, the 8 entrepreneur support organizations supported by MassTech hosted 125 events aimed at increasing the growth of businesses in the Commonwealth. In addition, these organizations had 166 entrepreneurs participating in various entrepreneur support programs and launched 55 companies.

Global Entrepreneur In Residence (GEIR)

Through the GEIR, universities partner with the Commonwealth to provide valuable, relevant part-time work opportunities which initiate a cap-exempt H-1B visa application process. Participating universities act as the "sponsor" for filing cap-exempt H-1B petitions for graduates with advanced degrees who want to grow their companies but cannot due to a lack of available H-1B visa slots. This part-time employment authorization enables the entrepreneur's start-up company to apply for the entrepreneur's work authorization, also in a cap-exempt visa category, and ultimately will allow the company, and new high-skill jobs, to grow in Massachusetts.

In FY20, 66 applications were received, resulting in 21 entrepreneurs in residence across the Commonwealth.

Internships

In FY20, 128 internships were funded through the program, with 22 companies being first-time program participants.

Both companies and interns report individually that internships have led to subsequent employment. Data collected is not statistically significant to draw conclusions as post-internship survey responses to track this data have yielded response rates of less than 20%.

The MassCyberCenter

The MassCyberCenter was launched in September 2017 with a vision to enhance opportunities for the Massachusetts cybersecurity ecosystem to compete as the national cybersecurity leader while strengthening the 'cyber resiliency' of the Commonwealth's municipalities, public infrastructure, and private companies.

The third annual Cybersecurity Forum was held in October of 2019 as part of the inaugural Massachusetts Cybersecurity Week. The 2019 Forum, focused on the theme "Leading a Cyber Secure and Resilient Commonwealth Together," built on the momentum of prior events, helping strengthen connections across the cybersecurity ecosystem and solidifying the Commonwealth's global leadership in cybersecurity.

The Cyber Resilient Massachusetts Working Group ("CRMWG") was established to bring together public and private sector leaders to identify ways the Commonwealth's innovative technology ecosystem can help Massachusetts municipalities and critical institutions protect sensitive data, increase cybersecurity awareness, and respond to emerging threats. Over 45 member organizations participate in the CRMWG, which held 12 meetings and additional sub-working groups focused on municipalities, strategic planning, table top exercises, and critical infrastructure. During FY20, the CRMWG developed a Municipal Cybersecurity Toolkit as a first step to help municipal leaders begin to understand the cybersecurity posture of their municipality and to develop next steps for protecting municipal infrastructure against cyber threats. Recognizing the need to assist the Massachusetts' 351 municipalities in building their cyber incident response plans, the MassCyberCenter engaged the firm of Robinson + Cole to design, develop, and facilitate Cyber Incident Response Plan Workshops for Massachusetts municipalities, workshops which began in July of 2020.

Massachusetts Manufacturing Innovation Initiative (M2I2)

The Baker-Polito Administration established the Massachusetts Manufacturing Innovation Initiative (M2I2) in fiscal year 2016 as a key pillar of their innovation growth strategy for Massachusetts and established oversight of this initiative at MassTech. This initiative represents a substantial commitment to develop manufacturing infrastructure within the state's academic, research and manufacturing industry, and is a direct response to Manufacturing USA, a national network of federally sponsored, collaborative communities, each with the mission of securing the future of their respective technologies. The M2I2 is a state-sponsored collaboration of manufacturing innovation institutes in Massachusetts that are affiliated with the Manufacturing USA and leverages the leading Massachusetts research universities to strengthen the Commonwealth's research-to-manufacturing infrastructure. Through grants administered by EOEHD, M2I2 provides capital cost shares for projects and discovery centers located within the Commonwealth's borders, as part of the state's ongoing commitment to the Manufacturing USA program. The initiative boosts economic development by supporting job creation and growth in existing and emerging industry clusters across Massachusetts.

In April 2020, as a response to the COVID-19 public health crisis, the Baker-Polito Administration announced a new initiative to mobilize, organize, and operationalize critical path work streams necessary for Massachusetts manufacturers to pivot their operations to produce needed materials in response to the pandemic. Called the Massachusetts Manufacturing Emergency Response Team or M-ERT, the effort helped produce in-demand personal protective equipment (PPE) and other critical devices, such as ventilators, sanitizers, and thermometers. Funding in the amount of \$5.6 million was allocated from the M2I2 program was administered, with support from MassTech, through AFFOA (Advanced Functional Fabrics of America), a member of the National Network of Manufacturing Innovation Institutes.

During FY20, more than \$14 million in grants were award to nine grantees bringing the total M2I2 awards to over \$64 million to date.

Massachusetts eHealth Institute

Through MeHI, MassTech is working to accelerate the growth and adoption of technologies that save lives and reduce healthcare costs. MeHI was created through the passage of Chapter 305 of the Acts of 2008 and tasked with improving healthcare quality and increasing efficiency through the increased adoption of innovative technologies. Chapter 224 of the Acts of 2012 enhanced MeHI's charge to expand its focus on key priorities including implementing electronic health records ("EHRs") in all provider settings statewide, helping providers connect these EHRs to the Commonwealth's health information exchange, the Mass HIway, identifying and promoting technologies with the potential to improve the quality and reduce the cost of healthcare; helping providers continue to evolve their use of EHRs to comply with future Meaningful Use stages, and promoting the understanding of the benefits of health information technology ("Health IT") to providers, patients, and the general public. This law also created a requirement that providers implement and use electronic health record technology in order to continue to practice in the Commonwealth. MeHI helps providers comply with this requirement through educational programs, technical support, and grants. In 2016, MeHI's mission was further expanded through the enactment of state economic development legislation which charged MeHI with supporting the growth of a digital health industry sector within the Commonwealth.

MeHI also serves as the implementing agency of the Massachusetts Digital Health Initiative, which was launched in 2016 to position Massachusetts as the leading global ecosystem for digital health innovation. Digital Health is among the fastest growing industry sectors in the country and Massachusetts is positioned at the forefront of this growth, combining its strengths in both healthcare and technology to drive digital health innovation. Massachusetts is already home to more than 380 digital health companies and the Initiative aims to increase the growth of these firms. MeHI connects policymakers, healthcare experts, physicians, and business leaders to break down the barriers to widespread integration of these advanced technologies.

MeHI has three teams working to promote its mission. MeHI's Medicaid Services team provides technical assistance, enrollment and validation services related to the Medicaid Incentive Program. The HIway Adoption and Outreach Services team develops and delivers services to promote health information exchange adoption and utilization among healthcare providers. Both of these programs are conducted under agreements with the Commonwealth of Massachusetts Executive Office of Health and Human Services.

In addition to the above services, MeHI's Digital Health team focused in FY20 on the growth of the Commonwealth's digital health ecosystem and on supporting innovation in aging and caregiving.

As the implementing agency for the Massachusetts Digital Health Initiative, MeHI's activities in FY20 included:

Awarding \$250,000 in additional grant funding for the Commonwealth's two primary digital health innovation labs:
 MassChallenge HealthTech in Boston and TechSpring at Baystate Health in Springfield. With this funding, the two

- programs provided targeted support for over 38 digital health startups, helping them grow and compete;
- Owning, maintaining, and enhancing the MassDigitalHealth.org web portal, including improving and promoting
 the only statewide digital health job board in the United States with over 330 companies and more than 1,000
 open digital health jobs;
- Partnering with MassChallenge HealthTech to run a one-year sponsorship of the first HealthTech newsletter
 developed by STAT, the national healthcare publication, and run it for a year to promote the Mass Digital Health
 Initiative. The new HealthTech newsletter has national and international reach and is distributed weekly to a
 growing audience of thousands of digital health and healthcare stakeholders, helping to grow the Mass Digital
 Health brand across the country and world;
- Focus on supporting innovation in aging and caregiving in alignment with one of the Baker-Polito Administration's priorities;
- Running and expanding the Digital Health Sandbox Network and Grant Program. This grant program supports
 Massachusetts digital health companies in accessing testing and validation opportunities at Massachusetts
 sandboxes. The program expanded from one Sandbox in FY19 to eight Sandbox locations and one Sandbox tool
 in FY20. MeHI also awarded \$240,000 in grants to the Sandboxes to support projects with five Massachusetts
 digital health companies;
- Launching the Right Care 4 You Grant Program to support the goals of the Massachusetts Employer Health
 Coalition by offsetting the costs for Massachusetts digital health companies to pilot their products and services
 with Massachusetts employers. MeHI awarded \$189,360 to two Massachusetts digital health companies to
 pilot their products and quantify their impact on their employer partner's healthcare costs.

To coordinate a shared strategy across the Baker-Polito Administration and private sector stakeholders around the direction of the Mass Digital Health Initiative, MassTech continued to provide support to the Governor's Digital Healthcare Council, including the release of a report that outlined eight near-term priority initiative recommendations, the Councils activities to date, and its plans to implement the initiatives going forward.

Massachusetts Broadband Institute

The MBI was created as a division within MassTech in 2008. The MBI makes strategic and targeted public investments with the goal of expanding broadband access within unserved and underserved communities in Massachusetts.

In August 2014, \$50 million of capital bond funding was authorized by the Commonwealth for MBI to develop last mile solutions designed to bring broadband from centralized hubs to individual end users ("Last Mile"). In fiscal year 2018, an additional \$45 million in bond authorization was approved by the Commonwealth. The additional funding was authorized to ensure that all Last Mile towns will have a funded solution, including access to a contingency fund for possible make ready cost overages for municipally-owned, fiber-to-the home projects, as well as funds for required investments in MBI's middle mile broadband network, *MassBroadband* 123.

During FY20, MBI continued to identify solutions and award funds for the remaining unserved towns. As of the end of the fiscal year, funds have been awarded for a broadband solution for all Last Mile towns.

As of the end of the fiscal year, of the original 53 Last Mile towns (including underserved towns), 21 towns are completed and have fully operational broadband networks, 11 others have broadband networks that are partially lit, with customers installations occurring on a rolling basis construction is completed. The remaining 21 town projects are in the design, make ready process, or construction phase.

The Last Mile Infrastructure Grant Program, launched by the Executive Office of Housing and Economic Development (EOHED) in April 2017, was modeled after their existing MassWorks grant program and was designed to provide funding for eligible unserved towns which will develop and build municipally-owned broadband networks. The program empowers communities to use these grants to fund design and engineering, and construction services directly, as they would other local infrastructure projects. The EOHED is administering the Last Mile Infrastructure Grant Program, with up to \$20 million in MBI's bond funds as approved by the MBI Board of Directors. To date, EOHED has awarded grants to 22 towns, totaling approximately \$28.3 million, including funds from the additional authorization in 2018.

The MassBroadband 123 network, which has been fully operational since early 2014, created a robust 'middle mile' fiber-optic network that stretches over 1,200 miles and directly connects approximately 1,100 key community facilities in over 120 communities. MassBroadband 123 provides these communities with the ability to enhance education, drive healthcare innovation, and strengthen public safety through the direct connection to this 21st Century fiber-optic network. The MassBroadband 123 network also creates an essential foundation to connect homes and businesses currently unserved by

broadband, the so-called Last Mile of connectivity highlighted above.

Campus Operations

MassTech owns, manages, and develops its Westborough, Massachusetts, headquarters as the Massachusetts Technology Park Corporation. The use of the 36-acre campus reflects MassTech's mission to promote partnerships among industrial, educational, and governmental sectors.

Fiscal Year 2020 Goals & Targets - Overall MassTech Collaborative

1

Goal: Enhance economic growth: Foster dynamic, innovative businesses in the Commonwealth, accelerating the creation and expansion of firms in technology-growth sectors, increasing profitability, and generating more jobs for people in Massachusetts.

Impact: 5 cluster initiatives for Artificial Intelligence, Fintech, Quantum Computing, Blockchain and Robotics. Artificial Intelligence cluster efforts have been organized but we await further guidance from EOHED and the Governor's Office.

2

Goal: Accelerate technology use and adoption: Promote statewide connectivity and competitiveness through widespread adoption of innovative technology in academia, business, and government across the Commonwealth.

Impact: Over 500 interactions with companies and entrepreneurs via the 5 cluster initiatives, Cyber Resilient Massachusetts Working Group (CRMWG), annual Cybersecurity Forum, participating Intern Partnership companies, participating Mentorship/ Entrepreneurship support companies, and digital health initiatives, such as MassChallenge HealthTech program.

3

Goal: Harness the value of research: Strengthen capacity for innovation and commercialization at research institutions in the Commonwealth, enhancing research capabilities and encouraging greater collaboration with industry to address relevant research questions and bring ideas to market.

Impact: Over 200 industry partnerships (15 industry-university from the R&D Fund and over 200 as a result of M2I2/Manufacturing Emergency Response Team) and 18 new research grants (4 R&D Fund, 6 Digital Health Sandbox, 2 Big Data, 1 Mentorship, and 5 M2I2).

4

Goal: Find solutions for all unserved towns in the Commonwealth to achieve last mile broadband access.

Impact: All unserved towns in western Massachusetts are actively pursuing solutions. The New Braintree (final town) Selectboard voted to move forward with Charter in FY20.

5

Goal: Achieve the goals of health reform (better health, better care, and lower costs) through better information exchange among healthcare providers.

Impact: In FY20, 947 organizations transacted on the HIway and 1,387 Eligible Providers participated in the Meaningful Use Electronic Health Record Incentive Program.

COLLABORATIVE RESEARCH & DEVELOPMENT MATCHING GRANT PROGRAM (M.G.L. Chapter 40J, Section 4G)

MassTech administers the Collaborative Research and Development Matching Grant Program to support large-scale, long-term projects that have the potential to spur innovation, promote workforce and cluster development, and grow jobs by investing in critical research and development (R&D) infrastructure. These investments support R&D partnerships that bring together the Commonwealth's world-class research institutions and class-leading companies.

Aligning Partnerships for Growth Goal & COVID-19 Response: In April 2020, MassTech funded two ventilator development projects (automated resuscitators) to Worcester Polytechnic Institute & MIT. These came to MassTech through the Manufacturing Emergency Response Team (M-ERT) effort to fight the COVID-19 crisis in Massachusetts.

1

Goal: Approval of one new Collaborative Research & Development grant that drives economic development outcomes in the Commonwealth and aligns with priorities of the Baker-Polito Administration.

Impact: R&D centers supported by MassTech generated 37 new IP agreements & licenses.

2

Goal: Develop the Research Center Partnership Program for Entrepreneurs & Innovators. This new program will pilot modest awards promoting business research partnerships with Massachusetts Research Centers that will support the improvement of products & services being developed at the centers by small & medium sized firms.

Impact: Across the current R&D Fund grant portfolio in FY20, there were 14 new industry-university partnerships and 53 research projects with the private sector. In FY20, MassTech funded two pilot programs intended to promote business research partnerships at our University Research Centers – Al Jump Start and Woods Hole Oceanographic Institute Marine Technology Initiative – that will begin accepting applications in FY21.

MASSTECH INTERN PARTNERSHIP (Item 7002-1508 of Section 2 of Chapter 47 of the Acts of 2017)

The MassTech Intern Partnership (MTIP) program provides stipends to digital technology companies that are starting and scaling-up across Massachusetts to directly support internships for Massachusetts college and graduate students. The program enables eligible companies to hire eligible interns, helping drive innovation and keeping our tech sector dynamic, vibrant, and growing across the Commonwealth. Companies can be reimbursed for up to 50% of the intern's hourly wage up to \$8 per hour for a total of \$3,200/year per individual intern.

Aligning Partnerships for Growth Goal & COVID-19 Response: Summer 2020 Program opened on April 1st. MassTech has requested information regarding the applicability of applicant's work in relation to the COVID-19 crisis to ensure that the program supports medical, economic, social, or other relief/adaptation efforts. Interns have worked on a wide variety of projects that respond to COVID-19, including supporting telemedicine, diagnostics, and social distancing tracking in warehouses and museums.

1

Goal: Provide stipends to fund up to 50% of an intern to Massachusetts tech companies; Support up to 160 internships.

Impact: 128 internships supported. Due to COVID restrictions and refocusing resources to address the pandemic interest in the program was down and the program was not heavily promoted.

2

Goal: More detailed tracking of the impact of MTIP funded summer internships on the ability of students to obtain employment in the tech sector. Tracking is accomplished through surveys.

Impact: Summer 2019 intern survey was completed in fall 2019 with a 16.5% response rate.

INNOVATION INSTITUTE ECOSYSTEM DEVELOPMENT (M.G.L. Chapter 40J, Section 6A)

The Innovation Institute works to align state support for the research, technology and business development, capital, talent and other infrastructure needs necessary for vibrant ecosystems for innovation across the Commonwealth. We undertake targeted projects and initiatives, in close collaboration with leaders within the industry, academic, public and non-profit sectors of our economy, that are designed to improve conditions for growth within the Innovation Ecosystem. These efforts are often focused on:

Regional Support - We engage new and well-established institutions and other community partners in growing regional innovation economies through new and novel programs that address proven demand and need or proven programs that demonstrate their ability to mature and scale.

Entrepreneurship and Start-Up Support - We see entrepreneur mentoring (often found within collaborative workspaces) as a means to build and support strategies that help create the conditions for growth within regional entrepreneurship ecosystems.

Cluster Development - Using industry clusters as an organizing concept the Innovation Institute continuously concentrates its support on growth conditions for emerging clusters. FY19 priority clusters include: Cybersecurity, Robotics and the Internet of Things (IoT).

The Innovation Institute also produces and publishes the Annual Index of the Massachusetts Innovation Economy, the Commonwealth's tool for benchmarking the status and progress of our innovation economy. Since 1997, the Index has provided users with a wealth of data and information for assessing the performance and progress of the Commonwealth's innovation sectors. Through an analysis of 22 economic indicators, the Index offers a comprehensive view of several dimensions of the innovation ecosystem.

Through a contract with the Executive Office of Housing and Economic Development's Seaport Economic Council, the Innovation Institute also supports grand challenges that leverage the Internet of Things (IoT) to support and enhance competitiveness of the Commonwealth's Blue Economy.

Aligning Partnerships for Growth Goal & COVID-19 Response: To support business competitiveness and workforce through regional economic development initiatives, the Innovation Institute engaged with industry groups and key stakeholders on new business growth models amidst the COVID-19 pandemic. For example, the Innovation Institute assembled the Manufacturing-Emergency Response Team and other similar bodies to assist with Intrapreneur challenges and other measures.

Goal: Collaborate closely with regional stakeholders to generate economic growth increasing their competitiveness in the Commonwealth and beyond by addressing unique needs.

Impact: Participated in 11 regional economic growth activities, including talent/workforce activities in Springfield & Boston, existing entrepreneurship and innovation ecosystem activities in Cape Cod, Holyoke, Haverhill, Fall River/New Bedford and Lowell, as well as new regional engagements in Beverly, Gardner, North Adams and Worcester. Participated in 45 programs, conferences, showcases, exhibits & events.

2

Goal: Support growth in clusters that comprise the state's digital economy.

Impact: 38 working group meetings and strategy informational sessions with 100+ participants across the 5 cluster initiatives – Artificial Intelligence, Fintech, Robotics, Quantum Computing, and Blockchain.

GLOBAL ENTREPRENEUR IN RESIDENCE (FY19 Line Item 7002-1509)

The Massachusetts Global Entrepreneur in Residence program is an initiative intended to help qualified international students to stay in the Commonwealth after graduation to start or grow a high potential business in Massachusetts. By partnering with the University of Massachusetts and sponsoring these entrepreneurs under its nonprofit research institution exemption from the H-1B cap, the Global Entrepreneur in Residence program helps international student entrepreneurs stay in the United States and continue to build their startup companies.

1

Goal: Facilitate Global Entrepreneur in Residence placement as university part-time employee or venture center residency in support of university mission to petition for H-1B visa.

Impact: 21 entrepreneurs in residence.

2

Goal: Conduct outreach to the technology, start-up, venture capital, legal, and university communities to develop a pipeline of potential candidates.

Impact: 66 entrepreneur applications received.

MASSTECH MENTORSHIP PROGRAM SUPPORT (Item 7002-1508 of Section 2 of Chapter 47 of the Acts of 2017)

The Innovation Institute supports entrepreneur mentoring to build regional start-up ecosystems and communities of innovation across Massachusetts. The opportunity to engage in a strong mentoring relationship builds the confidence and success of new businesses and plays a crucial role in lowering the barriers to entry for owning and running a business. In addition to the impact they have on individual entrepreneurs, mentors are a key part of a healthy entrepreneurship ecosystem, both inspiring new business leaders through their example and bringing needed expertise on the business development process.

Aligning Partnerships for Growth Goal & COVID-19 Response: MassTech launched the Intrapreneur Challenge as a statewide initiative intended to help MassTech and the Manufacturing Emergency Response Team (M-ERT) activate, connect and focus Massachusetts companies wanting to pivot production capabilities to meet the demands of the COVID-19 pandemic, starting with non-medical use face masks.

Goal: Develop emerging and evolving entrepreneur support ecosystems.

Impact: The Entrepreneurial Ecosystem assessment, including findings and recommendations are due on August 31, 2020. In FY21, we will use the assessment to inform a solicitation which will result in FY21 grants for programming and initiatives that align with the assessment's findings and recommendations.

Goal: Engagement with new institutions and community partners to grow regional entrepreneurial support ecosystems.

Impact: In FY20, MassTech participated in 11 regional entrepreneur support initiatives including existing initiatives in Springfield, Boston, Cape Cod, Holyoke, Haverhill, Fall River/New Bedford and Lowell, as well as new and emerging regional initiatives in Beverly, Gardner, North Adams and Worcester. In FY20, the 8 entrepreneur support organizations supported by MassTech hosted 125 events aimed at increasing the growth of businesses in the Commonwealth. In addition, these organizations had 166 entrepreneurs participating in various entrepreneur support programs and launched 55 companies.

BIG DATA

The Big Data and Innovation Workforce Fund was created as part of the 2014 Economic Development Bill. The purpose of the Fund is to leverage the use of big data to grow the Commonwealth's tech economy and to help close the skills gap in the digital economy. The work performed on behalf of this fund has varied widely, from student engagement and workforce development to the creation of the MassCyberCenter.

Aligning Partnerships for Growth Goal & COVID-19 Response: Current economic conditions from COVID-19 have made financial institutions particularly vulnerable to Synthetic ID Fraud: lower interest rates causing an increase in loan applications; a surge in financial crime from the economic downtown; and a shift to online applications from "stay-at-home" restrictions. The Multi-Party Computation Platform Fintech pilot will result in the development of a collaboration between financial institutions and their financial regulators to improve synthetic ID Fraud detection through a network effect or "wisdom of crowds".

Goal: Build infrastructure that increases access to currently unavailable private data sets.

Impact: MassTech has engaged stakeholders who have made significant technological advances that are making it possible for data under lock and key to be used by third parties in a way that does not require full data disclosure or risk data leakage or loss. The Multi-Party Computation Platform award will support three pilot projects related to FinTech & Health Care technologies that will demonstrate the potential for privacy-preserving technologies to address real-world applications for a better society.

Goal: Increase the development of next-generation data instruments and products that leverage data sets.

Impact: In FY20, MassTech approved an award to Boston University that will support and validate a Multi-Party Computation Platform. This award will support three pilot projects related to FinTech & Health Care technologies that will demonstrate the potential for privacy-preserving technologies to address real-world applications for a better society.

Fiscal Year 2020 Goals & Targets – MassCyber Center at MassTech Collaborative

The vision of the MassCyberCenter is to enhance opportunities for the Massachusetts cybersecurity ecosystem to compete as the national cybersecurity leader while strengthening the resiliency of the Commonwealth's public and private communities. The MassCyberCenter enhances conditions for economic growth through outreach to the cybersecurity ecosystem of Massachusetts while fostering cybersecurity resiliency within the Commonwealth.

Aligning Partnerships for Growth Goal & COVID-19 Response: MassCyberCenter initiated bi-weekly update calls with Cyber Resilient Massachusetts Working Group members to share threat information and best practices to cope with COVID-19 telework requirements. MassCyberCenter collated relevant cyber resources from CISA and other agencies on MassCyberCenter website.

Goal: Promote cybersecurity workforce initiatives, support the cybersecurity industry and prepare for Federal opportunities.

Impact: Two of the three Talent Grants (Bay Path and MassHire New Bedford) wrapped up with final reports, which outlined ways to improve future programs; the third grant will wrap in FY21. Partnered with .406 Ventures to hold a cybersecurity investor event during Massachusetts Cybersecurity Week with over 100 participants. Hosted the 2019 Massachusetts Cybersecurity Forum with 200 participants at the State House and Rapid7 Headquarters. Continue to investigate options to showcase cybersecurity R&D.

Goal: Resiliency for the Commonwealth through the convening of the Cyber Resilient Massachusetts Working Group (CRMWG).

Impact: Convened 12 meetings of CRMWG plus additional sub-working groups focused on municipalities, strategic planning, tabletop exercises and critical infrastructure. Over 45 organizations participate as members of the CRMWG. Outcomes include an online Municipal Cybersecurity Tool Kit and a tabletop exercise to examine cybersecurity response plans.

Fiscal Year 2020 Goals & Targets – Massachusetts Manufacturing Innovation Initiative (M2I2) at MassTech Collaborative

MASSACHUSETTS MANUFACTURING INNOVATION INITIATIVE (FY19 Line Item 7002-8007 of Section 2A of Chapter 219 of the Acts of 2016)

The Massachusetts Manufacturing Innovation Initiative (M2I2) provides capital cost shares for projects and discovery centers located within the Commonwealth's borders, as part of the state's ongoing commitment to the Manufacturing USA program put forth by the federal government. M2I2 builds upon the state's superior academics, R&D, deep innovation ecosystem and long history of manufacturing. M2I2 deepens these assets by linking MA companies, universities, community colleges, vocational schools, national labs, new ventures, government, and Manufacturing USA in new ways not possible without this program.

- M2I2 propels Advanced Manufacturing across ecosystems: new jobs, products, and revenues; new partnerships and supply chains; new employee skills. It maximizes impact by promoting intersections as technology converges (we funded the first and still the only facility in the nation with collaboration by 3 National Institutes).
- M2I2 works closely with applicants, from the earliest concept stage to develop partnerships and supply chains, maximize impact and provides connectivity
 to Manufacturing USA's national network of industry-leading companies and universities. M2I2 also brings significant DoD and other project cost share
 spending into MA.

Aligning Partnerships for Growth Goal & COVID-19 Response: Coordination of the Manufacturing Emergency Response Team (M-ERT) to mobilize, organize, and operationalize critical path work streams necessary for Massachusetts manufacturers to pivot their operations to produce needed materials in response to the pandemic. We expect to earmark \$6M towards pivoting manufacturers to make PPEs.

1

Goal: Develop collaborative partnerships through projects that advance Massachusetts' manufacturing innovation ecosystems.

Impact: More than 200 partnerships established. The large increase is mainly due to COVID-19 PPE related services provided to pivoting manufacturers.

2

Goal: (1) Number of jobs created or saved, and (2) Number of people trained

Impact: More than 100 jobs have been created/saved and more than 100 people have been trained. The increase is partially due to COVID-19 with manufacturers pivoting to make PPEs.

MANUFACTURING EMERGENCY RESPONSE TEAM

The Manufacturing Emergency Response Team (M-ERT) mission is to support Massachusetts manufacturers in pivoting their operations to produce needed materials in response to the COVID-19 pandemic. The effort mobilized, organized, and operationalized critical path work streams necessary for Massachusetts manufacturers to pivot their operations to produce needed materials in response to the pandemic. Pivoted support included assistance around FDA guidance, overcoming supply chain issues, access to testing of PPE, understanding demand for PPE, packaging and labeling and other matters unfamiliar to pivoting manufacturers.

The program allocated \$8.6M M2I2 funds towards pivoting manufacturers to make PPE. Over 550 Massachusetts companies came through the M-ERT portal, and just over 50 companies made it through M-ERT pivot support and to the market.

Over 15 million personal protective equipment, including N95 masks, medical gowns, hand sanitizer, face shields, and other priority items, such as ventilators and COVID-19 testing materials, have been produced by Massachusetts manufacturers.

Fiscal Year 2020 Goals & Targets – MassBroadband Institute at MassTech Collaborative

MIDDLE MILE NETWORK & MASSBROADBAND 123 (Chapter 231 of the Acts of 2008)

The MassBroadband 123 network provides last mile connectivity to hundreds of public facilities in Western and North Central Massachusetts. The network provides services to local Internet Service Providers (ISPs) that may offer consumer services in the region.

Aligning Partnerships for Growth Goal & COVID-19 Response: Community development focus; MBI worked with KCST, the network operator, to reach agreement to waive the wholesale monthly charge for the 250 Mbps circuit at each hotspot. This helped to enable the hotspots to be delivered at no cost to 26 unserved towns.

1

Goal: Ensure the continued operation, stability and integrity of the *MassBroadband 123* network as a vital resource for community anchor institutions in the Commonwealth.

Impact: The network access uptime for FY20 was 99.905%. The network core uptime for FY20 was 100%. Network interruptions are typically the result of damage to fiber or utility poles and are repaired by the *MassBroadband 123* network operator (in cooperation with the electric utility company when necessary).

LAST MILE PROGRAM (M.G.L. Chapter 40J, Section 6B)

To support and co-invest in broadband solutions for the 45 Massachusetts towns that have lacked residential broadband service. This program includes grants to private broadband service providers and directly to municipalities.

Aligning Partnerships for Growth Goal & COVID-19 Response: Community development focus; MBI's WiFi Hotspot Program has supported the installation of high-capacity hotspots at community anchor institutions (libraries, town halls, schools, etc.) in 26 Last towns that do not have a completed broadband project.

1

Goal: Have every town on a dedicated path to a broadband solution.

Impact: The funds allocated by MBI for all 44 unserved towns have been fully awarded and each unserved town has either completed a broadband project or is actively pursuing the development of a broadband network that is in the planning, make-ready or construction phase.

2

Goal: Substantially increase the number of Massachusetts residents that have access to broadband service.

Impact: 23 unserved towns have a broadband network that is partially or fully operational.

Fiscal Year 2020 Goals & Targets – Massachusetts eHealth Institute at MassTech Collaborative

MASS DIGITAL HEALTH INITIATIVE (M.G.L. Chapter 40J, Section 6D (g))

The Mass Digital Health Initiative is a public-private partnership working to establish Massachusetts as the leading ecosystem for digital health innovation, for the purpose of economic growth and improved healthcare quality and costs. Through the initiative, MassTech is investing in and helping to organize a more accessible digital health marketplace for the Commonwealth.

Aligning Partnerships for Growth Goal & COVID-19 Response: Hosted and sponsored events to offer virtual opportunities for networking and education. Additionally, MeHI held virtual events focused on supporting caregivers during COVID-19 and MassChallenge HealthTech hosted a number of COVID-19 related virtual events, including a COVID-19 Innovation Summit.

1

Goal: Provide support to high-potential startups across Massachusetts

Impact: 27 companies completed the MCHT 2020 program; tracked 223 jobs created at 10 scaling companies; identified 395 MA- based digital health companies in our stakeholder database; sponsored or hosted 54 events.

2

Goal: Support collaborations enabling MA digital health companies to test and implement their products and services in MA environments to help grow the Commonwealth's digital health cluster and address healthcare cost challenges.

Impact: 7 approved sandbox environments and one "sandbox tool" added to the MA Digital Health Sandbox Program; 6 projects with 5 companies supported through the Sandbox Program; contracts pending for projects between 2 digital health companies and 2 MA employers, and one project pending approval of an employer partner, through the Right Care 4 You Grant Program (previously known as the MA Employer Digital Healthcare Program).

MEDICAID ELECTRONIC HEALTH RECORD INCENTIVE PAYMENT PROGRAM (M.G.L. Chapter 40J, Section 6D)

The Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs provide financial incentives to Eligible Hospitals and Eligible Professionals to adopt, implement, upgrade and demonstrate Meaningful Use (MU) of Certified Electronic Health Record Technology (CEHRT). MassHealth has contracted MassTech to support and process the incentive applications in the Commonwealth.

Aligning Partnerships for Growth Goal & COVID-19 Response: Focus on key Cluster Leadership, as well as Equity through its focus on Medicaid providers. Extended program year 2019 deadline to give providers who had to focus on responding to COVID-19 sufficient time to attest. For continuity of services, the program activities were adapted to be provided remotely from the Medicaid team members' homes.

1

Goal: Maintain processing efficiency and cycle time for validation of Medicaid EHR Incentive applications.

Impact: 1,202 PY2018 applications fully processed and most outstanding applications for prior program years closed out.

2

Goal: Educate healthcare providers in the Meaningful Use of EHRs, HIE and EPE, and the application of process improvement and change management, to enable them to meet the MU requirements.

Impact: Hosted: 9 "Meaningful Use" and 105 one-on-one support webinars; 1 learning collaborative (second postponed due to COVID-19); 4 "Meaningful Use" info sessions; and 1 workshop. The workshop and learning collaborative were combined with the HIway program to offer the same content to a larger audience.

Fiscal Year 2020 Goals & Targets – Massachusetts eHealth Institute at MassTech Collaborative

MASS HIWAY OUTREACH AND ADOPTION SUPPORT

The Hlway, Massachusetts' statewide health information exchange, offers doctors' offices, hospitals, laboratories, pharmacies, behavioral health, long term services and supports, and other healthcare organizations a way to securely and seamlessly transmit vital data electronically. The Executive Office of Health and Human Services has contracted MassTech to provide outreach, account management, and consulting services to target and assist healthcare providers in meaningfully adopting and using health information exchange to improve quality of care and reduce costs.

Aligning Partnerships for Growth Goal & COVID-19 Response: Focus on building key cluster leadership, and equity through its focus on MassHealth payment reform. To ensure continuity of support, account management, HAUS, and outreach services were adapted to be provided from the HIway team members' homes.

1

Goal: Provide HIE adoption and utilization services (HAUS) to MassHealth Accountable Care Organizations (ACOs), their community partners (CPs), and community service agencies (CSAs) to promote the use of the HIway to support care coordination, and to acute care hospitals, ambulatory practices and community health centers to assist them in meeting the Mass HIway connection requirement. Intent to enroll 30 organizations in HAUS, and 50% of enrolled organizations implement a care condition use case.

Impact: 30 organizations participated in, or are actively participating in, a HAUS project; 100% of these organizations are implementing a care coordination use case.

2

Goal: Develop and present educational webinars, learning collaboratives, and workshops to assist organizations in connecting to and meaningfully using the Hlway, HIE, Query HIE, and EHR interoperability. These outreach and education activities will cover the Hlway attestation process, HIE-enabled change management and process improvement, and HAUS participation.

Impact: Hosted 7 webinars, 1 learning collaborative (second postponed due to COVID-19), and 1 workshop (1 cancelled due to no- shows, 1 postponed due to COVID-19). The workshop and learning collaborative were combined with the Medicaid program to offer the same content to a larger audience.

INVESTMENTS AND GRANTS AWARDED OR PROVIDED BY THE AGENCY DURING FISCAL YEAR 2020

Award Overview

Name of Award Program - or - Investment	Name of Recipient	Description of Award or Investment	Amount (if applicable)	Municipality of Recipient *if regional or state-wide, please indicate
Global Entrepreneur in Residence Program	UMass Boston	Continuation of the GEIR Program at Umass Boston's Venture Development Center	\$50,000.00	Boston
John Adams Innovation Institute Fund	MassRobotics	Robot Block Party to kickoff Mass STEM week 2019	\$50,000.00	Boston
John Adams Innovation Institute Fund	Boston University	Sponsorship support for a project focused on the establishment of a Quantum Leap Challenge Institute in Massachusetts	\$150,000.00	Boston
John Adams Innovation Institute Fund	Ernst & Young	Ernst & Young will conduct an analysis of the Massachusetts Fintech ecosystem	\$153,000.00	Boston
John Adams Innovation Institute Fund	Media Shower	To provide government leaders with a high-quality educational experience around blockchain technology, taught by industry leaders	\$31,500.00	Boston
John Adams Innovation Institute Fund	Northeastern University	Al Jumpstart Program: companion funding	\$200,000.00	Boston
John Adams Innovation Institute Fund	Venture Forum, The	To strengthen the mentorship program through an expanded regional mentorship network that will serve Worcester and Central Massachusetts.	\$25,000.00	Worcester
John Adams Innovation Institute Fund	MassRobotics	To scale efforts to strengthen the robotics cluster in Massachusetts.	\$40,000.00	Boston
John Adams Innovation Institute Fund	Lever, Inc.	For the design and implementation of a Massachusetts COVID-19 Intrapraneur Challenge to help activate, connect and focus Massachusetts companies to create products and services that address emerging needs in response to the COVID-19 pandemic.	\$12,000.00	North Adams
Massachusetts Broadband Incentive Fund	Fiber Connect LLC	Fiber Connect Expansion of Broadband Service in Egremont and Monterey	\$2,210,000.00	Monterey
Massachusetts Broadband Incentive Fund	Charter Communications	Flexible Grant Program award to support broadband access for the Town of New Braintree	\$1,576,000.00	Worcester
Massachusetts Cybersecurity Innovation Fund	Robinson & Cole LLP	Design, development, facilitation and hosting of cyber incident response plan workshops for municipalities of the Commonwealth	\$125,000.00	Boston

Massachusetts eHealth Institute - Digital Health	Worcester Polytechnic Institute	Support of two PracticePoint projects: eMotion Rx and Stability Health. PracticePoint will provide resources and services to support each project, administer the funding to cover PracticePoint's fees as well as purchase approved materials for the projects, and report to MeHI on its work, ability to support the projects, and the resources required to support the projects.	\$85,000.00	Worcester
Massachusetts eHealth Institute - Digital Health	TechSpring	TechSpring@Baystate Health in Springfield, MA to support the expansion of their sandbox capabilities	\$80,000.00	Springfield
Massachusetts eHealth Institute - Digital Health	TechSpring	Support for two projects through the Digital Health Sandbox Program: Nutrimedy and BlocHealth	\$50,000.00	Springfield
Massachusetts eHealth Institute - Digital Health	NuEyes	NuEyes, a leader in augmented reality (AR) smart glass solutions that empower those that suffer from severe vision loss, today announces a new pilot study in collaboration with the Massachusetts Commission for the Blind (MCB) and Massachusetts eHealth Institute (MeHI). The pilot is being conducted as part of the 2020 MassChallenge HealthTech program, an effort to boost startups at the intersection of healthcare and technology supported by the Massachusetts Digital Health Initiative.	\$10,000.00	Boston
Massachusetts eHealth Institute - Digital Health	TechSpring	To support the second phase of a project with Nutrimedy through the Digital Health Sandbox Program	\$45,000.00	Springfield
Massachusetts eHealth Institute - Digital Health	Institute for Medical Engineering & Science at MIT	To support a project with Leuko Labs through the Digital Health Sandbox Program at MIT IMES	\$60,000.00	Cambridge
Massachusetts Manufacturing Innovation Initiative	Umass Lowell	The project addresses a problem where typical electronics encapsulation do not conform to the flex/stretch requirements of Flexible Hybrid Electronics (FHEs). The project develops different encapsulation solutions, enhancing the commercialization of FHE devices. This leverages technology from Eastman Chemical Lockheed Martin and Acellent Technologies. The resulting encapsulation processes will benefit all Massachusetts companies working on FHE devices. This project brings with it a \$400K cost share match from the national NextFlex Institute.	\$201,600.00	Lowell
Massachusetts Manufacturing Innovation Initiative	Umass Lowell	Leverages Lockheed's Small unmanned aircraft systems (SUAS) platform technology and integrates it into a flexible electronics form factor to lower the weight and add communication functionality to drones. The resulting FHE-based wireless devices and systems can be applied to other electronic systems to drive MA leadership in this area. This projects brings with it an \$850K cost share match from the national NextFlex Institute.	\$303,000.00	Lowell

Massachusetts Manufacturing Innovation Initiative	Umass Lowell	Supports a collaboration between UMass Lowell, Saint-Gobain and Boeing to develop a Smart Textile with Embedded and Printed Sensors (STEPS), which would provide a functional textile substrate with embedded Fiber Bragg Grating (FBG) sensors and Printed Sensor Arrays (PSA). This enables a system that can monitor aircraft wings and similar structures under production. Composite wing fabrication is one of the longest lead processes in the production of commercial aircraft and is subject to many rework activities; in-situ monitoring is expected to reduce the production time by 50% which could translate to millions of dollars in savings per plane. This projects brings with it an \$800K cost share match from the national NextFlex Institute.	\$305,700.00	Lowell
Massachusetts Manufacturing Innovation Initiative	Worcester Polytechnic Institute	Enables WPI, in collaboration with MassMEP, QCC and their local public, to develop, test, and deploy a curriculum for summer and afterschool programs targeted at middle and high school students that include interactive hands-on experience and training in robotics. The project will develop motivated and skilled future employees for advanced manufacturing employers by 1) enrolling an upstream cohort of middle and high school students in robotics summer and after-school hands-on programs, and 2) giving two- and four-year college students invaluable soft and hard skills by serving as the instructors. The project will benefit from \$230,000 of funding from other sources including WPI and the ARM Institute.	\$82,300.00	Worcester
Massachusetts Manufacturing Innovation Initiative	Stonehill College/ Bridgewater State University	Southeast MA integrated photonics hub at both Stonehill College and Bridgewater State University	\$3,807,731.00	Easton/Bridgewater
Massachusetts Manufacturing Innovation Initiative	Human Systems Integration (HSI)	Garment-embedded Physiological Monitoring Platform, to be developed by Human System Integration (HSI) of East Walpole and UMass Lowell.	\$1,450,000.00	Walpole
Massachusetts Manufacturing Innovation Initiative	Advanced Functional Fabrics of America	COVID-19 Response Funding	\$5,600,000.00	Cambridge
Massachusetts Manufacturing Innovation Initiative	Umass Dartmouth	Lockheed Martin of Billerica, UMass Dartmouth, and UMass Lowell, to develop methods by which folded antennas on space vehicles can be deployed.	\$600,000.00	Dartmouth
Massachusetts Manufacturing Innovation Initiative	Advanced Functional Fabrics of America	To expand the existing Headquarters Fabric Discovery Center (FDC) and the Advanced Functional Fabrics Lab at Greater Lawrence Technical School	\$1,178,557.00	Cambridge
Massachusetts Manufacturing Innovation Initiative	Umass Amherst	Work on process specifications for surface- mount and die-attach adhesives. UMass will be assisted by GE and DuPont	\$66,000.00	Amherst
Massachusetts Manufacturing Innovation Initiative	Worcester Polytechnic Institute	WPI with partner Carpe Diem Technologies of Franklin, as well as collaboration with QCC, to develop roll-to-sheet (R2S) prototyping equipment;	\$419,775.00	Worcester

Massachusetts Manufacturing Innovation Initiative	UMass Lowell	A collaboration between UMass Lowell and WPI to demonstrate and characterize printable stretchable conductors	\$150,000.00	Lowell
MassTech Big Data Innovation and Workforce Fund	Boston University	Implementation of no fewer than three pilot "use case" projects to test and validate the Privacy Preserving – Multiparty Computation (PPMPC) methodology for allowing collaborative analysis on data gathered from two or more sources in a manner that isolates and preserves key identifying data features, thereby not revealing the underlying private or confidential identifiers of the data in the process.	\$440,000.00	Boston
MassTech Big Data Innovation and Workforce Fund	Coalesce.ai	Financial Services Pilot Use Case focused on Combating Synthetic ID Fraud	\$60,000.00	Boston
MassTech Intern Partnership Program	New England Venture Capital Association	The Tech Talent Diversity Initiative was created to support focused efforts that increase the number of individuals from underrepresented or diverse populations who are offered internships or entry level employment opportunities within technology firms across the Commonwealth. The New England Venture Capital Association grant will support and expand their "Hack.Diversity" fellowship programming. The funding will also support enhanced alumni services and expanded geographical reach.	\$375,000.00	Cambridge
MassTech Intern Partnership Program	Tech Foundry	The Tech Talent Diversity Initiative was created to support focused efforts that increase the number of individuals from underrepresented or diverse populations who are offered internships or entry level employment opportunities within technology firms across the Commonwealth. The Tech Foundry grant will support a "Ramp to Hire" program alongside diversity, equity and inclusion training for IT employers in the Pioneer Valley.	\$94,234.00	Springfield
MassTech Intern Partnership Program	Summer 2019 internships (awarded in FY20)	MTIP will support approx 200 internships at small tech firms around Massachusetts	\$19,200.00	Statewide
MassTech Intern Partnership Program	Summer 2020 Internships (awarded in FY20)	MTIP will support approx 130 internships at small tech firms around Massachusetts	\$387,200.00	Statewide
MassTech Mentoring Program	TEConomy Partners, LLC	Entrepreneurship Ecosystem Assessment	\$99,985.00	Out of State
MassTech Mentoring Program	Startup Wind	Virtual Innovation Network	\$38,000.00	Out of State
MassTech Mentoring Program	Lever, Inc.	COVID-19 Intrapreneur Challenge	\$250,000.00	North Adams
MassTech Mentoring Program	Sea Ahead Blue Tech Innovation	This program represents a partnership between the New England Aquarium (NEAq) and SeaAhead to establish BlueSwell in support of the creation and growth of startups with scalable solutions that enhance ocean sustainability and global resilience.	\$50,000.00	Boston
Research and Development Matching Grant Fund	Northeastern University	Al Jumpstart Program	\$2,000,000.00	Boston

Research and Development Matching Grant Fund	Harvard University	New England Research Cloud (NERC)	\$875,000.00	Cambridge
Research and Development Matching Grant Fund	Worcester Polytechnic Institute	AutoBVM Ventilator Development Project	\$100,000.00	Worcester
Research and Development Matching Grant Fund	Massachusetts Institute of Technology	Development of low cost automated resuscitators (E-Vent units)	\$200,000.00	Cambridge

TECHNICAL ASSISTANCE PROVIDED BY THE AGENCY DURING FISCAL YEAR 2020

Award Overview

Name of Award Program - or - Investment	Name of Recipient	Description of Award or Investment	Amount (if applicable)	Municipality of Recipient *if regional or state-wide, please indicate
Global Entrepreneur in Residence Program	Worcester Polytechnic Institute	WPI GEIR Grant Agreement and SOW	\$50,000.00	Worcester
John Adams Innovation Institute Fund	Media Shower	Media Shower Blockchain Services Agreement	\$31,500.00	Boston
John Adams Innovation Institute Fund	MassRobotics	MassRobotics Services Agreement	\$40,000.00	Boston
John Adams Innovation Institute Fund	The Venture Forum	The Venture Forum Grant Agreement	\$25,000.00	Worcester
John Adams Innovation Institute Fund	Western Mass Economic Development Council	Western MA Economic Development Council EastWest Exchange Services Agreement	\$80,000.00	Springfield
John Adams Innovation Institute Fund	Ernst & Young LLP	Ernst & Young Fintech Ecosystem Assessment Services Agreement	\$153,000.00	Boston
John Adams Innovation Institute Fund	Boston University	Boston University QLCI Sponsorship Agreement	\$150,000.00	Boston
MassTech Intern Partnership Program	New England Venture Capital Association	NEVCA Hack Diversity Grant Agreement	\$375,000.00	Cambridge
MassTech Big Data Innovation and Workforce Fund	Coalesce.Al	Coalese.Al Multiparty Computation Grant Agreement	\$60,000.00	Boston
MassTech Big Data Innovation and Workforce Fund	Boston University	Boston University Multiparty Computation Grant Agreement	\$440,000.00	Boston
MassTech Mentoring Program	TEConomy Partners, LLC	TEConomy Partners Services Agreement and SOW	\$99,985.00	Out of State
MassTech Mentoring Program	Lever, Inc.	Lever Intrapreneurship Challenge Grant Agreement	\$250,000.00	North Adams
John Adams Innovation Institute Fund	Tech Foundry	Regional Priority Grant Program	\$100,765.00	Springfield
John Adams Innovation Institute Fund	Lever, Inc.	Lever Inc. Grant Agreement 2018	\$75,000.00	North Adams
John Adams Innovation Institute Fund	FinTech Sandbox	FinTech Sandbox Grant Agreement and SOW	\$75,000.00	Boston

John Adams Innovation Institute Fund	Northeastern University	NU AI Jumpstart Grant Agreement and SOW (Innovation Fund Award)	\$200,000.00	Boston
John Adams Innovation Institute Fund	Woods Hole Oceanographic Institute	Grant Agreement- WHOI Entrepreneurs and Innovators Support	\$200,000.00	Woods Hole
Research and Development Matching Grant Fund	Massachusetts Institute of Technology	MIT E-VENT R&D Grant Agreement	\$200,000.00	Cambridge
Research and Development Matching Grant Fund	University of Massachusetts Amherst	UMass Amherst Data Science/Cyber Security (DSCC) TO 16-1	\$5,000,000.00	Amherst
Research and Development Matching Grant Fund	Harvard University	Harvard University NERC Research and Development Grant Agreement	\$875,000.00	Cambridge
Research and Development Matching Grant Fund	Woods Hole Oceanographic Institute	WHOI 16-1	\$5,084,754.00	Woods Hole
Research and Development Matching Grant Fund	Northeastern University: Nanomanufacturing	Northeastern University Nanomanufacturing TO 16-1	\$3,000,000.00	Boston
Research and Development Matching Grant Fund	Northeastern University	NU AI Jumpstart Grant Agreement and SOW	\$2,000,000.00	Boston
Research and Development Matching Grant Fund	Worcester Polytechnic Institute	Worcester Polytechnic Institute (WPI) HealthTech R&D Grant Agreement and SOW 17-1	\$5,100,000.00	Worcester
Massachusetts Ehealth Institute - Medicaid Services	N/A	Team members support applicants with technical assistance that includes support for providers across the state as they modify their work habits and use of health information technology to qualify for the Meaningful Use incentive payments managed by the program. Team members also develop expertise in commonly used electronic health records platforms and relationships with the vendors of those programs and then provides that expertise to providers as technical assistance.	N/A	Statewide

Massachusetts eHealth Institute - Hiway Outreach Services	N/A	The Mass HIway team provides informational webinars about the HIway and appropriate ways to adopt its use in provider practices. The team also provides HIway Adoption and Use Services (HAUS) project management to help providers implement specific health information exchanges with their key collaborators in healthcare services delivery. On an ongoing basis, the team provides technical assistance and support with electronic health records vendors as providers implement health information exchange.	N/A	Statewide
Massachusetts Manufacturing Innovation Initiative	Stonehill College/ Bridgewater State University	Southeast MA integrated photonics hub at both Stonehill College and Bridgewater State University	\$3,807,731.00	Easton/Bridgewater
Massachusetts Broadband Institute	Town of Warwick	Flexible Grant Program Award - wireless network for the Town of Warwick	\$450,000.00	Warwick



FY2021 Agency Overview

The Massachusetts Technology Park Corporation does business as the Massachusetts Technology Collaborative ("MassTech Collaborative" or "MassTech"). MassTech strengthens the competitiveness of the tech and innovation economy by driving strategic investments, partnerships, and insights that harness the talent of Massachusetts.

MassTech is advancing economic development in key areas such as digital health technology, information technology, broadband deployment, advanced manufacturing, cybersecurity, and other emerging sectors such as robotics and the Internet of Things ("IoT"). Over its 38-year history, MassTech has managed numerous complex projects, overseeing more than \$638 million in public funding by providing grants, loans, and other financial assistance to thousands of projects across the Commonwealth of Massachusetts (the "Commonwealth" or "Massachusetts"). Through its major divisions and centers - the Innovation Institute (the "Institute"), the Massachusetts eHealth Institute ("MeHI"), the Massachusetts Broadband Institute ("MBI"), the MassCyberCenter, and the Center for Advanced Manufacturing, MassTech is stimulating economic activity throughout the Commonwealth.

MassTech brings together leaders from industry, government, and academia to advance technology-based solutions that strengthen regional economies, improve the healthcare system, expand high-speed internet access, and stimulate cluster growth.

The Innovation Institute at MassTech

The Institute at MassTech is chartered to support the economic conditions for growth for the Commonwealth's technology and innovation-based economy. The Institute works closely with key stakeholders in academia, industry, public, and nonprofit sectors to strengthen capacities in research, technology and business development, and talent, which lead to new business formation, and job creation. These efforts also attract and grow companies in emerging and established technology subsectors such as robotics, financial technology, advanced manufacturing, computing, and cybersecurity.

The Institute engages in grant activities, manages projects, develop initiatives and provides direct services for civic, industry and nonprofit organizations. The Institute also:

- Supports rigorous, collaborative, interdisciplinary research and development partnerships at Massachusetts universities;
- Enhances the ability of the Commonwealth's academic research centers to compete for millions of dollars in federal research awards and aligns technology capacities at our research institutions with the needs of industry;
- Secures the economic benefits of downstream production and employment for all regions of the Commonwealth as new research and technologies are commercialized in the marketplace;
- Analyzes the Massachusetts innovation economy through the development of the annual Index of the Massachusetts Innovation Economy as well as sector and regional specific analyses;
- Partners with and invests in novel talent development initiatives such as internship support and targeted higher education and adult education technology training programs with a focus on diversity and inclusion;
- Provides business assistance services targeted toward firms in the technology sector with the goal of helping businesses relocate to or expand in the Commonwealth. The Innovation Institute provides referrals to state resources as well as assisting startup entrepreneurs and tech firms leverage other resources in the tech ecosystem;
- Develops regional innovation economies and cluster growth through its regional priority grant program by supporting
 high value innovation based economic development activities including support of targeted cluster growth opportunities
 in the Tech Sector; analysis of opportunities for growth in technology clusters such as Robotics, Quantum Computing,
 Artificial Intelligence, FinTech, and Blockchain; and convening key stakeholders in promising clusters to develop
 consensus around targeted action agendas.

As a mechanism to drive growth in industry clusters, the Innovation Institute also administers a \$65 million Collaborative Research Matching Grant Program which was created by the Massachusetts Legislature and recapitalized in 2016 as part of the economic development bill, "An Act Relative to Job Creation and Workforce Development". This program provides matching capital funds for scientific or technology research and development projects sponsored by the University of Massachusetts, research universities, non-profit entities, or non-profit research institutions in the Commonwealth. Two new awards were made under this program in fiscal year 2021. To date, 12 awards have been made under this fund for a total of \$28.8 million of capital investment to fund and help develop large-scale, long-term collaborative research projects sponsored by Massachusetts-based research entities. This program enables the Innovation Institute to strengthen research

capacity in the Commonwealth through these research investments and by convening the directors of research centers to share best practices and to promote partnerships with key industry partners.

Two other programs contribute to the goals of the Innovation Institute including the MassTech Intern Partnership and the Massachusetts Innovation Mentoring Initiative. The MassTech Intern Partnership pays matching stipends to small- and medium-sized technology companies in Massachusetts to support the hiring of two and four year college students as interns. This program has funded more than 1,000 interns at approximately 400 companies, MassTech's Entrepreneur Mentoring effort is designed to support regional entrepreneur mentoring activities in underserved regions of the state through support for organizations that provide seasoned mentors to emerging startups. In fiscal year 2021, the Innovation Institute participated in 12 regional entrepreneur support initiatives helping to expand and enhance programs and activities to reach more people, target diverse communities, and increase the impact.

Mentorships

87 companies were involved to be supported during FY21. The most involved program came from the four rounds of the Intrapreneur Challenge that Innovation had hosted to meet the challenges of the COVID-19 pandemic. Additional programs include: The Venture Forum, E-For-All – Holyoke & Cape Cod, Worcester State University, BlueSwell/SeaAhead. In addition the Innovation Institute ran a competitive solicitation, focused on scaling companies, which resulted in 5 new awards to UMass Lowell Research Institute, MassChallenge, Economic Development Council of Western MA and TiE Boston. These awards will enhance more than 50 scaling companies in FY22.

Global Entrepreneur In Residence (GEIR)

FY21 Innovation Institute has supported the matured GEIR program, hosted by UMass Boston throughout the COVID-19 pandemic with a total of 74 applicants and 8 participating entrepreneurs involved in the FY21 process. Innovation staff was informed that GEIR program at WPI remained closed due to the impact of the pandemic and still are in the preliminary stages of introducing the program with BU back in Spring 2021.

Internships

In FY21, there were a total of 141 internships across 76 companies. Approximately 34% of the companies were first-time participants in the program.

Both companies and interns report individually that internships have led to subsequent employment. Data collected is not statistically significant to draw conclusions as post-internship survey responses to track this data have yielded response rates of less than 20%.

The MassCyberCenter

The MassCyberCenter was launched in September 2017 with a vision to enhance opportunities for the Massachusetts cybersecurity ecosystem to compete as the national cybersecurity leader while strengthening the 'cyber resiliency' of the Commonwealth's municipalities, public infrastructure, and private companies.

The fourth annual Cybersecurity Forum was held in October of 2020 as part of the inaugural Massachusetts Cybersecurity Week. The 2020 Forum, focused on the theme "Reimagining a Cyber Resilient Future," built on the momentum of prior events, helping strengthen connections across the cybersecurity ecosystem and solidifying the Commonwealth's global leadership in cybersecurity.

The Cyber Resilient Massachusetts Working Group ("CRMWG") was established to bring together public and private sector leaders to identify ways the Commonwealth's innovative technology ecosystem can help Massachusetts municipalities and critical institutions protect sensitive data, increase cybersecurity awareness, and respond to emerging threats. Over 45 member organizations participate in the CRMWG and additional sub-working groups focused on municipalities, strategic planning, table top exercises, and critical infrastructure. During fiscal year 2021, the CRMWG held 12 meetings and developed a Minimum Baseline of Cybersecurity for Municipalities to provide municipalities a foundational goal of cyber resiliency. To support the adoption of the Minimum Baseline, MassCyberCenter selected a vendor, eResponders, to build modules to educate municipal leadership. These modules are now posted on the MassCyberCenter website and help promote adoption of the Minimum Baseline.

The Cybersecurity Training and Education Working Group ("CTEWG") meets monthly to support the training and education of cybersecurity professionals in the Commonwealth through collaboration and partnerships. MassCyberCenter hosts these monthly meetings to update the group on initiatives, discuss requirements to support education and training, and provide opportunities for members to collaborate. Based on the working group recommendation, MassCyberCenter now hosts an on-line Massachusetts Cybersecurity Jobs Board to aid job-seekers and employers.

During fiscal year 2021, MassCyberCenter created the Cybersecurity Mentorship Program to provide opportunities for diverse Massachusetts undergraduate college students to learn about careers in cybersecurity and develop their professional networks through direct engagement with industry professionals. The goal of the Cybersecurity Mentorship Program is to encourage diverse undergraduate college students to continue to pursue a career in cybersecurity and promote the diversity of the cybersecurity workforce in Massachusetts.

The Center for Advanced Manufacturing

The Center for Advanced Manufacturing was established to foster the most complete, most connected, and fastest manufacturing ecosystem from innovation through production. The Center builds on the success of the Massachusetts Manufacturing Innovation Institute Program (M2I2) and will increase its impacts on the manufacturing sector by:

- Aligning investments in manufacturing with the state's vision;
- Leveraging existing programs for increased regional impact;
- Supporting new initiatives from the Advanced Manufacturing Collaborative (AMC);
- · Ensuring a deep pipeline for all programs; and
- Tracking outcomes and efficacy of all programs.

The Baker-Polito Administration established the M2I2 in fiscal year 2016 as a key pillar of their innovation growth strategy for Massachusetts and established oversight of this initiative at MassTech. This initiative represents a substantial commitment to develop manufacturing infrastructure within the state's academic, research and manufacturing industry, and is a direct response to Manufacturing USA, a national network of federally sponsored, collaborative communities, each with the mission of securing the future of their respective technologies. The M2I2 is a state-sponsored collaboration of manufacturing innovation institutes in Massachusetts that are affiliated with the Manufacturing USA and leverages the leading Massachusetts research universities to strengthen the Commonwealth's research-to-manufacturing infrastructure. Through grants administered by Executive Office of Housing and Economic Development (EOHED), M2I2 provides capital cost shares for projects and discovery centers located within the Commonwealth's borders with the goal of boosting economic development by supporting job creation and growth in existing and emerging industry clusters.

In April 2020, as a response to the COVID-19 public health crisis, the Baker-Polito Administration announced a new initiative to mobilize, organize, and operationalize critical path work streams necessary for Massachusetts manufacturers to pivot their operations to produce needed materials in response to the pandemic. Called the Massachusetts Manufacturing Emergency Response Team or M-ERT, the effort helped produce in-demand personal protective equipment (PPE) and other critical devices, such as ventilators, sanitizers, and thermometers. Funding in the amount of \$5.6 million was allocated to the M2I2 program and was administered, with support from MassTech, through Advanced Functional Fabrics of America (AFFOA), a member of the National Network of Manufacturing Innovation Institutes.

During fiscal year 2021, more than \$8.9 million in grants were awarded to four grantees bringing the total M2I2 awards to over \$72.8 million to date.

In July 2020, MassTech was awarded a \$3.2 million grant from the U.S. Department of Defense's Manufacturing Technology Program ("DoD ManTech") for a manufacturing technician training program that will serve as a national model. This effort, named MassBridge, is being led by the Center for Advanced Manufacturing along with a team of experts from academia, industry, and federal and state agencies. The goal of the MassBridge project is to develop and test a well-connected, state-based training and career pathway model - a "Bridge" for technicians that spans the gaps between the Commonwealth of Massachusetts' state-wide advanced manufacturing programs and the needs of the Manufacturing USA Institutes. The curriculum will be deployed through vocational and academic high schools and community colleges across Massachusetts; with connectivity to supporting universities, for those workers who want to continue their education, to pull students along a pathway toward careers in Manufacturing USA technologies.

Massachusetts eHealth Institute

Through MeHI, MassTech is working to accelerate the growth and adoption of technologies that save lives and reduce healthcare costs. MeHI was created through the passage of Chapter 305 of the Acts of 2008 and tasked with improving healthcare quality and increasing efficiency through the increased adoption of innovative technologies. Chapter 224 of the Acts of 2012 enhanced MeHI's charge to expand its focus on key priorities including implementing electronic health records ("EHRs") in all provider settings statewide, helping providers connect these EHRs to the Commonwealth's health information exchange, the Mass HIway, identifying and promoting technologies with the potential to improve the quality and reduce the cost of healthcare; helping providers continue to evolve their use of EHRs to comply with future Meaningful Use stages, and promoting the understanding of the benefits of health information technology ("Health IT") to providers, patients, and the general public. This law also created a requirement that providers implement and use electronic health record technology in order to continue to practice in the Commonwealth. MeHI helps providers comply with this requirement

through educational programs, technical support, and grants. In 2016, MeHI's mission was further expanded through the enactment of state economic development legislation which charged MeHI with supporting the growth of a digital health industry sector within the Commonwealth.

MeHI serves as the implementing agency of the Massachusetts Digital Health Initiative, which was launched in 2016 to position Massachusetts as the leading global ecosystem for digital health innovation. Digital Health is among the fastest growing industry sectors in the country and Massachusetts is positioned at the forefront of this growth, combining its strengths in both healthcare and technology to drive digital health innovation. Massachusetts is already home to more than 400 digital health companies and the Initiative aims to increase the growth of these firms. MeHI connects policymakers, healthcare experts, physicians, and business leaders to break down the barriers to widespread integration of these advanced technologies.

MeHI has three teams working to promote its mission. MeHI's Medicaid Services team provides technical assistance, enrollment and validation services related to the Medicaid Incentive Program. The HIway Adoption and Outreach Services team develops and delivers services to promote health information exchange adoption and utilization among healthcare providers. Both of these programs are conducted under agreements with the Commonwealth of Massachusetts Executive Office of Health and Human Services.

In addition to the above services, MeHI's Digital Health team focused in fiscal year 2021 on the growth of the Commonwealth's digital health ecosystem and on supporting innovation in aging and caregiving.

As the implementing agency for the Massachusetts Digital Health Initiative, MeHI's activities in fiscal year 2021 included:

- Administering \$170,000 in additional grant funding for the Commonwealth's two primary digital health innovation labs: MassChallenge HealthTech ("MCHT") in Boston. With this funding, MCHT provided targeted support for 30 digital health startups, helping them grow and compete. MeHI also provided administrative support to three Massachusetts state agencies to act as champions in the 2021 MCHT Program;
- Supporting 45 networking and professional development events related to growing the digital health ecosystem.
 Most of these events were through partners such as MCHT, the Massachusetts Executive Office of Elder Affairs and the Massachusetts Caregiver Coalition;
- Owning, maintaining, and enhancing the MassDigitalHealth.org web portal, including improving and promoting
 the only statewide digital health job board in the United States with over 330 companies and approximately 2,400
 open digital health jobs as of the end of fiscal year 2021;
- Expansion of our efforts to support unpaid family caregivers through the launch of the Mass Caregiving Initiative, an extension of the Massachusetts Caregiver Coalition work that we launched in 2019. This focus on supporting innovation in aging and caregiving is in alignment with one of the Baker-Polito Administration's priorities;
- Continuing the Digital Health Sandbox Network and Grant Program which supports Massachusetts digital health companies in accessing testing and validation opportunities at Massachusetts Sandboxes. The program has expanded from one Sandbox in fiscal year 2019 to nine Sandbox locations and one Sandbox tool as of the end of fiscal year 2021. MeHI awarded \$247,200 in grants to the Sandboxes to support projects with six Massachusetts digital health companies during the year;
- Running the Right Care 4 You Grant Program to support the goals of the Massachusetts Employer Health
 Coalition by offsetting the costs for Massachusetts digital health companies to pilot their products and services
 with Massachusetts employers. In fiscal year 2020 MeHI awarded \$189,360 to two Massachusetts digital health
 companies to pilot their products and quantify their impact on their employer partner's healthcare costs. In FY21,
 MeHI supported the companies in their ongoing work with their employer partners. Results for both pilots are
 expected in FY22; and
- Launching the Digital Health COVID-19 Recovery Challenge Program, funded by a \$682,880 federal grant from
 the U.S. Department of Commerce's Economic Development Agency as part of their SPRINT Challenge. The
 program partners with Lever, Inc., a business accelerator and innovation support organization, and leverages
 MeHI's Sandbox Network to help commercialize digital health solutions that support COVID-19 recovery. The first
 Challenge, Innovations to Support Family Caregivers, launched in June.

To implement a shared strategy across the Baker-Polito Administration and private sector stakeholders around the direction of the Mass Digital Health Initiative, MassTech continued work on activities advancing the eight near-term priority initiative recommendations identified by Governor Baker's Digital Healthcare Council.

Massachusetts Broadband Institute

The MBI was created as a division within MassTech in 2008. The MBI makes strategic and targeted public investments with the goal of expanding broadband access within unserved and underserved communities in Massachusetts.

In August 2014, \$50 million of capital bond funding was authorized by the Commonwealth for MBI to develop last mile solutions designed to bring broadband from centralized hubs to individual end users ("Last Mile"). In fiscal year 2018, an additional \$45 million in bond authorization was approved by the Commonwealth. The additional funding was authorized to ensure that all Last Mile towns will have a funded solution, including access to a contingency fund for possible make ready cost overages for municipally-owned, fiber-to-the home projects, as well as funds for required investments in MBI's middle mile broadband network, *MassBroadband 123*.

MBI's Last Mile program was designed to support and co-invest in broadband solutions for the Massachusetts towns who have lacked residential broadband service. This program includes grants to private broadband service providers and directly to municipalities.

As part of this effort, the Last Mile Infrastructure Grant Program, launched by the EOHED in April 2017, was modeled after their existing MassWorks grant program and was designed to provide funding for eligible unserved towns which will develop and build municipally-owned broadband networks. The program empowers communities to use these grants to fund design and engineering, and construction services directly, as they would other local infrastructure projects. The EOHED is administering the Last Mile Infrastructure Grant Program, with up to \$20 million in MBI's bond funds as approved by the MBI Board of Directors and funds from the 2018 authorization. To date, EOHED has awarded grants to 22 towns, totaling approximately \$26.9 million.

During fiscal year 2021, MBI continued to identify solutions and award funds for the remaining unserved towns. As of the end of the fiscal year, funds have been awarded for a broadband solution for all Last Mile towns.

As of the end of the fiscal year, of the original 53 Last Mile towns (including underserved towns), 33 towns are completed and have fully operational broadband networks, 15 others have broadband networks that are partially lit, with customers installations occurring on a rolling basis construction is completed. The remaining 5 town projects are in the design, make ready process, or construction phase.

The MassBroadband 123 network, which has been fully operational since early 2014, created a robust 'middle mile' fiber-optic network that stretches over 1,200 miles and directly connects approximately 1,100 key community facilities in over 120 communities. MassBroadband 123 provides these communities with the ability to enhance education, drive healthcare innovation, and strengthen public safety through the direct connection fiber-optic network. The MassBroadband 123 network also creates an essential foundation to connect homes and businesses currently unserved by broadband, the so-called Last Mile of connectivity highlighted above.

During fiscal year 2021, MassTech was awarded \$9.2 million by the Commonwealth of Massachusetts as part of the Partnerships for Recovery plan for MBI to implement programs to expand internet access. One of these programs, Mass Internet Connect, is a subsidy program that assist unemployed job seekers working with MassHire with addressing technology barriers, including accessing or using a computer or the internet. The Mass Internet Connect program assisted over 2,000 jobseekers. A second program, expanded Wi-Fi Hotspots in Unserved Communities. This program continues to support unserved communities in western and central Massachusetts with outdoor and indoor hotspots, helping provide critical connectivity to communities that are waiting for high-speed internet networks to be built through the state's Last Mile program. Since the inception of the program, MBI has supported community hotspots in over 26 towns.

Campus Operations

MassTech owns, manages, and develops its Westborough, Massachusetts, headquarters as the Massachusetts Technology Park Corporation. The use of the 36-acre campus reflects MassTech's mission to promote partnerships among industrial, educational, and governmental sectors.

Fiscal Year 2021 Goals & Targets - Overall MassTech Collaborative

1

Goal: Drive and accelerate innovation in key clusters to grow the Commonwealth's economy.

Impact: Over 300 companies, colleges and universities, and other entities outside of Boston reached through programs, grants and events.

2

Goal: Support and advance job growth in key clusters throughout Massachusetts.

Impact: 743 jobs created or retained, and 653 people trained.

3

Goal: Expand connectivity and access to the tech and innovation economy across the Commonwealth.

Impact: Approximately 31,000 people in 33 Last Mile towns with broadband access via completed broadband projects. *NOTE: This population estimate* is based on 2010 census data and premise count data and providing access to 96% of the population.

4

Goal: Support the diversity of the tech and innovation ecosystem and economy across industry, academia, government, and stakeholders.

Impact: 233 individuals and companies of diverse backgrounds (including minority or women-owned businesses) participated in programs or initiatives.

5

Goal: Foster economic growth and collaboration in key clusters to strengthen the state's economy.

Impact: 78 partnerships across academia, industry, and government developed by MassTech's divisions.

The Innovation Institute works to align state support for the research, technology and business development, capital, talent and other infrastructure needs necessary for vibrant ecosystems for innovation across the Commonwealth. These efforts are often focused on Regional Support, Entrepreneurship and Start-Up Support and Cluster Development with a focus on technology verticals such as FinTech, Artificial Intelligence, Quantum Computing, Robotics and Blockchain.

The institute continued to convene industry groups and key stakeholders on new business growth models amidst COVID-19. Examples of this work include support for the Manufacturing-Emergency Response Team (M-ERT) and other COVID-19 emergency support through the Intrapreneur Challenge and other measures.

1

Goal: Support growth in key industry clusters that comprise the state's tech and innovation economy by working with stakeholders to develop economic development strategies and projects that generate economic growth in Massachusetts.

Impact: Over 70 businesses, colleges/universities, and other entities participated in 32 working group meetings, partnerships, and collaborations.

2

Goal: Support opportunities to profile the strengths and unique attributes of the Massachusetts innovation economy to disseminate information and attract project participants to increase the effectiveness of the Innovation Institute's economic development projects and strategies and to support and disseminate best practices.

Impact: Engaged in 12 regional projects and initiatives outside the Boston area, including EastWest Exchange, Intrapreneur Challenge, Blockchain Education Series, WPI Ventilator Project, The Venture Forum, Business Triage Program, EastWest Exchange: Defense Focus, BIC Manufacturing Academy, and Tech Foundry.

COLLABORATIVE RESEARCH & DEVELOPMENT MATCHING GRANT PROGRAM

The Collaborative Research and Development Matching Grant Program supports large-scale, long-term projects that bring together the Commonwealth's world-class research institutions and class-leading companies and have the potential to spur innovation, promote workforce and cluster development, and grow jobs by investing in critical research and development (R&D) infrastructure.

FY21 investments prioritized opportunities targeting support for COVID-19. The R&D Fund has supported ventilator development projects (automated resuscitators) in partnership with the Manufacturing Emergency Response Team (M-ERT) effort.

1

Goal: Disseminate and promote research center technology development and research findings.

Impact: 17 IP agreements and technology licenses executed by R&D Fund grantees.

2

Goal: Support industry participation in programs through R&D partnerships and technology development & deployment opportunities.

Impact: Increased participating firms by 65 via AI Jumpstart and revised R&D Fund solicitation workshop sessions held on Defense & Aerospace, Cybersecurity, Robotics, Digital Health, and Fintech/Blockchain.

MASSTECH INTERN PARTNERSHIP

The MassTech Intern Partnership provides stipends to support interns at Massachusetts tech start-ups. The goal of this program is to promote the growth of start-ups, especially in priority sectors, such as Cybersecurity, Digital Health, FinTech, IoT, and Robotics, and retain talent by supporting more internship opportunities that will root student's technology industry networks in state and lead to them staying in Massachusetts after graduation.

1

Goal: Support high level quality internships at technology start-ups and scaling companies in key clusters to increase opportunity for entry level employment in MA, internships with a COVID-19 response focus will be prioritized.

Impact: 141 total internships supported across the MassTech Internship Partnership, and three new programs at Stonehill College, MassRobotics and MassDiGi. 36 of the 76 (34% of total) MassTech Intern Partnership companies were first time participants.

2

Goal: Increase diversity of the participating companies and interns.

Impact: 41% of the total interns came from a diverse background or placed at minority/women-owned businesses.

GLOBAL ENTREPRENEUR IN RESIDENCE

The Massachusetts Global Entrepreneur in Residence (GEIR) program is an initiative intended to help qualified international students stay in the Commonwealth after graduation to start or grow a high potential business in Massachusetts. The program was negatively impacted by immigration policy and travel restrictions because of the COVID-19 pandemic.

1

Goal: Facilitate Global Entrepreneur in Residence placement as university part-time employee or venture center residency in support of university mission to petition for H-1B visa.

Impact: Received 74 entrepreneur applicants and 8 entrepreneurs participated in the UMass Boston GEIR program.

TECH TALENT DIVERSITY

The Tech Talent Diversity Initiative offered applicants the opportunity to propose creative projects that increase the successful placement and retention of talent for tech internships, apprenticeships, and any entry-level tech sector jobs from underrepresented groups such as women, African American, or Hispanic individuals. The program resulted in two funded projects, Hack. Diversity in association with the New England Venture Capital Association, and Tech Foundry of Springfield. In response to the COVID-19 pandemic, both programs moved to primarily virtual operation while maintaining participation from students, fellows, mentors, and instructors.

1

Goal: Support participation of students from diverse backgrounds in programs that provide training, mentoring, and professional development services relevant to careers in technology.

Impact: 111 individuals participated in the Tech Talent Diversity Initiative programs –Hack.Diversity and Tech Foundry.

2

Goal: Increase the diversity of the tech workforce in Massachusetts and improve the success rate of applicants from diverse backgrounds in applying for internships and entry level tech jobs.

Impact: 86 individuals (63 from Hack.Diversity and 23 from Tech Foundry) have secured paid internships, entry level jobs, or are pursuing higher education.

MASSTECH MENTORSHIP PROGRAM SUPPORT

The Innovation Institute supports entrepreneur mentoring to build regional start-up ecosystems and communities of innovation across Massachusetts. Access to strong mentoring relationships builds the confidence and success of new businesses and plays a crucial role in lowering the barriers to entry for owning and running a business. Mentors are key to a healthy entrepreneurship ecosystem – inspiring new business leaders through their example and bringing needed expertise on the business development process. There is also a focus on support of entrepreneur mentoring programs in regions and underserved communities to increase diversity and help create the conditions for growth.

MassTech utilized the results of an ecosystem assessment to begin implementing a Strategic Framework for the support of Entrepreneurs in Massachusetts that included new support mechanisms for entrepreneurial communities in the wake of COVID-19. MassTech has also launched the Intrapreneur Challenge as a statewide initiative intended to help MassTech and the Manufacturing Emergency Response Team (M-ERT) activate, connect and focus Massachusetts companies wanting to pivot production capabilities to meet the demands of the COVID-19 pandemic.

1

Goal: Support programs impacting mentoring and entrepreneurship models, startup scale, and industry specific ecosystems, with a focus on those shifting to address new realities brought on by COVID-19.

Impact: 87 companies supported by the Mentorship initiative programs (including the Intrapreneur Challenge, Venture Forum, EforAll – Holyoke and Cape Cod, Worcester State University, BlueSwell/SeaAhead).

2

Goal: Increase the diversity of entrepreneur mentoring programs.

Impact: 35% of the total participating Mentorship-supported companies were minority-owned/founded (mainly through the Intrapreneur Challenges and Venture Forum).

Fiscal Year 2021 Goals & Targets – MassCyber Center at MassTech Collaborative

MassCyberCenter enhances conditions for economic growth through outreach to the cybersecurity ecosystem while fostering cybersecurity resilience.

In the face of COVID-19 themed cyber-attacks, MassCyberCenter conducted regular meetings with Cyber Resilient Massachusetts Working Group (CRMWG) members and partnered with MA Municipal Association to directly support municipalities with best practices. Cyber Incident Response Plan Workshops and an annual Cybersecurity Forum will be held virtually.

1

Goal: Promote cybersecurity workforce initiatives via the Cybersecurity Training and Education Working Group (CTEWG) and support the cybersecurity industry via the Cybersecurity Forum.

Impact: 161 companies, colleges/universities, and entities participated in the CTEWG meetings and the October 2020 Massachusetts Cybersecurity Forum.

2

Goal: Foster cyber resiliency through the convening of the CRMWG and the Cyber Incident Response Plan Workshops for the Commonwealth's municipalities.

Impact: 36 organizations participated in the CRMWG meetings, and 268 individuals representing 166 communities participated in the Cyber Incident Response Plan Workshops.

Fiscal Year 2021 Goals & Targets – Massachusetts Manufacturing Innovation Initiative (M2I2) at MassTech Collaborative

MASSACHUSETTS MANUFACTURING INNOVATION INITIATIVE

The Massachusetts Manufacturing Innovation Initiative (M2I2) aims to help Massachusetts manufacturers adopt innovative new technologies and guides the state's investment in the Manufacturing USA program. Through the creation of sector-specific Manufacturing USA Centers, M2I2 will advance innovation and job growth throughout the state through cross-collaboration among companies, universities, national labs, government, incubators, accelerators, and other academic and training institutions.

M2I2, in its continued response to the COVID-19 pandemic, convened its Manufacturing Emergency Response Team (M-ERT). M-ERT mobilizes, organizes, and operationalizes critical path work streams necessary for Massachusetts manufacturers to pivot their operations to produce needed materials in response to the pandemic. The program earmarks approximately \$6M towards pivoting manufacturers to make personal protective equipment.

1

Goal: Develop collaborative partnerships through projects that advance Massachusetts' manufacturing innovation ecosystems.

Impact: Over 30 partnerships related to M2I2 and over 50 partnerships related to M-ERT created.

2

Goal: Advance job growth across the state's advanced manufacturing sector.

Impact: 300 jobs created across the state and over 250 people trained.

ADVANCED MANUFACTURING TRAINING GRANT

The Advanced Manufacturing Training Program provides funding to qualifying consortiums to develop, coordinate, and maintain comprehensive manufacturing workforce development systems. Regional systems will provide workforce development services in advanced manufacturing, such as recruitment, job training, placement activities, and supportive services. The program focuses on providing training to unemployed and underemployed individuals, and underrepresented populations including veterans, minorities, and women.

In its response to the COVID-19 pandemic, the program supported regions in developing a "Plan B" in the event vocational schools could not re-open for inperson workforce training programs in the fall (and beyond). These plans included, moving to fully online courses (through community colleges and other providers), hybrid courses combining online to on-the-iob-training, and apprenticeship type models.

1

Goal: Foster talent and advance job growth in the advanced manufacturing sector.

Impact: 522 enrolled in training, 403 people completed training, and 208 people placed after training.

Fiscal Year 2021 Goals & Targets - MassBroadband Institute at MassTech Collaborative

LAST MILE PROGRAM (M.G.L. Chapter 40J, Section 6B)

The Last Mile Program supports and co-invests in broadband solutions for the 44 Massachusetts towns who have lacked residential broadband service. This program includes grants to private broadband service providers and directly to municipalities.

Aligning Partnerships for Growth Goal & COVID-19 Response: Community development focus; MBI's WiFi Hotspot Program has supported the installation of high-capacity hotspots at community anchor institutions (libraries, town halls, schools, etc.) in 26 Last Mile Towns that do not have a completed broadband project.

Goal: Continue to expand broadband access in Last Mile Towns.

1

Impact: 12 additional Last Mile Towns have been completed (with installations still wrapping up in some cases), bringing the total to 24 Last Mile Towns with completed broadband projects. The networks in these 12 towns reach more than 12,000 people. Please note that the population numbers exceed the fiscal year target (even with one less town achieving completion) because the composition of the completed towns differed from the projections. Some towns finished construction early while other towns experienced delays.

Fiscal Year 2021 Goals & Targets – Massachusetts eHealth Institute at MassTech Collaborative

MASS DIGITAL HEALTH INITIATIVE (M.G.L. Chapter 40J, Section 6D (g))

The Digital Health Initiative is focused on supporting the Governor's Digital Health Council and its recommendations, reinvesting in programs, such as MassChallenge HealthTech, and developing or launching new programs to grow the digital health ecosystem.

Aligning Partnerships for Growth Goal & COVID-19 Response: Adjusted program operational goals, such as the Sandbox call for proposals that will help with the recovery from COVID-19.

1

Goal: Enable collaboration through MA digital health companies to test and implement their products and services in MA environments to help grow the Commonwealth's digital health cluster via the Digital Health Sandbox Grant Program (at the 8 Digital Health Sandboxes).

Impact: 7 companies received Sandbox Grants to work with 4 different Digital Health Sandbox Network sites.

2

Goal: Provide support to high-potential digital health startups across Massachusetts to continue to grow the digital health cluster.

Impact: 302 jobs created across 10 digital health companies; 402 MA-based digital health companies identified in MeHI's stakeholder database; 45 sponsored or hosted events (all held virtually); and 30 companies participated in the MassChallenge HealthTech program.

INVESTMENTS AND GRANTS AWARDED OR PROVIDED BY THE AGENCY DURING FISCAL YEAR 2021

Award Overview

Name of Award Program - or - Investment	Name of Recipient	Description of Award or Investment	Amount (if applicable)	Municipality of Recipient *if regional or state-wide, please indicate
Advanced Manufacturing Center- MassBridge	Cape Cod Community College	Participation in the MassBridge Project	\$431,328.00	Statewide
Advanced Manufacturing Center- MassBridgee	Massachusetts Institute of Technology	Frameworks for MassBridge: MIT Initiative for Knowledge and Innova- tion in Manufacturing (IKIM)	\$318,547.00	Cambridge
Advanced Manufacturing Center- MassBridge	Massachusetts Institute of Technology	MassBridge: MIT Office of Open Leaning	\$665,829.00	Cambridge
Advanced Manufacturing Center- MassBridge	MassHire Greater New Bedford Work- force Board	Participation in the MassBridge Project	\$507,328.00	Statewide
Advanced Manufacturing Center- MassBridge	MassMEP (Massa- chusetts Manufac- turing Extension Partnership)	Participation in the MassBridge Project	\$99,990.17	Statewide
Advanced Manufacturing Center- MassBridge	National Coalition of Advanced Technology Centers	Benchmarking Services for the MassBridge Project	\$100,000.00	Statewide
Innovation Institute Innovation Fund Management	Western Mass Economic Development Council	EastWest Exchange	\$80,000.00	Statewide
Innovation Institute- Internship Program	iSlide, Inc.	iSlide: Award: 2020 Summer Internship Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	Ava Robotics Inc	AvaRobotics: Award: 2020 Summer Internship Grant	\$3,200.00	Cambridge
Innovation Institute- Internship Program	DynamiCare Health, Inc.	DynamiCare: Award: 2020 Summer Intern Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Cazena, Inc.	Cazena: Award: 2020 Summer Internship Grant	\$3,200.00	Waltham
Innovation Institute- Internship Program	Viken Detection Corporation	Viken: Award: 2020 Summer Internship Grant	\$6,400.00	Burlington
Innovation Institute- Internship Program	www.realestate, Inc dba W3RE	w3RE:: Award: 2020 Summer Internship Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Bitome, Inc.	Bitome: Award: 2020 Summer Intern Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Orbita, Inc	Orbita: Award: 2020 Summer Internship Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	Orthogonal Net- works dba Jellyfish	Jellyfish: AmdAward: Add 2020 summer Intern	\$3,200.00	Boston

Innovation Institute- Internship	City as a Lab, LLC	DigitalReady: Award: 2020	\$6,400.00	Boston
Program Innovation Institute- Internship	dba Digital Ready AutoGuide Mobile	Summer Intern Grant AutoGuide: AmdAward: Add	\$3,200.00	Chelmsford
Program	Robots	2020 Summer Intern		GHEIIIISIOIU
Innovation Institute- Internship Program	Absolute Robot Corporation	AbsoluteRobot: Award: 2021 Summer Internship	\$3,200.00	Worcester
Innovation Institute- Internship Program	Armored Things	ArmoredThings: Award: 2021 Summer Interns	\$9,600.00	Boston
Innovation Institute- Internship Program	Automated Controversy Detection, Inc dba AuCoDe	AuCoDe: Award: 2021 Summer Internship Grant	\$9,600.00	Granby
Innovation Institute- Internship Program	Autonodyne LLC	Autonodyne: Award: 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	Cleo Robotics Labs Inc	CleoRobotics: Award: 2021 Summer Interns	\$9,600.00	Boston
Innovation Institute- Internship Program	PredictAP, Inc.	PredictAP: Award: 2021 Internship Program	\$3,200.00	Chestnut Hill
Innovation Institute- Internship Program	Wellist LLC	Wellist: Award: 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	RailPod, Inc.	RailPod: Award: 2021 Summer Internship Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	6AM Health	6am: Award: 2021 Summer Interns	\$9,600.00	Waltham
Innovation Institute- Internship Program	Extruo LLC	Extruo: Award: 2021 Summer Interns	\$3,200.00	Melrose
Innovation Institute- Internship Program	Mesodyne, Inc	Mesodyne: Award: 2021 Internship Grant	\$9,600.00	Somerville
Innovation Institute- Internship Program	Pison Technology	Pison: Award: 2021 Summer Internship	\$3,200.00	Boston
Innovation Institute- Internship Program	Surround Insurance Agency LLC	SurroundIns: Award: 2021 Summer Internship	\$3,200.00	Cambridge
Innovation Institute- Priority	FinTech Sandbox	Promoting Fintech in Massachusetts	\$75,000.00	Statewide
Innovation Institute- Priority	FinTech Sandbox	FinTech Sponsorship	\$25,000.00	Statewide
Innovation Institute- Priority	Worcester Polytech- nic Institute	Emergency Ventilator Development	\$245,690.00	Worcester
Innovation Institute - R&D Bond Fund	Worcester Polytechnic Institute	Ventilator Development & Validation	\$50,000.00	Worcester
Innovation Institute - R&D Bond Fund	Worcester Polytechnic Institute	Emergency Ventilator Development	\$463,000.00	Worcester
MassCyberCenter- Cybersecurity	Getro (formerly Monday.vc)	MassCyberCenter Jobs Board	\$8,200.00	Statewide
MBI - Last Mile - Construction	Charter Communications	Last Mile Grant - Town of New Braintree	\$1,576,000.00	New Braintree
MBI - Last Mile - Construction	Comcast (Comcast of Massachusetts II, & Comcast of Massachusetts/ Virginia, Inc.)	Last Mile Grant Program– Town of Tolland	\$140,000.00	Tolland
MBI - Mass Internet Connect	AccessPlus Communications, Inc.	Last Mile Town WiFi Hotspot Bandwidth	\$7,500.00	Western Massachusetts
MBI - Mass Internet Connect	PJ Systems Inc. aka HiQ Computers	Chromebooks for Mass Internet Connect participants	\$934,500.00	Statewide
MBI - Mass Internet Connect	Charter Communications	Broadband Subsidy Program	\$11,475.00	Statewide

MBI - Mass Internet Connect	Comcast (Comcast of Massachusetts II, & Comcast of Massachusetts/ Virginia, Inc.)	Broadband Subsidy Program	\$1,350.00	Statewide
MBI - Mass Internet Connect	Crocker Communications, Inc.	Last Mile Town WiFi Hotspot Bandwidth	\$12,000.00	Western Massachusetts
MBI - Mass Internet Connect	OpenCape Corporation	WiFi Hotspots	\$219,701.16	Cape Cod
MeHI - Digital Health	Getro (formerly Monday.vc)	MA Digital Health Jobs Board Platform	\$9,000.00	Statewide
MeHI - Digital Health	Massachusetts Institute of Technology	MIT Hacking Medicine - Oct 2020 Grand Hack One-Track Sponsorship	\$20,000.00	Statewide
MeHI - Digital Health	MassChallenge Inc.	MassChallenge HealthTech (MCHT) Sponsorship - FY2021	\$170,000.00	Statewide
MeHI - Digital Health	TechSpring	Digital Health Sandbox - Keva Health	\$25,000.00	Western Massachusetts
MeHI - Digital Health	TechSpring	Western MA Sandbox Expansion	\$80,000.00	Western Massachusetts
MeHI - Digital Health	TechSpring	Digital Health Sandbox Grant - Keva Health Phase 2	\$25,000.00	Western Massachusetts
MeHI - Digital Health	UMass Medical School	Digital Health Sandbox Grant - Caresyntax	\$37,500.00	Worcester
MeHI - Digital Health	Worcester Polytechnic Institute	Digital Health Sandbox Grant -Dynocardia	\$43,750.00	Worcester
Advanced Manufacturing Center - MassBridge	Advanced Functional Fabrics of America (AFFOA)	AFFOA MassBridge Stipend	\$5,000.00	Statewide
Advanced Manufacturing Center - MassBridge	Advanced Robotics for Manufacturing Institute (ARM)	ARM MassBridge Stipend	\$5,000.00	Statewide
Advanced Manufacturing Center - MassBridge	America Makes	America Makes MassBridge Stipend	\$5,000.00	Statewide
Advanced Manufacturing Center - MassBridge	Lightweight Innovations for Tomorrow (LIFT)	LIFT MassBridge Stipend	\$5,000.00	Statewide
Advanced Manufacturing Center - MassBridge	MassRobotics	MassRobotics MassBridge Stipend	\$5,000.00	Statewide
Advanced Manufacturing Center - MassBridge	Nextflex	NextFlex MassBridge Stipend	\$5,000.00	Statewide
Innovation Institute- Internship Program	24M Technologies	24M: Award: 2021 Summer Interns	\$6,400.00	Cambridge
Innovation Institute- Internship Program	ACTnano Inc	ACTnano: Award: 2021 Summer Intern	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Admetsys Corporation	Admetsys: Award: 2021 Summer Intern Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Aero Shield Materials Inc.	AeroShield: Award: 2021 Summer Intern Grant	\$3,200.00	Hyde Park
Innovation Institute- Internship Program	Aura Intelligent Systems, Inc	AuraIntelligent: Award: 2021 Summer Internship Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Autonodyne LLC	Autonodyne: Add 2nd Intern: 2021 Summer Program	\$3,200.00	Boston
Innovation Institute- Internship Program	Autonodyne LLC	Autonodyne: Add 3rd Intern: Summer 2021	\$3,200.00	Boston

Innovation Institute- Internship Program	Ava Robotics Inc	AvaRobotics: Award: 2021 Summer Interns	\$9,600.00	Cambridge
Innovation Institute- Internship Program	Bare Tree Media Inc.	BareTreeMedia: Award: 2021 Summer Intern	\$3,200.00	Franklin
Innovation Institute- Internship Program	Bare Tree Media Inc.	BareTree: Add Intern: Summer 2021	\$3,200.00	Fraklin
Innovation Institute- Internship Program	BioSensics LLC	BioSensics: Award 2021 Summer Intern Grant	\$3,200.00	Newton
Innovation Institute- Internship Program	Bitome, Inc.	Bitome: Award: 2021 Summer Intern Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	BlocksCAD Inc	BlocksCAD: Award: 2021 Summer Internship	\$3,200.00	Burlington
Innovation Institute- Internship Program	BlocksCAD Inc	BlocksCAD: Add 2021 Summer Intern	\$3,200.00	Burlington
Innovation Institute- Internship Program	Bluefin Technology Partners, LLC	Bluefin: Award: 2021 Summer Intern	\$3,200.00	Worcester
Innovation Institute- Internship Program	Bluefin Technology Partners, LLC	Bluefin: Add 2021 Summer Intern	\$3,200.00	Worcester
Innovation Institute- Internship Program	Bounce Imaging	Bouncelmaging: Award: 2021 Internship Grant	\$3,200.00	Waltham
Innovation Institute- Internship Program	Brain Power, LLC	BrainPower: Award: 2021 Summer Internship Grant	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Cardea Technology Inc	Cardea: Award: 2021 Summer Internship Grant	\$3,200.00	Arlington
Innovation Institute- Internship Program	CleanCrop Technologies, Inc.	CleanCrop: Award: 2021 Summer Intern Grant	\$6,400.00	Haydenville
Innovation Institute- Internship Program	Datycs Inc	Datycs: Award: 2021 Summer Internship Grant	\$3,200.00	Woburn
Innovation Institute- Internship Program	Day Zero Diagnostics, Inc.	DayZero: Award: 2021 Summer Internship	\$3,200.00	Boston
Innovation Institute- Internship Program	Delsys, Inc.	Delsys: Award: 2021 Summer Intern	\$3,200.00	Natick
Innovation Institute- Internship Program	Dexai Robotics, Inc.	Dexai: Award: 2021 Summer Internship	\$3,200.00	Somerville
Innovation Institute- Internship Program	Dexai Robotics, Inc.	Dexai: AmdAward: Add 2 Interns: 2021	\$6,400.00	Somerville
Innovation Institute- Internship Program	Dive Technologies Inc	DiveTechnologies: Award: 2021 Summer Intern	\$3,200.00	Hingham
Innovation Institute- Internship Program	Dive Technologies Inc	DiveTech: AmdAward: Add 2 Interns: 2021	\$6,400.00	Hingham
Innovation Institute- Internship Program	DynamiCare Health, Inc.	Dynamicare: Award: 2021 Summer Internship Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	E-Green LLC	EGreen: Award: 2021 Summer Internship Grant	\$3,200.00	Cambridge
Innovation Institute- Internship Program	E-Green LLC	eGreen: AmdAward: Add Intern	\$3,200.00	Cambridge
Innovation Institute- Internship Program	eMotionRx, Inc.	eMotionRx: Award: 2021 Summer Internships	\$9,600.00	Cambridge
Innovation Institute- Internship Program	Folia Water dba Folia Materials	Folia: Award: 2021 Summer Intern	\$3,200.00	Woburn
Innovation Institute- Internship Program	Folia Water dba Folia Materials	Folia: Add 2nd Intern: Summer 2021	\$3,200.00	Woburn
Innovation Institute- Internship Program	Fosta-Tek Optics, Inc	FostaTek: Add 1 Intern: 2021 Summer	\$3,200.00	Leominster
Innovation Institute- Internship Program	Fosta-Tek Optics, Inc	FostaTek: Award: 2021 Summer Interns	\$6,400.00	Leominster

Innovation Institute- Internship Program	Geisel Software, Inc.	Geisel: Award: 2021 Summer Internship Grant	\$6,400.00	Worcester
Innovation Institute- Internship Program	GenoSpace, LLC	Genospace: Award: 2021 Summer Interns	\$6,400.00	Boston
Innovation Institute- Internship Program	GreenSight, Inc.	GreenSight: Award 2021 Summer Interns	\$9,600.00	Boston
Innovation Institute- Internship Program	Gunnison Company	Gunnison: Award: 2021 Summer Internship Grant	\$3,200.00	Cambridge
Innovation Institute- Internship Program	H2Ok Innovations Inc.	H2Ok: Award: 2021 Summer Intern Grant	\$3,200.00	Somerville
Innovation Institute- Internship Program	HelloTeam Inc.	HelloTeam: Award: 2021 Intern Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	HelloTeam Inc.	HelloTeam: AmdAward: Add 2021 Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	HodlPal Inc dba FindOurView	FindOurView: Award: 2021 Summer Interns	\$6,400.00	Melrose
Innovation Institute- Internship Program	InMotion Systems, LLC	InMotion: Award: 2021 Summer Internship Grant	\$3,200.00	Northborough
Innovation Institute- Internship Program	InMotion Systems, LLC	InMotion: AmdAward: Add 2021 Intern	\$3,200.00	Northborough
Innovation Institute- Internship Program	Inside Tracker by Segterra Inc.	InsideTracker: Award: 2021 Summer Interns	\$6,400.00	Cambridge
Innovation Institute- Internship Program	International Fabric Machines	Int'lFabrMachines: Award: 2021 Summer Internships	\$6,400.00	Boston
Innovation Institute- Internship Program	Iterate Labs	IterateLabs: Award: 2021 Summer Internship Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Iterative Scopes, Inc.	IterativeScopes: Award: 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	Kaon Interactive, Inc.	Kaon: Award: 2021 Summer Intern Grant	\$3,200.00	Maynard
Innovation Institute- Internship Program	Lengio Corporation dba Slang	Slang: Award: 2021 Summer Internship Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	Lever, Inc.	Lever: Award: 2021 Summer Interns	\$6,400.00	North Adams
Innovation Institute- Internship Program	LeveragePoint Innovations Inc.	LeveragePoint: Award: 2021 Summer Internship	\$3,200.00	Medford
Innovation Institute- Internship Program	MassChallenge Inc.	MassChallenge: Award: 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	MassChallenge Inc.	MassChallenge:AmdAward: Add 2021 Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	MassRobotics	MassRobotics Jumpstart Fellowship Award	\$8,000.00	Boston
Innovation Institute- Internship Program	Orbita, Inc	Orbita: Award: 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	Ori Inc	Ori: Award: 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	Orthogonal Networks dba Jellyfish	Jellyfish: Award: 2021 Summer Interns	\$6,400.00	Boston
Innovation Institute- Internship Program	Parrots, Inc.	Parrots: Award: 2021 Summer Interns	\$6,400.00	Boston
Innovation Institute- Internship Program	Pasito Inc.	Pasito: Award: 2021 Summer Intern Grant	\$3,200.00	Waltham
Innovation Institute- Internship Program	Pasito Inc.	Pasito: AmdAward: Add 2021 Summer Intern	\$3,200.00	Waltham

Innovation Institute- Internship Program	Persistence Plus LLC	PersistencePlus: Award: 2021 Summer Intern	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Perthera	Perthera: Award: 2021 Summer Intern Grant	\$6,400.00	Holliston
Innovation Institute- Internship Program	Phloem Biotech, Inc dba Radix Labs	Radix: Award: 2021 Summer Interns	\$9,600.00	Cambridge
Innovation Institute- Internship Program	Phuc Labs, Inc.	PhucLabs: Award 2021 Summer Internship Grant	\$6,400.00	Boston
Innovation Institute- Internship Program	Posh Technologies, Inc	Posh: Award 2021 Summer Interns	\$9,600.00	Boston
Innovation Institute- Internship Program	Raptor Maps, Inc.	RaptorMaps: Award: 2021 Summer Internships	\$3,200.00	Somerville
Innovation Institute- Internship Program	Rendever, Inc.	Rendever: Award: 2021 Summer Intern Grant	\$6,400.00	Somerville
Innovation Institute- Internship Program	RightHand Robotics, Inc.	RightHand: Award: 2021 Summer Intern	\$3,200.00	Somerville
Innovation Institute- Internship Program	ScribeUp, LLC	ScribeUp: Award: 2021 Summer Internship Grant	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Solstice Power Technologies, Inc.	Solstice: Award: 2021 Summer Intern	\$3,200.00	Can
Innovation Institute- Internship Program	Solstice Power Technologies, Inc.	SolsticePwr: Add 1 Intern: Summer 2021	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Stonehill College	Stonehill College Advanced Manufacturing & Integrated Photonics Internship Program	\$28,800.00	North Easton
Innovation Institute- Internship Program	Surround Insurance Agency LLC	Surroundins: Add 2nd Intern: 2021	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Sync-Think, Inc.	SyncThink: Award: 2021 Summer Internship Grant	\$3,200.00	Holliston
Innovation Institute- Internship Program	Tarmika, Inc.	Tarmika: Award: 2021 Summer Intern Grant	\$3,200.00	Woburn
Innovation Institute- Internship Program	Tarmika, Inc.	Tarmika: AmdAward: Add 2021 Intern	\$3,200.00	Woburn
Innovation Institute- Internship Program	TurnGram, Inc. dba IgnitePOST	IgnitePOST: Award: 2021 Summer Intern	\$3,200.00	Cambridge
Innovation Institute- Internship Program	Tyme Wear, Inc	TymeWear: Award: 2021 Summer Intern Grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Vee24	Vee24: Award: 2021 Summer Internhips	\$6,400.00	Boston
Innovation Institute- Internship Program	Viken Detection Corporation	Viken: Award: 2021 Summer Intern Grant	\$6,400.00	Burlington
Innovation Institute- Internship Program	Worcester Polytechnic Institute	Mass DiGI Summer Innovation Program Experimental	\$100,000.00	Worcester
Innovation Institute- Internship Program	Z Imaging Inc	ZImaging: Award: 2021 Summer Internship grant	\$3,200.00	Boston
Innovation Institute- Internship Program	Zwicky dba Pluto	Pluto: AmdAward: Add 2021 Summer Intern	\$3,200.00	Boston
Innovation Institute- Internship Program	Zwicky dba Pluto	Pluto: Award: 2021 Summer Intern Grant	\$6,400.00	Boston
Innovation Institute - Mentorship Program	Valley Venture Mentors	Business Triage Program	\$50,000.00	Springfield
Innovation Institute- Priority	FinTech Sandbox	MAFinTechHub	\$25,000.00	Statewide

Innovation Institute - Seaport Innovation	Falmouth Economic Development & Industrial Corporation	MA Ocean Sensor Testbed (SEC Grant)	\$197,063.00	Falmouth
MassCyberCenter- Cybersecurity	eResponders Inc	eResponders Cybersecurity eLearning Consultant to create training modules and supporting materials for Minimum Baseline of Cybersecurity	\$79,800.00	Statewide
MBI - Mass Internet Connect	City of Fitchburg	Gateway City WiFi Hotspot Grant for the City of Fitchburg	\$40,220.00	Fitchburg
MBI - Mass Internet Connect	Essex County Community Foundation	Grant Award to Essex County Community Foundation for Gateway Cities Hotspots	\$693,000.00	Essex County
MBI - Mass Internet Connect	Metropolitan Area Planning Council (MAPC)	Grant Agreement for Community WiFi Hotspot Partnership	\$550,000.00	Chelsea, Everett, Malden, Revere and Quincy
MeHl - Digital Health	Lever, Inc.	SPRINT COVID-19 Challenges	\$182,880.00	Statewide
MeHl - Digital Health	MITRE	Digital Health Sandbox Grant - Tranquil Data	\$47,200.00	Bedford
MeHl - Digital Health	TechSpring	Digital Health Sandbox -Health Together	\$25,000.00	Springfield
MeHl - Digital Health	Worcester Polytechnic Institute	Digital Health Sandbox Grant - X-Sight	\$43,750.00	Worcester

TECHNICAL ASSISTANCE PROVIDED BY THE AGENCY DURING FISCAL YEAR 2021

Award Overview

Name of Award Program - or - Investment	Name of Recipient	Description of Award or Investment	Amount (if applicable)	Municipality of Recipient *if regional or state-wide, please indicate
MBI-Last Mile	Town of Warwick	Last Mile Wireless Project	450,000.00	Warwick
MBI-Last Mile	WiValley Broadband	Last Mile Fixed Wireless Project	2,315,461.00	Florida, Hawley, Savoy and Monroe
MBI-Mass Internet Connect	Essex County Community Foundation	Gateway Cities Hotspots	693,000.00	Essex County Gateway Cities- Haverhill, Lawrence, Lynn, Methuen, Peabody and Salem
MeHI-Sprint Challenge	Lever, Inc	Sprint Challenge	182,880.00	Statewide
MeHI - Digital Health	MassChallenge	HeatIhTech Grant	170,000.00	Statewide
MassCyberCenter	eResponders	eResponders Cybersecurity eLearning Consultant Services Agreement	79,800.00	Statewide
Center for Advanced Manufacturing - MassBridge	Advanced Functional Fabrics of America (AFFOA)	MassBridge Stipend	5,000.00	Statewide
Center for Advanced Manufacturing - MassBridge	Advanced Robotics for Manufacturing Institute (ARM)	MassBridge Stipend	5,000.00	Statewide
Center for Advanced Manufacturing-MassBridge	America Makes	MassBridge Stipend	5,000.00	Statewide
Center for Advanced Manufacturing - MassBridge	Cape Cod Community College	Cape Cod Community College MassBridge Sub-award Agreement	431,328.00	Statewide
Center for Advanced Manufacturing - MassBridge	Class Generation, LLC	Class Generation Agreement to produce online MassBridge Awareness Module	45,000.00	Statewide
Center for Advanced Manufacturing - MassBridge	Massachusetts Institute of Technology	Office of Open Learning (OOL) MassBridge Sub-agreement	655,760.61	Statewide
Center for Advanced Manufacturing - MassBridge	Massachusetts Institute of Technology	Initiative for Knowledge and Innovation in Manufacturing (IKIM) MassBridge Sub- agreement	318,547.00	Statewide
Center for Advanced Manufacturing - MassBridge	MassHire Greater New Bedford Workforce Board	MassHire MassBridge Sub- agreement	507,328.00	Statewide
Center for Advanced Manufacturing - MassBridge	MASSMEP	MassBridge Sub-agreement	99,990.17	Statewide
Center for Advanced Manufacturing - MassBridge	MassRobotics	MassBridge Stipend	5,000.00	Statewide

Center for Advanced Manufacturing - MassBridge	National Coalition of Advanced Technology Centers	MassBridge Benchmarking Services	100,000.00	Statewide
Center for Advanced Manufacturing - MassBridge	Nextflex	MassBridge Stipend	5,000.00	Statewide
Innovation Institute - GEIR Program	UMass - Boston	Global Entrepreneur in Residence Grant	225,000.00	Statewide
Innovation Institute - Innovation Fund	Boston Consulting Group Inc	Study on the Post-Pandemic Future of Life Sciences and Defense Manufacturing in the Commonwealth	1,480,000.00	Statewide
Innovation Institute - Innovation Fund	Boston University	QLCI Sponsorship	150,000.00	Boston
Innovation Institute - Innovation Fund	Ernst & Young LLP	Fintech Ecosystem Assessment	153,000.00	Statewide
Innovation Institute - Innovation Fund	MassRobotics	Robotics Services	40,000.00	Statewide
Innovation Institute - Innovation Fund	Media Shower	Blockchain Services	31,500.00	Statewide
Innovation Institute - Innovation Fund	Western Mass Economic Development Council	EastWest Exchange	72,150.00	Statewide
Innovation Institute - Internship Program	Tech Foundry	Diversity Ramp to Hire Grant Agreement	94,234.00	Springfield
Innovation Institute- Mass Big Data Initiative	Boston University	Multiparty Computation Grant Agreement	440,000.00	Statewide
Innovation Institute - Mass Big Data Initiative	Coalesce.Al	Coalese.Al Multiparty Computation Grant	60,000.00	Statewide
Innovation Institute - Mentorship Program	Umass Lowell Research Institute	Commercialization Academy 2021 Pathways to Scale	129,381.00	Lowell
Innovation Institute - Mentorship Program	EDC-Western MA	2021 Pathways to Scale Mentorship Grant	199,615.00	Western Massachusetts
Innovation Institute - Mentorship Program	MassChallenge Inc.	2021 Pathways to Scale Mentorship Grant	190,176.00	Boston
Innovation Institute - Mentorship Program	TiE Boston	2021 Pathways to Scale Mentorship Grant	181,050.00	Boston
Innovation Institute - Mentorship Program	Lever, Inc.	Intrapreneurship Challenge	250,000.00	Statewide
Innovation Institute - Mentorship Program	Startup Wind	Virtual Accelerator & Mentor Network	38,000.00	Statewide
Innovation Institute- Mentorship Program	The Capital Network (TCN)	Pathways to Scale Mentorship Grant -Fellowship for Female Founders	50,000.00	Arlington
Innovation Institute - Mentorship Program	The Venture Forum	Expanded Regional Mentorship Network	25,000.00	Worcester
Innovation Institute - Mentorship Program	Valley Venture Mentors	Business Triage Program	50,000.00	Western, Central, and Southeastern MA
Innovation Institute- Priority	FinTech Sandbox	Mass FinTech Hub Sponsorship	50,000.00	Statewide
Innovation Institute- Priority	Lever, Inc.	Strengthening the Entrepreneur Ecosystem	75,000.00	Berkshires
Innovation Institute - Priority	Northeastern University	Al Jumpstart Grant	200,000.00	Statewide
Innovation Institute - Priority	Tech Foundry	TechFoundry 3.0 Regional Priority Grant	100,765.00	Pioneer Valley
Innovation Institute - Priority	Woods Hole Oceanographic Institute	Entrepreneurs and Innovators Support	200,000.00	Woods Hole

Innovation Institute - Priority	Worcester Polytechnic Institute	Ventilator Development Grant	245,690.00	Worcester
Innovation Institute - R&D Bond Fund	Harvard University	NERC Research and Development Grant	875,000.00	Cambridge
Innovation Institute - R&D Bond Fund	Massachusetts Institute of Technology	MIT E-VENT R&D Grant	200,000.00	Cambridge
Innovation Institute - R&D Bond Fund	Northeastern University	Al Jumpstart Grant	2,000,000.00	Statewide
Innovation Institute - R&D Bond Fund	Northeastern University: Nanomanufacturing	Advanced Nanomanufacturing Cluster for Smart Sensors and Materials (ANSSeM)	3,000,000.00	Statewide
Innovation Institute - R&D Bond Fund	University of Massachusetts Amherst	Data Science/Cyber Security (DSCC)	5,000,000.00	Statewide
Innovation Institute - R&D Bond Fund	Woods Hole Oceanographic Institute	Center for Marine Robotics	5,084,754.00	Woods Hole
Innovation Institute- R&D Bond Fund	Worcester Polytechnic Institute	Ventilator Development Grant	463,000.00	Worcester
Innovation Institute - R&D Bond Fund	Worcester Polytechnic Institute	HealthTech R&D Grant	5,150,000.00	Worcester
Innovation Institute- Seaport Innovation	Cape Cod Commercial Fishermen Alliance (CCCFA)	SEC BlueTech Grant	183,914.00	Cape Cod
Innovation Institute- Seaport Innovation	Tufts	SEC BlueTech Capital Grant	153,800.00	Medford
Innovation Institute - Seaport Innovation	Falmouth Economic Development & Industrial Corporation	MA Ocean Sensor Testbed SEC Capital Grant	197,063.00	Falmouth
Innovation Institute - Seaport Innovation	Massachusetts Maritime Authority	Marine Hydrokinetic Oceanographic Data Portal (Buzzards Bay) Grant	69,600.00	Buzzards Bay
MeHI - Digital Health	Baystate Medical Center, Inc. d/b/a TechSpring	Digital Health Sandbox	250,000.00	Statewide
MeHI - Digital Health	Institute for Medical Engineering & Science at MIT	Institute for Medical Engineering & Science at MIT Digital Health Sandbox	60,000.00	Statewide
MeHI - Digital Health	MITRE Corporation	Digital Health Sandbox	47,200.00	Statewide
MeHI - Digital Health	UMass Medical School	Digital Health Sandbox	37,500.00	Statewide
MeHI - Digital Health	Worcester Polytechnic Institute	Digital Health Sandbox	172,500.00	Statewide



