

Office of Performance

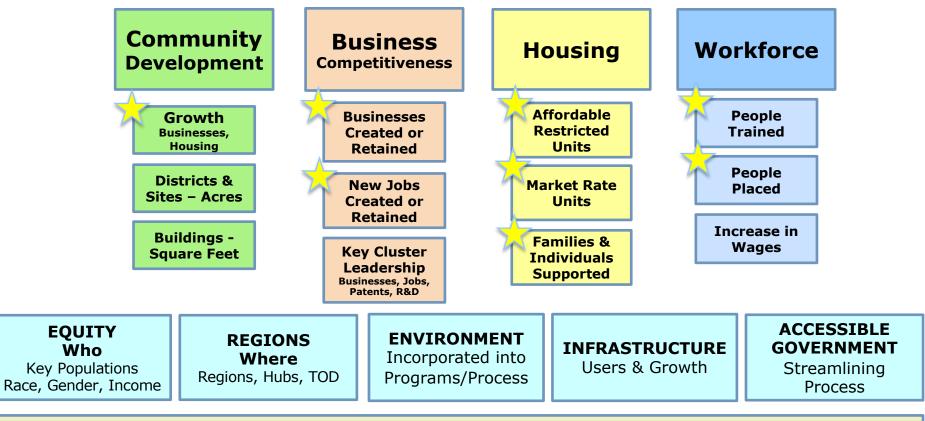
Management Oversight (OPMO)

MassTech Collaborative FY2022 Report

Economic Development Plan Key Outcome Metrics



Economic Development Plan Pillars & Principals



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.



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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:** Supported approx. 300 companies, colleges and universities, and other entities outside of Boston.
- Agency Goal 2: Support and advance job growth in key clusters throughout Massachusetts.
- Agency Target for Goal 2: 350 jobs created or retained, and 625 people trained.
- **Results of Goal 2:** Approximately 765 jobs created or retained, and 277 people trained. NOTE: In FY22, the Manufacturing Training program shifted to calendar year programming in January 2022.
- Agency Goal 3: Expand connectivity and access to the tech and innovation economy across the Commonwealth.
- Agency Target for Goal 3: Approximately 42,000 people in 38 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 38,000 in 33 Last Mile towns with broadband access via completed projects.
- 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: 50 individuals and companies of diverse backgrounds (including minority or women-owned businesses) participating in programs or initiatives.
- **Results of Goal 4:** 240 individuals and companies of diverse backgrounds participating in programs and initiatives.



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. As an agent of the Commonwealth, the Innovation Institute uses this model to fuel economic growth, create wealth and generate improvements in the regions' standard of living. 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
- **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:** 50 businesses and other entities engaged and participating in key cluster working groups, partnerships, and collaborations (ex: FinTech Working Group meetings, Robotics Steering Committee meetings, AI Task Force), leading to the retention and expansion of technology firms in the Commonwealth.
- **Results of Goal 1:** 80 businesses and other entities engaged and participating in working groups, partnerships, and collaborations.



Innovation Institute, continued

- **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 to expand innovation capacity to underserved areas and fortify critical innovation elements, such as entrepreneurship, research & development, and supply chain development.
- Results of Goal 2: 13 regional initiatives outside the Boston area. This includes multiple initiatives in Gateway Cities (such as Worcester, Fitchburg and Springfield), entrepreneurship initiatives that will impact Western MA & Middlesex County, Blue Economy initiatives in both the North Shore and South Shore regions, and demonstration projects that will bring economic benefits to Worcester County and Essex County.

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:** \$8,000,000
- Partnerships for Growth Goal Alignment: Business Competitiveness and Workforce
- 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, contributing to the retention, expansion, and/or creation of Massachusetts-based businesses.
- **Results of Goal 1:** 37 IP agreements and technology licenses, while adding 35 companies participating at the funded research centers and spinning out 4 new startups. In addition the investment in WHOI's CMR resulted in the creation of a new venture fund (Propeller VC) designed to take cutting edge technologies from lab to market.
- Fiscal Year Goal 2: Increase industry participation in the program through a focus on R&D partnerships, technology development, and deployment opportunities.
- **Fiscal Year Target 2:** 50 companies and other entities engaged via increased industry participation at funded research centers, leading to increased retention and/or expansion at those companies.
- **Results of Goal 2:** 84 companies and other entities engaged via industry participation and partnerships at funded research centers.



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: Not included in FY22 Budget. Goals will be met by projects supported by FY21 funds.
- Partnerships for Growth Goal Alignment: Business Competitiveness and Workforce
- 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: 130 internships supported at quality MA-based technology firms, with 32 of those companies (25% of total) participating in program for the first time.
- **Results of Goal 1:** 149 internships supported, with 25 companies (32% of total) participating in the program for the first time. These companies hired 44 interns (30% of total).
- 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:** Of the interns who provided identification, 56% of total interns are from a diverse background and 33% of total interns are women.



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:** Not included in FY22 Budget. Goals will be met by projects supported by FY21 funds.
- Partnerships for Growth Goal Alignment: Business Competitiveness
- **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:** 50 companies supported by the Mentorship initiative programs, leading to the retention and/or expansion of those companies.
- **Results of Goal 1:** 75 companies supported by Mentorship initiative programs this includes: 67 companies supported by Pathways to Scale grants to build mentor networks for scaling companies and 8 companies supported by Valley Venture Mentor's Business Triage program.
- 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/womenowned companies.
- **Results of Goal 2:** 51% of total participating Mentorship-supported companies were minority-led and 46% were led by female founders.



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:** This program was not funded in the Governor's FY22 budget. Goals will be met by projects supported by FY21 funds.
- Partnerships for Growth Goal Alignment: Business Competitiveness
- **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:** 25 entrepreneur applicants and 10 participating entrepreneurs in the GEIR program, leading to the retention of those companies in the Commonwealth.
- **Results of Goal 1:** 47 entrepreneur applicants and 5 participating entrepreneurs.



Diversity in Tech

- **Program Description:** The Diversity in Tech 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.
- **Program Budget:** Goals will be met by projects supported by FY20 & FY21 funds.
- Partnerships for Growth Goal Alignment: Business Competitiveness
- **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: 30 individuals participating in Tech Talent Diversity Initiative programs.
- **Results of Goal 1:** 132 individuals participated in Hack.Diversity, Tech Talent Diversity Initiative funded-program.
- **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: 15 program graduates in either paid tech employment or continuing education.
- **Results of Goal 2:** 105 of Hack.Diversity participants (80% of total) secured permanent employment by December 2021.



Digital Health Initiative

- **Program Description:** The Digital Health Initiative is focused on supporting the Governor's Digital Health Council and its recommendations, and developing, launching or investing in programs to grow the digital health ecosystem.
- **Program Budget:** \$2,178,175 ٠
- Partnerships for Growth Goal Alignment: Business Competitiveness Key Cluster Leadership ٠
- Fiscal Year Goal 1: Enable collaboration through support for digital health companies to test and implement their ٠ products and services in MA digital health sandbox environments to help grow the Commonwealth's digital health cluster via the Digital Health Sandbox Grant Program and the COVID-19 Recovery Challenges.
- **Fiscal Year Target 1:** 8 companies retained and receiving Sandbox Grants to work with at least 4 of the Digital Health ٠ Sandboxes. 4 companies retained and working with Digital Health Sandboxes on validation projects through the first COVID-19 Recovery Challenge.
- Results of Goal 1: 10 companies retained and receiving Sandbox Grants or COVID-19 Recovery Challenge Programs to ٠ work with 5 of the Digital Health Sandboxes.
- Fiscal Year Goal 2: Provide support to high-potential digital health startups and digital health startups founded or led ٠ by women or minorities across MA to continue to grow and diversify the digital health cluster.
- Fiscal Year Target 2: 400 MA-based digital health companies identified in MeHI's stakeholder database; 150 jobs ٠ created at high-potential scaling digital health companies; and 50% of startups participating in the COVID-19 Recovery Challenges co-founded or led by women or minorities.
- **Results of Goal 2:** 376 MA-based digital health companies identified in MeHI's stakeholder database; 819 job openings ٠ on the Mass Digital Health jobs board between July 2021 and January 2022 (issues with the analytics platform limit reporting past January 2022); 80% of startups participating in the COVID-19 Recovery Challenges co-founded or led by women or minorities. 12



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:** \$3,429,705
- Partnerships for Growth Goal Alignment: Community Development
- Fiscal Year Goal 1: Continue to expand access in Last Mile Towns.
- Fiscal Year Target 1: Approximately 12,000 people in 13 additional Last Mile Towns with access to fully
 operational broadband networks (bringing the total to 38 Last Mile Towns that have completed broadband
 projects). NOTE: The population estimate is based on 2010 census data and premise count data, and provide
 access to 96% of the population.
- **Results of Goal 1:** Approximately 10,000 people in 9 additional Last Mile Towns with access to fully operational broadband networks (bringing the total to 33 Last Mile Towns with completed broadband projects). NOTE: The completion of a four town fixed wireless network was delayed due to a lengthy permitting process required for access to DCR land.



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: \$12,000,000 (not administered through Mass Tech)
- Partnerships for Growth Goal Alignment: Business Competitiveness
- **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 that align with key focus areas for the state.
- **Results of Goal 1:** 30 partnerships formed from the 17 new programs started in 2022, with over \$176M in revenue generated from private funding.
- Fiscal Year Goal 2: Advance job growth across the state's advanced manufacturing sector.
- Fiscal Year Target 2: 100 manufacturing jobs created or saved and 100 people trained.
- **Results of Goal 2:** 215 manufacturing jobs created (total includes 47 entry level jobs, 40 technician jobs, and 78 engineering jobs).



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
- Partnerships for Growth Goal Alignment: Workforce
- Fiscal Year Goal 1: Foster talent and advance job growth in the advanced manufacturing sector.
- Fiscal Year Target 1: 600 people trained and 300 people placed after training.
- **Results of Goal 1:** 303 people enrolled in training, 147 people completed training, and 76 people placed in employment after training. NOTE: In FY22, the program shifted to calendar year programming in January 2022 in order to provide continuous year-round programming, so these results are from January to June 2022.



MassCyberCenter

- **Program Description:** MassCyberCenter will enhance conditions for economic growth through outreach to the cybersecurity ecosystem while fostering cybersecurity resilience.
- **Program Budget:** \$2,450,000
- Partnerships for Growth Goal Alignment: Business Competitiveness and Community Development
- **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 and other entities retained by participating in the monthly meetings of the Cybersecurity Training and Education Working Group (CTEWG) and the annual Massachusetts Cybersecurity Forum.
- **Results of Goal 1:** 172 companies and other entities/organizations participated in CTEWG meetings and annual Massachusetts Cybersecurity Forum.
- **Fiscal Year Goal 2:** Foster cyber resiliency through the convening of the Cyber Resilient Massachusetts Working Group (CRMWG) and convening Massachusetts Municipal Cybersecurity Summit.
- **Fiscal Year Target 2:** 255 communities, agencies and individuals participating in the monthly meetings of the CRMWG and Massachusetts Municipal Cybersecurity Summit.
- **Results of Goal 2:** Over 440 entities, including representatives from municipalities, public libraries, local power companies, private sector companies, and state and federal government, participated in monthly CRMWG meetings and the Massachusetts Municipal Cybersecurity Summit.