



# Office of Performance Management Oversight (OPMO)

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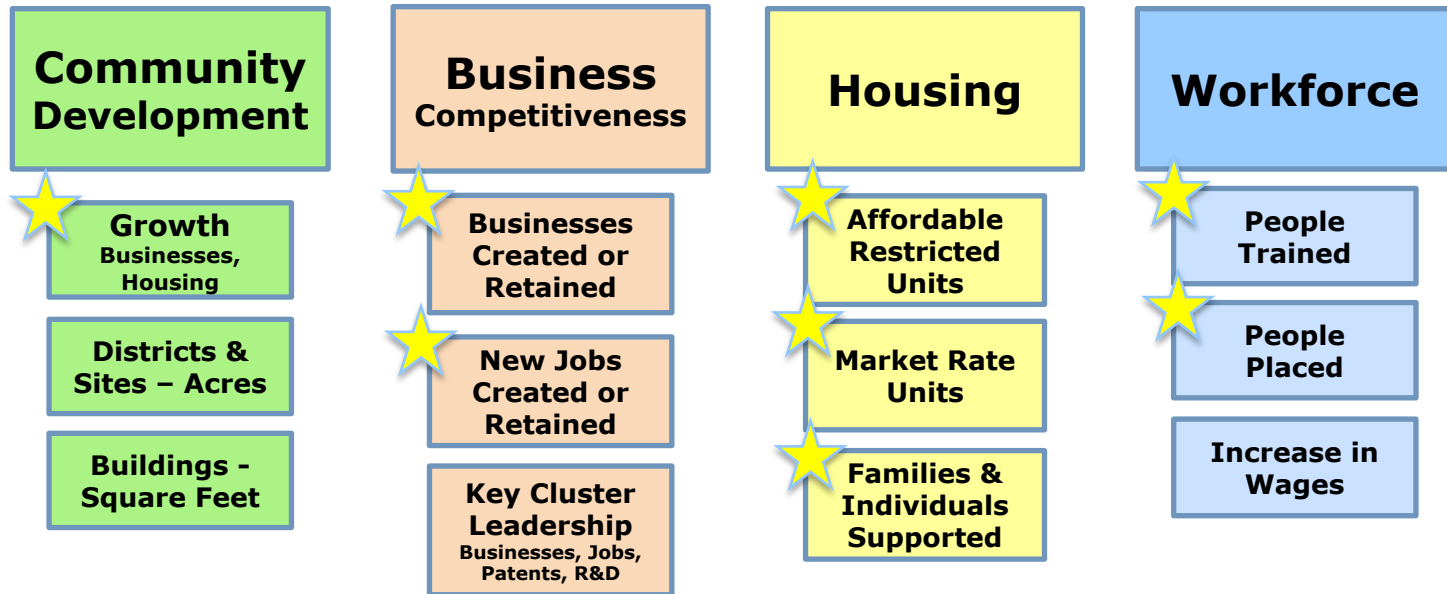
**Massachusetts Technology Collaborative  
FY2023 Report**



# Economic Development Plan

## Key Outcome Metrics

### Economic Development Plan Pillars & Principals



Investment Leveraged from Other Sources - \$

Engagement & Technical Assistance – Contact with Individuals & Companies



# Agency Mission

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- **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

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- **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 200 companies, colleges and universities, and other entities outside of greater Boston across MassTech programs.
- **Agency Goal 2:** Support and advance job growth in key clusters throughout Massachusetts.
- **Agency Target for Goal 2:** 500 jobs created or retained, and 1000 people trained across MassTech programs.
- **Results of Goal 2:** Over 600 jobs created or retained, and 450 people trained across MassTech programs.
- **Agency Goal 3:** Expand connectivity and access to the tech and innovation economy across the Commonwealth.
- **Agency Target for Goal 3:** Approximately 44,000 people in 42 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 41,000 people in 39 Last Mile towns with broadband access via completed broadband 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:** 100 individuals and companies of diverse backgrounds (including minority or women-owned businesses) participating in programs or initiatives.
- **Results of Goal 4:** 100 individuals and companies of diverse backgrounds participating in Tech & Innovation Ecosystem grantees' programs, Internship programs, and Mentorship programs.



# Innovation Institute

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- **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 Leadership Committee), leading to the retention and expansion of technology firms in the Commonwealth.
- **Results of Goal 1:** Over 150 businesses and entities engaged and or participating in key strategic entities including the Robotics Industry Steering Committee, the FinTech Working Group, Blockchain Advisory Group, North of Boston Innovation Ecosystem Competitiveness Steering Committee, Investment Advisory Committees and the Pioneer Valley Quantum Innovation Hub Consortium.



## Innovation Institute, continued

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- **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:** Engaged in 20 regional initiatives, including four Mentorship initiatives (Worcester, North Central MA, Northampton, and a state-wide effort led by North Adams-based Lever), Workforce initiatives in three regions (Northeast, Pioneer Valley, and the Berkshires), R&D/Tech & Innovation initiatives in eight regions (Dartmouth, Lowell, Worcester, Quincy, Bedford, Amherst, Springfield, Gloucester), a Quantum initiative that engages with entities in the four Western Massachusetts regions (Berkshire, Franklin, Hamden and Hampshire Counties), and a North of Boston Innovation Ecosystem Regional Competitiveness Review.



# Collaborative Research and Development Matching Grant Program

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- **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:** \$7,000,000
- **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:** 12 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:** 19 IP agreements and technology licenses in technology areas such as Quantum Computing, Medical Device Development, and Advanced Materials.
- **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:** Over 100 companies and entities engaged with the current R&D Fund portfolio of investments, including Quantum Computing, Marine & Environmental Testing, and Space Sciences & Technology sectors.



# Tech and Innovation Ecosystem Grant Program

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- **Program Description:** The Tech and Innovation Ecosystem Grant program is designed to support innovation-based economic development, within the technology and innovation ecosystem across the Commonwealth, by supporting creative ideas and stimulating collaboration with industry that strengthens key technology and innovation sectors.
- **Program Budget:** \$9,000,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness and Workforce
- **Fiscal Year Goal 1:** Improve competitiveness of technology and innovation sector companies.
- **Fiscal Year Target 1:** 30 participating companies retained in Massachusetts through product development, workforce development, job creation and commercialization activities.
- **Results of Goal 1:** Over 60 companies participated in Tech & Innovation initiatives.
- **Fiscal Year Goal 2:** Improve conditions overall for job growth, contributing to a competitive advantage for existing and emerging industry clusters in Massachusetts.
- **Fiscal Year Target 2:** 50 diverse people receiving specialized skills identified as priorities by industry participants within key technology & innovation sectors.
- **Results of Goal 2:** Even though many of the funded projects were still in the start-up phase, this portfolio of investments resulted in 52 diverse individuals receiving specialized skills within key technology & innovation sectors such as Autonomous Systems, Blockchain, and Fintech.





# Internship Program

- **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 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:** 160 internships placed at quality MA-based start-up technology firms, with 40 of those companies (25% of total) participating in program for the first time.
- **Results of Goal 1:** As a result of market conditions affecting tech start-ups, we continued to see a decreasing demand for internships. This resulted in only 106 internships at 66 companies, with 22 of those companies (33% of total) participating for the first time. The Innovation Institute is currently exploring strategies to align closer to industry needs. In addition, the Innovation Institute's Tech Talent Diversity Initiative assisted in placing over 130+ people from diverse backgrounds in attaining internships or entry level jobs in the tech industry
- **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:** 45.3% of total interns from a diverse background.



# Mentorship Program

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- **Program Description:** The Innovation Institute supports entrepreneur mentoring as means to building regional start-up ecosystems and communities of innovation across Massachusetts. These efforts align Entrepreneur Support Organizations (ESOs) and resources in their respective communities around a common mission of helping more local entrepreneurs succeed.
- **Program Budget:** \$675,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness
- **Fiscal Year Goal 1:** Aid Entrepreneur Support Organizations (ESOs) or other civic, nonprofit, or academic institutions in their efforts to develop regional entrepreneur ecosystems, generating local entrepreneurial growth and productivity.
- **Fiscal Year Target 1:** Engage with 30 entrepreneurial ecosystem leaders building startup communities across the Commonwealth.
- **Results of Goal 1:** More than 50 entrepreneurs and community leaders participated in advisory committees related to four regional Mentorship initiatives in Worcester, Northampton, North Central Massachusetts, and on a statewide level via a virtual community being built to support Massachusetts early-stage founders.
- **Fiscal Year Goal 2:** Support mentoring and entrepreneurship programming with a focus on models that expand access to entrepreneurship within underserved regions and populations.
- **Fiscal Year Target 2:** 40 entrepreneurs launching and expanding companies because of Mentorship-supported programs.
- **Results of Goal 2:** 69 companies launched or scaled/expanded through the Pathway to Scale's 1:1 mentor matching, peer networks, and entrepreneurial workshops. Of those companies, 51% of companies are led by minority founders and 46% are led by female founders.



# Digital Health Initiative

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- **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:** \$1,454,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness – Key Cluster Leadership
- **Fiscal Year Goal 1:** Enable innovation in priority areas through support for digital health companies in testing and validating their 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.
- **Fiscal Year Target 1:** 6 companies with solutions that focus on aging, behavioral health, and/or equitable access to care receiving Sandbox Grants to work with at least 3 of the Digital Health Sandboxes.
- **Results of Goal 1:** 6 companies with solutions that focus on aging, behavioral health, and/or equitable access to care receiving either Healthy Aging Challenge or Sandbox grants to work with 4 of the Digital Health Sandboxes.
- **Fiscal Year Goal 2:** Provide support to high-potential digital health startups and digital health startups founded or led by women or minorities across MA to continue to grow and diversify the digital health cluster.
- **Fiscal Year Target 2:** 385 MA-based digital health companies identified in MeHI's stakeholder database; 150 jobs created at high-potential, scaling digital health companies; and 50% of startups participating in the Digital Health Sandbox Program co-founded or led by women or minorities.
- **Results of Goal 2:** 376 MA-based digital health companies identified in MeHI's stakeholder database; 88% of companies participating in the Healthy Aging Challenge were co-founded or led by women or minorities. MeHI sent a survey to 15 scaling companies, but only received responses from three companies. Among the three companies that responded, 46 new jobs were created.



# M2I2

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- **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:** \$10,000,000 (not administered through MassTech)
- **Partnerships for Growth Goal Alignment:** Business Competitiveness and Workforce
- **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:** 34 new partnerships outside of greater Boston.
- **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:** 89 manufacturing jobs created, 68 manufacturing jobs saved, and 122 people trained.



# MA Manufacturing Accelerate Program (MMAP)

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- **Program Description:** The Commonwealth's MMAP program aims to help Massachusetts-based small to medium sized manufacturers prepare their businesses to meet the demands of Industry 4.0 and the manufacturing of new technologies and innovations that align with key industries in the Commonwealth. The program provides capital for equipment purchases and creates partnerships between manufacturing and non-profit partners to help manufacturers drive efficiencies and scale their business.
- **Program Budget:** \$6,000,000
- **Partnerships for Growth Goal Alignment:** Business Competitiveness and Workforce
- **Fiscal Year Goal 1:** Develop collaborative partnerships through projects that advance Massachusetts' manufacturing innovation ecosystems.
- **Fiscal Year Target 1:** 20 partnerships between manufacturers and non-profit partners that help manufacturers scale their business and develop a cohesive, resilient advanced manufacturing ecosystem.
- **Results of Goal 1:** 26 partnerships between manufacturers and non-profit partners, including MassMEP, the Berkshire Innovation Center, MassHire, the Greater Boston Manufacturing Partnership, MassHire, the Northeast Advanced Manufacturing Consortium, MassRobotics, and The Venture Forum.
- **Fiscal Year Goal 2:** Advance job growth across the state's advanced manufacturing sector.
- **Fiscal Year Target 2:** 100 manufacturing jobs created or saved across the state.
- **Results of Goal 2:** Between 146-346 jobs created or saved, based upon expected hires needed to operate new equipment purchased by MMAP manufacturers.



# Manufacturing Training Program

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- **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 350 people placed after training.
- **Results of Goal 1:** Total of 29 training programs were offered from January to June 2023. 234 people enrolled in training, 163 people completed training, and 43 people placed after training. The results are lower due to the change in RFP release date to calendar year training (rather than fiscal year) and contracting for services



# MassCyberCenter

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- **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
- **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 connected by 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:** 289 total companies and other entities connected by participating the CTEWG, annual Cybersecurity Forum, Cybersecurity Mentorship Program, and Health Care Provider Cybersecurity Calls.
- **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, Tabletop Exercises and the Massachusetts Municipal Cybersecurity Summit.
- **Results of Goal 2:** 262 total communities, companies and entities participating in the CRMWG, Tabletop Exercises and the Massachusetts Municipal Cybersecurity Summit.



# Cyber SOC and Range (Mass Cyber Consortium)

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- **Program Description:** Through the operations of the Massachusetts Cybersecurity Consortium, advance the imperatives of undersecurity, underemployment, business development and employee training through the use of statewide cybersecurity operations centers and cyber range Cybersecurity Centers of Excellence (CCEs).
- **Program Budget:** \$1,500,000
- **Partnerships for Growth Goal Alignment:** Workforce, Community Development, Business Competitiveness
- **Fiscal Year Goal 1:** Establish non-profit organization to provide governance to the Massachusetts Cybersecurity Consortium and support the development of Cybersecurity Centers of Excellence and advance job growth across the state's cybersecurity sector.
- **Fiscal Year Target 1:** 2 range CCEs operational using range services and training 75 students, adult learners/people in academic programs or professional certifications.
- **Results of Goal 1:** 2 range CCEs operational and 133 students trained.





# Last Mile Program

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- **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:** \$4,057,251
- **Partnerships for Growth Goal Alignment:** Community Development
- **Fiscal Year Goal 1:** Continue to expand access in Last Mile Towns.
- **Fiscal Year Target 1:** Approximately 9,000 people in 10 additional Last Mile Towns with access to fully operational broadband networks (bringing the total to 42 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 5,800 people in 7 additional Last Mile Towns with access to fully operational broadband networks. These results are lower than expected due to delays in the 4 WiValley towns.