MINUTES

TWO HUNDRED AND SIXTY FIFTH MEETING

of the

EXECUTIVE COMMITTEE

of the

MASSACHUSETTS TECHNOLOGY PARK CORPORATION

February 5, 2020 Boston, Massachusetts

The Two Hundred Sixty Fifth Meeting of the Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation was held on February 5, 2020, at the Massachusetts Technology Collaborative, Two Center Plaza, Boston, Massachusetts, pursuant to notice duly given to the Directors and publicly posted on the Mass Tech Collaborative website with corresponding notice provided to the Office of the Secretary of State.

The following members of the Mass Tech Collaborative Executive Committee were present and participated: Secretary of Housing and Economic Development Mike Kennealy (represented by Damon Cox of the Executive Office of Housing and Economic Development), Anne Margulies, Rupa Cornell, Pam Reeve, Julie Chen and Christina Royal.

The following members of the Mass Tech Collaborative Board of Directors were present and participated: Michael Greeley

The following members of the Mass Tech Collaborative Staff were present: Carolyn Kirk, Jennifer Saubermann, Michael Baldino, James Byrnes, Laurance Stuntz, Jasmijn Rompa, Ira Moskowitz, Pat Larkin, Lisa Erlandson, Brianna Wehrs, Stephanie Helm, Brian Noyes, Holly Lucas Murphy, Joseph Downing and Kelly Kleanthous.

Mr. Cox observed the presence of quorum of the Executive Committee and called the Meeting to order at 2:02 p.m.

Agenda Item I Approval of Minutes

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation, acting on behalf of the full Board pursuant to section three of Chapter Forty J of the General Laws of the Commonwealth, hereby adopts the Draft Minutes of the open session portion of the One Hundred and Sixty Fourth Meeting of the Executive Committee, held on December 18, 2019 in Boston, Massachusetts, as the formal Minutes thereof.

Agenda Item II Report of the Chairperson

Mr. Cox delivered the report of the Chairperson. Mr. Cox opened the meeting by discussing the upcoming economic development bill, based on the statewide economic development plan recently signed by Governor Baker. He commented that there was a heightened level of engagement by Secretary Kennealy with the Mass Tech Collaborative's work in the tech and innovation space, especially around FinTech and AI, which speaks to quality of the leadership and team at the Mass Tech Collaborative.

Agenda Item III Report of the Executive Director

Ms. Kirk delivered the report of the Executive Director. She discussed the Mass Tech Collaborative's \$100 million request for funding in the economic development bill. She indicated that funds have been requested for, among other things, emerging technologies, AI, cyber, and advanced manufacturing outside of M2I2, but it is unclear how much of the Mass Tech Collaborative's request will be incorporated in the final bill when it is introduced.

Ms. Kirk discussed Tech Tuesdays, short videos addressing technology and innovation developments and the work of the Mass Tech Collaborative, which are currently aimed at Massachusetts legislators. Ms. Reeve suggested that the videos should highlight the diversity of the staff at the Mass Tech Collaborative. Ms. Kirk also mentioned that the STEM summit was occurring on April 15, and that she serves on a subcommittee to increase industry attendance.

Ms. Kirk briefly touched on the work of each division. She mentioned that a meeting was held at the State House at the request of Representative Golden to discuss the future of the MassBroadband 123 middle mile network. She noted that the network is an important asset that will need significant capital investment in the years ahead. She indicated that she will be seeking input from the Board and the Administration on the future direction and disposition of the network. Ms. Kirk then discussed the Massachusetts eHealth Institute ("MeHI"), reminding the Executive Committee that the division received a one time tranche of funding which MeHI relies on year after year to support a significant share of its operations. She indicated that the team is currently modeling spending rate scenarios while they advocate for new funding. The Executive Committee will see the results of this analysis in the proposed Fiscal Year 2021 budget.

Ms. Kirk discussed the Mass Tech Collaborative's Westborough campus, stating that there are certain buildings on the campus that should be demolished and that the reserves of the organization won't cover what needs to be done. She mentioned the need to mitigate the risks and her intent to engage with the Division of Capital Asset Management. It was clarified that the Mass Tech Collaborative owns the buildings on the Westborough campus but the deed to the property contains a provision that the property reverts back to the Commonwealth if it is no longer needed by the Mass Tech Collaborative.

As an introduction to the next items on the agenda, Ms. Kirk discussed the need to reevaluate the use of the R&D Fund and efforts to achieve a legislative fix that will provide more flexibility in the deployment of these funds. She mentioned that two proposals for funding under the revised Collaborative Research Matching Grant Program would be presented later in the meeting. Her report concluded with a discussion of the Mass Tech Collaborative's readiness at a personnel level to receive significant funding from the economic development bill. Ms. Chen suggested that the Mass Tech Collaborative consider a fellowship model to secure some of the expertise that may be needed to implement new programs.

[Mr. Greeley left the meeting at 2:25pm]

Agenda Item IV Innovation Institute- Analysis of the Collaborative Research and Matching Grants

Ms. Rompa presented an analysis of the administration of the two R&D Fund programs that have been implemented by the Mass Tech Collaborative – the Research Center Matching Grant Program and the Collaborative Research and Development Matching Grant Program. She discussed the history of the grant programs, including the structure, eligibility requirements and the investments in 13 centers made under these funds. She noted that these funds are one of the biggest tools that we have to support the innovation economy. Ms. Rompa discussed her preparation and the methodology that she employed to gain insights and perspectives from grantees on the Mass Tech Collaborative's administration of the R&D funding program. She administered a questionnaire and interviewed 31 center directors and staff.

The key take aways from these interviews include: (1) the R&D grant programs are unique and valuable; (2) state support has helped the centers to attract talent and other investments; (3) restrictions associated with capital funding posed challenges to the centers, who would prefer a mix of capital and operating funding; (4) industry outreach and managing company expectations was difficult ; (5) Mass Tech Collaborative staff and the Investment Advisory Committee are good to work with; and (6) grant requirements, including administrative and match documentation, are complex and time consuming.

During the ensuing discussion Ms. Cornell and Ms. Reeve emphasized the importance of leveraging center director relationships and facilitating inter-center collaboration so that center directors can learn from each other and avoid having to reinvent the wheel each time. Ms. Margulies validated the business development challenges and the difficulties centers face in making company connections. Mr. Larkin mentioned that the Innovation Institute has convened center directors twice and intends to do so again. He also discussed the challenges centers face in becoming financially sustainable. Ms. Kirk stated that they took all this feedback and updated the current RFP accordingly. She indicated that the Mass Tech Collaborative will be more efficient with grant administration. Ms. Reeve mentioned that the presentation was helpful and requested a future presentation on the outcomes achieved through the R&D grants. Mr. Cox

asked if we could increase start-up access to equipment purchased under the grant program that is not being fully utilized by a center. Mr. Larkin agreed and indicated that this practice exists.

Agenda Item VInnovation Institute- Collaborative Research and Matching Grants-
Northeastern University- AI Jump Start (motion item)

Mr. Larkin presented the first proposed award under the new Collaborative Research and Matching Grant RFP for the AI Jump Start Program at Northeastern University in partnership with Tufts University and Boston University. The grant award is for \$2,200,000 and the funds will help build new capacity at Northeastern University that will support the development, testing and integration of artificial intelligence technology by Massachusetts companies and the development of AI/Machine Learning expertise. The award will draw \$2,000,000 from the R&D fund and \$200,000 from the Innovation Institute Fund. There will be a 1:1 match from Northeastern University for the R&D funds. It was noted that the Mass Tech Collaborative will work in partnership with Northeastern University in developing a pipeline of firms to create new products and services in the area of AI, with companies that haven't been able to embrace AI to date. Mr. Larkin explained that the \$200,000 in operational funding will support business outreach and faculty time to support 25 participating companies. He indicated that the project would be located in Burlington, MA.

During the ensuing discussion it was suggested by members of the Executive Committee that steps should be taken to incentivize involvement of minority-owned businesses, promote participation by high school students, and establish connections with entities like Venture Valley Mentors. Ms. Kirk clarified that the award to Northeastern University and the other recommended award to Harvard University are within the \$5 million budget, which covers new and existing awards. Ms. Erlandson explained that the Mass Tech Collaborative manages expenditures with centers over multiple years within the approved bond cap.

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation ("Mass Tech Collaborative"), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby authorize a grant award to Northeastern University under the Collaborative Research Matching Grant Program (RFP No. 2020-JAII-04) in an amount not to exceed \$2,200,000 to support the AI Jump Start Program, as presented. Not more than \$2,000,000 shall be awarded from the Scientific and Technology Research and Development Matching Grant Fund, and not more than \$200,000 shall be awarded from the Innovation Institute Fund. The grant award to Northeastern University is subject to the execution of a grant agreement in a form and with terms approved by MassTech's Executive Director.

Agenda Item VIInnovation Institute- Collaborative Research and Matching Grants-
Harvard University- New England Research Cloud (motion item)

Mr. Larkin discussed the second proposed award under the new Collaborative Research and Matching Grant RFP- the New England Research Cloud at Harvard University. The awards to Northeastern University and Harvard University were reviewed and endorsed by the Industry Advisory Committee. Mr. Larkin explained that the award to Harvard builds off of the success of the Massachusetts Green High Performance Computing Center ("MGHPCC") collaboration to support a pilot for the development of a common cloud framework that is tailored for data-driven research and discovery. Harvard will implement the pilot through a partnership with Boston University. Mr. Larkin explained that the MGHPCC does not have the capacity to meet all datadriven needs and discussed the broader opportunity associated with a vision for MGHPCC 2.0. He indicated that the vision involves achieving a scale that could benefit all research universities in New England. He also discussed the workforce benefits. Mr. Larkin emphasized that this effort, which will include the establishment of standards for accessing a production cloud, could set the stage to pursue a federal research lab. Ms. Margulies mentioned that she serves on the MGHPCC Board and referenced the opportunity to leap frog other regions by deploying next generation technology. Ms. Royal suggested that efforts should be made to incorporate the participation of community colleges.

After a period of discussion and upon a motion duly made and seconded, it was unanimously VOTED with Ms. Margulies abstaining:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation ("Mass Tech Collaborative"), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby authorize a grant award to Harvard University under the Collaborative Research Matching Grant Program (RFP No. 2020-JAII-04) in an amount not to exceed \$875,000 to support the New England Research Cloud, as presented. The grant award to Harvard University is subject to the execution of a grant agreement in a form and with terms approved by MassTech's Executive Director.

Agenda Item VII Center for Advanced Manufacturing- MassBridge Technician Training Program (motion item)

Mr. Moskowitz presented a recommendation for certain actions to support the MassBridge Technician Training Program. He began by discussing the focus of the Advanced Manufacturing Collaborative ("AMC") to develop the Commonwealth's manufacturing agenda, which has been energized under the leadership of Secretary Kennealy, who serves as Chair of the AMC. He noted that Secretary Kennealy has expanded and upgraded the membership of the AMC. Mr. Moskowitz discussed the Executive Office of Housing and Economic Development's support to establish a Center for Advanced Manufacturing at the Mass Tech Collaborative and the consolidation of relevant programs to be transferred to and administered by the Center. Ms. Kirk noted that it is likely that funding will stay with the current entities administering advanced manufacturing programs while compensating the Mass Tech Collaborative for program administration.

Mr. Moskowitz described the MassBridge program. He explained that the Department of Defense ("DoD") asked if Massachusetts would be willing to make a proposal to the DoD to

develop a multi-year, multi-departmental program to bridge the gap between existing training programs and industry needs for manufacturing technician training. In response to this request the Mass Tech Collaborative has developed and submitted a proposal to the DoD that was developed with input from Massachusetts stakeholders. Mr. Moskowitz indicated that this project will be led by the Center for Advanced Manufacturing at the Mass Tech Collaborative, and developed and implemented with partnering organizations. He explained that there are three phases to the project, with initial funding from the DoD expected to be for two years for phases 1 and 2, with the third phase authorized at a later date.

Mr. Moskowitz stated that the Mass Tech Collaborative is awaiting the formal award notice from the Advanced Functional Fabrics of America ("AFFOA"), who will be the contracting agent on behalf of the DoD. Funding requested is for \$4.7 million with approximately \$1.3 million in cost share. Ms. Kirk explained that the new Center for Advanced Manufacturing at Mass Tech Collaborative has not been announced yet. Mr. Moskowitz discussed how the curriculum may be implemented and noted that a significant share of the funding may go to community colleges and/or vocational schools. Ms. Erlandson clarified that the Mass Tech Collaborative is seeking authorization for Ms. Kirk to accept and expend funds when awarded by AFFOA.

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation ("MassTech"), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby delegate to the Executive Director authority to take the following actions related to the "MassBridge" project, as presented:

1. Execute an agreement with Advanced Functional Fabrics of America ("AFFOA") to accept and expend the funds awarded by the United States Department of Defense ("DoD") for the "MassBridge" project; and

2. Expend funds and to enter into agreements with the subawardees and contractor, listed in the table on slide 8, and any community colleges and vocational schools meeting the requirements of the subaward, as presented; provided that final award amounts to each shall be determined based upon the final scopes of work and detailed budgets agreed to by MassTech and the subawardees and contractor; and provided further that the total amount of all awards shall not exceed the award amount approved by the DoD. This delegation is subject to final approval by the DoD for funding associated with the "MassBridge" project.

Ms. Saubermann reminded Mr. Cox that there had been two motion items on the previous Executive Committee meeting minutes, and that the motion to accept the minutes from the executive session of December 18, 2019 meeting had been missed.

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation, acting on behalf of the full Board pursuant to section three of Chapter Forty J of the General Laws of the Commonwealth, hereby adopts the Draft Minutes of the executive session portion of the One Hundred and Sixty Fourth Meeting of the Executive Committee, held on December 18, 2019 in Boston, Massachusetts, as the formal Minutes thereof.

There being no other business to discuss and upon motion duly made and seconded, it was unanimously and without abstention voted to adjourn the meeting at 3:54 p.m.

A TRUE COPY ATTEST: (Secretary)

DATE:

Materials and Exhibits Used at this Meeting:

- 1. Draft Minutes for the open session of the December 18, 2019 Mass Tech Collaborative Executive Committee Meeting
- 2. Draft Minutes for the executive session of the December 18, 2019 Mass Tech Collaborative Executive Committee Meeting
- 3. Presentation- Executive Director's Report
- 4. Presentation- Innovation Institute- Analysis of the Collaborative Research and Matching Grants
- 5. Approval Item- Innovation Institute- Collaborative Research and Matching Grants-Northeastern University AI Jump Start Program
- 6. Approval Item- Innovation Institute- Collaborative Research and Matching Grants- Harvard University- New England Research Cloud
- 7. Approval Item Center for Advanced Manufacturing- MassBridge Technician Training Program