



Office of Performance Management Oversight (OPMO)

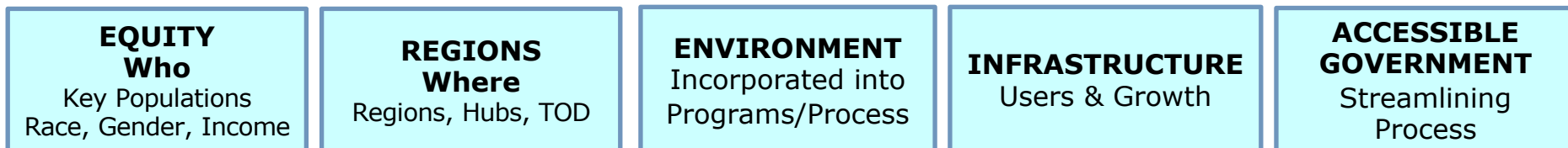
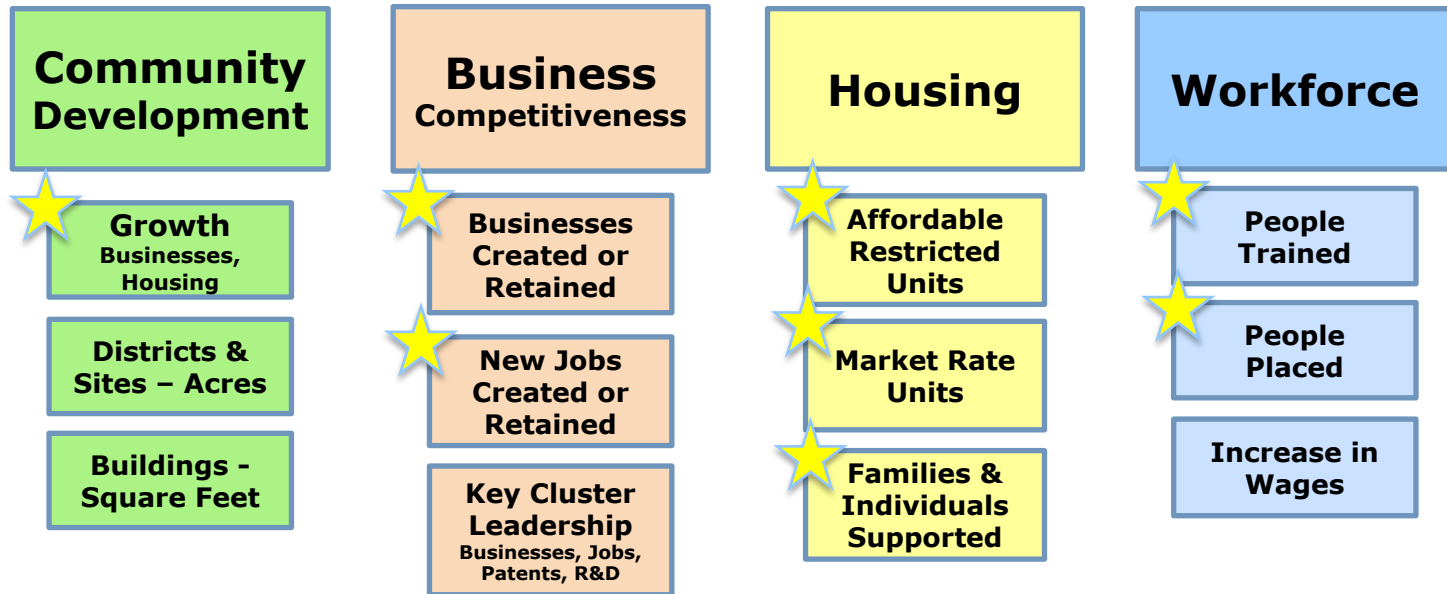
MassTech Collaborative
FY2021 Report



Economic Development Plan

Key Outcome Metrics

Economic Development Plan Pillars & Principles



Investment Leveraged from Other Sources - \$

Engagement & Technical Assistance – Contact with Individuals & Companies



Key Metric



Agency Mission

- **Mission:** We strengthen the competitiveness of the tech and innovation economy by driving strategic investments, partnerships, and insights that harness the talent of Massachusetts.
- **Contribution to Partnerships for Growth:** Mass Tech Collaborative primarily contributes to the pillars of Business Competitiveness, specifically Key Cluster Leadership, and Workforce. Mass Tech also contributes to the principle of Regions with its statewide approach. The Last Mile and Mass Broadband 123 programs contribute to Community Development.



Agency Goals

- **Agency Goal 1:** Drive and accelerate innovation in key clusters to grow the Commonwealth's economy.
- **Agency Target for Goal 1:** Reach and support 150 companies, colleges and universities, and other entities outside of Boston.
- **Results of Goal 1:** Over 300 companies, colleges and universities, and other entities outside of Boston through programs, grants and events.
- **Agency Goal 2:** Support and advance job growth in key clusters throughout Massachusetts.
- **Agency Target for Goal 2:** 325 jobs created or retained, and 600 people trained.
- **Results of Goal 2:** 743 jobs created or retained, and 653 people trained.
- **Agency Goal 3:** Expand connectivity and access to the tech and innovation economy across the Commonwealth.
- **Agency Target for Goal 3:** Approximately 26,000 people in 25 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.
- **Results of Goal 3:** 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.



Agency Goals

- **Agency Goal 4:** Support the diversity of the tech and innovation ecosystem and economy across industry, academia, government, and stakeholders.
- **Agency Target for Goal 4:** 100 individuals and companies of diverse backgrounds (including minority or women-owned businesses) participating in programs or initiatives.
- **Results of Goal 3:** 233 individuals and companies of diverse backgrounds (including minority or women-owned businesses) participating in programs or initiatives.
- **Agency Goal 5:** Foster economic growth and collaboration in key clusters to strengthen the state's economy.
- **Agency Target for Goal 5:** 40 partnerships across academia, industry, and government as developed by the Innovation Institute, MassCyberCenter, M2I2 and MeHI.
- **Results of Goal 5:** 78 partnerships across academia, industry, and government as developed by MassTech's divisions.



Innovation Institute

- **Program Description:** 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.
- **Program Budget:** \$2,500,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness and Workforce
- **COVID – 19 Response:** We continue to work with industry groups and key stakeholders on new business growth models amidst COVID-19. Examples of this work are our support the Manufacturing-Emergency Response Team and other COVID-19 emergency support through the Intrapreneur Challenge and other measures.



Innovation Institute

- **Fiscal Year Goal 1:** 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.
- **Fiscal Year Target 1:** 25 businesses, colleges/universities, and other entities participating in working groups, partnerships, and collaborations (ex: FinTech Working Group meetings, Robotics Steering Committee meetings, AI Task Force).
- **Results of Goal 1:** Over 70 businesses, colleges/universities, and other entities participating in 32 working group meetings, partnerships, and collaborations.
- **Fiscal Year Goal 2:** Support opportunities to profile the strengths and unique attributes of the Massachusetts innovation economy in an effort to disseminate information and attract project participants in order to increase the effectiveness of the Innovation Institute's economic development projects and strategies and to support and disseminate best practices.
- **Fiscal Year Target 2:** Engage in 10 regional initiatives outside the Boston area, which offer the opportunity for MassTech and EOHED participation in order to link stakeholders to opportunities for enhancing economic development impacts in the regions.
- **Results of Goal 2:** 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



- **Program Description:** 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.
- **Program Budget:** \$5,000,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness and Workforce
- **COVID – 19 Response:** FY21 investments will prioritize opportunities targeted towards COVID-19. The Innovation Institute will be developing a new R&D Fund solicitation which will involve the deployment of technologies to address COVID-19 resiliency. In addition, the R&D Fund has funded ventilator development projects (automated resuscitators) in partnership with the Manufacturing Emergency Response Team (M-ERT) effort to respond to the COVID-19 pandemic. This work will continue in FY21 as we work with partners on the evaluation, validation and eventual dissemination of the ventilators.

Collaborative Research & Development Matching Grant Program



- **Fiscal Year Goal 1:** Disseminate and promote research center technology development and research findings.
- **Fiscal Year Target 1:** 10 IP agreements and technology licenses as a result of the current investment portfolio of the Collaborative Research & Development Matching Grant Program.
- **Results of Goal 1:** 17 IP agreements and technology licenses executed by R&D Fund grantees.
- **Fiscal Year Goal 2:** Support industry participation in program through R&D partnerships and technology development & deployment opportunities.
- **Fiscal Year Target 2:** Increase industry participation at funded research centers by 50 firms.
- **Results of Goal 2:** Increase of 65 participating firms, via AI Jumpstart and revised R&D Fund solicitation workshop sessions held on Defense & Aerospace, Cybersecurity, Robotics, Digital Health, and Fintech/Blockchain.



Internship

- **Program Description:** The MassTech Intern Partnership (MTIP) 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.
- **Program Budget:** \$675,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness & Workforce
- **COVID – 19 Response:** For summer 2020, participating companies were asked to demonstrate their response to COVID-19 as part of the application process. When launching the program for summer 2021, we will evaluate the program and make additional changes in response to the ongoing pandemic.



Internship

- **Fiscal Year Goal 1:** 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.
- **Fiscal Year Target 1:** 125 internships supported at quality MA-based technology firms, with 31 of those companies (25% of total) participating in program for the first time.
- **Results of Goal 1:** 141 total internships 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.
- **Fiscal Year Goal 2:** Increase diversity of the participating companies and interns.
- **Fiscal Year Target 2:** 25% of total interns from a diverse background or placed at minority/women-owned businesses.
- **Results of Goal 2:** 41% of the total interns came from a diverse background or placed at minority/women-owned businesses.



Mentorship

- **Program Description:** 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.
- **Program Budget:** \$675,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness
- **COVID – 19 Response:** MassTech will utilize the results of an ecosystem assessment to begin implementing a Strategic Framework for the support of Entrepreneurs in Massachusetts that will include 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.



Mentorship

- **Fiscal Year Goal 1:** 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.
- **Fiscal Year Target 1:** 75 companies enhanced by programs supported by the Mentorship initiative.
- **Results of Goal 1:** 87 companies supported by the Mentorship initiative programs (including the Intrapreneur Challenge, Venture Forum, EforAll – Holyoke and Cape Cod, Worcester State University, BlueSwell/SeaAhead).
- **Fiscal Year Goal 2:** Increase the diversity of the entrepreneur mentoring programs.
- **Fiscal Year Target 2:** 25% of total participating Mentorship-supported companies/firms are minority/women-owned companies.
- **Results of Goal 2:** 35% of the total participating Mentorship-supported companies were minority-owned/founded (mainly through the Intrapreneur Challenges and Venture Forum).



Global Entrepreneur in Residence (GEIR)

- **Program Description:** 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.
- **Program Budget:** \$0
- **Partnerships for Growth Goal Alignment:** Business Competitiveness
- **COVID – 19 Response:** Immigration policy & travel restrictions negatively impacting program, which is at risk of complete shutdown.
- **Fiscal Year 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.
- **Fiscal Year Target 1:** 30 entrepreneur applicants and 10 participating entrepreneurs in the GEIR program.
- **Results of Goal 1:** 74 entrepreneur applicants and 8 participating entrepreneurs in the UMass Boston GEIR program.



Diversity in Tech

- **Program Description:** The Innovation Institute awarded Tech Talent Diversity Initiative grants in the fall of 2019 to Hack.Diversity, a project of the New England Venture Capital Association to support the expansion of their program consisting of 8 month fellowships for Black and LatinX tech talent, including mentorship and professional development while fellows are placed at area employers; and Tech Foundry to support a “ramp to hire” program and diversity, equity and inclusion training for IT employers in the Pioneer Valley. The Hack.Diversity award is also being used to organize the development of the Hack.Diversity alumni cohort as well as to develop plans for a second Hack.Diversity program located outside of the Boston region.
- **Program Budget:** \$469,234 from FY20
- **Partnerships for Growth Goal Alignment:** Business Competitiveness
- **COVID – 19 Response:** Both programs have moved to primarily virtual operation while maintaining participation from students, fellows, mentors, and instructors.



Diversity in Tech

- **Fiscal Year Goal 1:** Support participation of students from diverse backgrounds in programs that provide training, mentoring, and professional development services relevant to careers in technology.
- **Fiscal Year Target 1:** 75 individuals participating in Tech Talent Diversity Initiative programs.
- **Results of Goal 1:** 111 individuals participating in the Tech Talent Diversity Initiative programs –Hack.Diversity and Tech Foundry.
- **Fiscal Year Goal 2:** 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.
- **Fiscal Year Target 2:** 40 program graduates in either paid tech employment or continuing education.
- **Results of Goal 2:** 86 individuals (63 from Hack.Diversity and 23 from Tech Foundry) have secured paid internships, entry level jobs, or are pursuing higher education.



Digital Health Initiative

- **Program Description:** 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.
- **Program Budget:** \$2,365,995
- **Partnerships for Growth Goal Alignment:** Business Competitiveness – Key Cluster Leadership
- **COVID – 19 Response:** Adjusted program operational goals, such as the Sandbox call for proposals that will help with the recovery from COVID-19.



Digital Health Initiative

- **Fiscal Year Goal 1:** 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).
- **Fiscal Year Target 1:** 8 companies receiving Sandbox Grants to work with Digital Health Sandbox Network sites.
- **Results of Goal 1:** 7 companies received Sandbox Grants to work with 4 different Digital Health Sandbox Network sites.
- **Fiscal Year Goal 2:** Provide support to high-potential digital health startups across Massachusetts to continue to grow the digital health cluster.
- **Fiscal Year Target 2:** 100 jobs created at high-potential scaling digital health companies; 380 MA-based digital health companies identified in MeHI's stakeholder database; 50 sponsored or hosted events; and 25 companies participating in the MassChallenge HealthTech program.
- **Results of Goal 2:** 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 participating in MassChallenge HealthTech program.



Last Mile Program

- **Program Description:** 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.
- **Program Budget:** \$5,652,053
- **Partnerships for Growth Goal Alignment:** Community Development
- **COVID – 19 Response:** 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.
- **Fiscal Year Goal 1:** Continue to expand broadband access in Last Mile Towns.
- **Fiscal Year Target 1:** Approximately 11,000 people in 13 additional Last Mile Towns with access to fully operational broadband networks (bringing the total to 25 Last Mile Towns that have 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.
- **Results of Goal 1:** 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.



M2I2

- **Program Description:** 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.
- **Program Budget:** \$16,250,000 (not administered through Mass Tech)
- **Partnerships for Growth Goal Alignment:** Business Competitiveness
- **COVID – 19 Response:** Coordination of the Manufacturing Emergency Response Team (MERT) 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 will fund \$6M towards pivoting manufacturers to make PPE.



M2I2

- **Fiscal Year Goal 1:** Develop collaborative partnerships through projects that advance Massachusetts' manufacturing innovation ecosystems.
- **Fiscal Year Target 1:** 10 partnerships outside of the Boston area.
- **Results of Goal 1:** Over 30 partnerships related to M2I2 and over 50 partnerships related to MERT.
- **Fiscal Year Goal 2:** Advance job growth across the state's advanced manufacturing sector.
- **Fiscal Year Target 2:** 100 manufacturing jobs created or saved (as result of both M2I2 and MERT), and 100 people trained.
- **Results of Goal 2:** 300 jobs created across the state and over 250 people trained.



Manufacturing Training Program

- **Program Description:** 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.
- **Program Budget:** \$2,500,000 (not administered through Mass Tech)
- **Partnerships for Growth Goal Alignment:** Workforce
- **COVID – 19 Response:** All regions are developing a “Plan B” in the case that the vocational schools do not re-open for in person workforce training programs in the fall (and beyond). These plans include, moving to fully online courses (through community colleges and other providers), hybrid courses combining online to on-the-job-training, and apprenticeship type models.
- **Fiscal Year Goal 1:** Foster talent and advance job growth in the advanced manufacturing sector.
- **Fiscal Year Target 1:** 600 people trained and 350 people placed after training.
- **Results of Goal 1:** 522 enrolled in training, 403 people completed training, and 208 people placed after training.



MassCyberCenter

- **Program Description:** MassCyberCenter will enhance conditions for economic growth through outreach to the cybersecurity ecosystem while fostering cybersecurity resilience.
- **Program Budget:** \$950,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness and Community Development
- **COVID – 19 Response:** In the face of COVID-19 themed cyber attacks, MassCyberCenter conducts regular meetings with Cyber Resilient Massachusetts Working Group (CRMWG) members and partnered with MA Municipal Association to directly support municipalities with best practices tips. Cyber Incident Response Plan Workshops and this year's Cybersecurity Forum will be held virtually.



MassCyberCenter

- **Fiscal Year Goal 1:** Promote cybersecurity workforce initiatives via the Cybersecurity Training and Education Working Group (CTEWG), and support the cybersecurity industry via the Cybersecurity Forum.
- **Fiscal Year Target 1:** 135 companies, colleges/universities, and entities participating in the monthly meetings of the Cybersecurity Training and Education Working Group (CTEWG) and the annual Massachusetts Cybersecurity Forum in October.
- **Results of Goal 1:** 161 companies, colleges/universities, and entities participated in the CTEWG meetings and the October 2020 Massachusetts Cybersecurity Forum.
- **Fiscal Year Goal 2:** Foster cyber resiliency through the convening of the CRMWG and the Cyber Incident Response Plan Workshops for the Commonwealth's municipalities.
- **Fiscal Year Target 2:** 255 communities and individuals participating in the monthly meetings of the CRMWG and 10 Cyber Incident Response Plan Workshops sessions.
- **Results of Goal 2:** 36 organizations participated in the CRMWG meetings, and 268 individuals representing 166 communities participated in the Cyber Incident Response Plan Workshops.