MINUTES

FIFTY FIFTH MEETING

of the

BOARD OF DIRECTORS

of the

MASSACHUSETTS BROADBAND INSTITUTE

[OPEN SESSION]

May 31, 2017 Boston, Massachusetts

The Fifty Fifth Meeting of the Board of Directors of the Massachusetts Broadband Institute ("MBI") was held on May 31, 2017, at the Massachusetts Technology Collaborative ("Mass Tech Collaborative"), Two Center Plaza, Suite 200, Boston, Massachusetts, pursuant to notice duly given to the Directors and publicly posted on the MBI website with corresponding notice provided to the Office of the Secretary of State.

The following members of the MBI Board of Directors attended the meeting: Secretary of Housing and Economic Development Jay Ash (represented by Peter Larkin of the Executive Office of Housing and Economic Development), David Clark, Tim Connelly, Don Dubendorf, Paul Nicolai (arrived at 10:43 a.m.) and Karen Charles Peterson (represented by Joe Tiernan of the Department of Telecommunications and Cable).

The following Mass Tech Collaborative staff was present: Michael Baldino, Tim Connelly, Marybeth Dixon, Ed Donnelly, Phil Holahan and Brian Noyes.

The following individuals attended the meeting: Lauren Rayson, Department of Telecommunications and Cable; Bill Ennen, Executive Office of Housing and Economic Development; Chris Lynch, Matrix Design.

Mr. Larkin observed the presence of a quorum of the MBI Board of Directors and called the meeting to order at 10:03 a.m.

Mr. Larkin reviewed the legal requirements governing public participation at an open meeting of a public body. He stated that: (1) After notifying the Chair, any person may make a video or audio recording of an open session of a meeting of a public body, or may transmit the meeting through any medium, subject to reasonable requirements of the Chair as to the number, placement and operation of equipment used so as not to interfere

with the conduct of the meeting. At the beginning of the meeting the Chair shall inform other attendees of any recordings. (2) No person shall address a meeting of a public body without permission of the Chair, and all persons shall, at the request of the Chair, be silent. No person shall disrupt the proceedings of a meeting of a public body. If, after clear warning from the Chair, a person continues to disrupt the proceedings, the Chair may order the person to withdraw from the meeting and if the person does not withdraw, the Chair may authorize a constable or other officer to remove the person from the meeting.

Agenda Item I Approval of Minutes

Following a period of brief discussion, and upon a motion duly made and seconded, it was unanimously VOTED:

The Board of Directors of the Massachusetts Broadband Institute hereby adopts the Draft Minutes of the open session portion of the Fifty Fourth Meeting of the Board of Directors held on March 28, 2017, in Westborough, Massachusetts, as the formal Minutes thereof.

Agenda Item II Report of the MBI Board of Directors Chairperson

The report of the Chairperson was deferred.

Agenda Item III Discussion and Action Items

Mr. Larkin, Mr. Donnelly and Mr. Ennen provided updates on the status of broadband last mile programs and initiatives. Mr. Larkin provided an update on the private sector provider RFP. He informed the Board that the Mass Tech Collaborative has executed a grant agreement with Comcast to provide broadband access in Montgomery. Mr. Larkin noted that the Mass Tech Collaborative is negotiating a grant agreement with Charter, the other provider that has been qualified, while towns selected by Charter make a final decision on whether to accept the opportunity for Charter service at no cost to the town.

Mr. Larkin clarified that three towns that released their own RFP are negotiating directly with Frontier Communications, although Mr. Larkin noted that it was unclear how soon a deal would be reached between the towns and Frontier. Mr. Donnelly explained the differences between Frontier's financial framework and that of Charter and Comcast. He indicated that Frontier is seeking a long term commitment from each participating town that would mitigate Frontier's risk associated with take rates. It was noted that each participating town would pay a flat rate per premise that would entitle the resident(s) to receive a baseline level of service that can upgraded to higher speeds at an additional cost. Mr. Holahan clarified that legislative authorization will be needed to allow a town to make a binding, long term commitment to Frontier. He also mentioned that some towns are examining options that would not require the fees to be passed through the tax base, such as a municipal light plant ("MLP") fee.

Mr. Connelly observed that MBI is making a significant amount of progress. He mentioned that the number of houses that Comcast is covering under the Broadband Extensions Program exceeds Comcast's contractual requirements. Mr. Connelly also mentioned that Governor Baker recently conducted a tour of small businesses in West Stockbridge to commemorate the agreement reached last year with Charter to upgrade and expand its network in the towns of Hinsdale, Lanesborough and West Stockbridge.

A discussion ensued regarding cable company technology trends. Mr. Clark noted that the DOCSIS 3.1 technology that cable companies will be rolling out represents a major enhancement. Mr. Clark also noted that the next iteration of the technology is "full duplex" that will allow symmetrical services, although he cautioned that it will be a challenge for cable companies to deploy full duplex networks in rural areas. He suggested that that MBI inquire whether the cable companies plan to push fiber far enough into the new communities that they serve to enable full duplex rollouts in the future. Mr. Clark indicated that most subscribers should be satisfied with DOCSIS 3.1. Mr. Dubendorf noted that it has been a big "sea change" in western Massachusetts to get unserved towns to view private providers as a meaningful option.

Mr. Ennen provided an update on the status of the Last Mile Grant Program that is being administered by the Executive Office of Housing and Economic Development ("EOHED") for unserved towns that want to pursue a municipally-owned broadband network. He noted that EOHED has awarded grants to thirteen towns through two rounds of funding. He indicated that EOHED is reviewing applications from four towns and will be announcing a third round of grants in the near future. Mr. Ennen indicated that the grant agreements had been executed for all towns in the first round and that the initial tranche of funds would be disbursed within thirty days. He indicated that most of the towns in the Last Mile Grant Program intend to work with Westfield Gas & Electric ("WG&E") as the Owner's Project Manager.

Mr. Ennen led a discussion about the cost impact of make-ready work on utility poles and he highlighted that some towns, such as Heath, are encountering much higher make-ready costs than previously projected by MBI due to greater than expected need for new poles to be installed. He also indicated that Verizon has manpower constraints that are making it a challenge to keep up with the pace of make-ready work needed for these projects. Mr. Tiernan observed that it is important to provide pole owners, such as Verizon, with advanced warning of the timing and magnitude of pole license applications that will be submitted by unserved towns. Mr. Ennen noted that unserved towns are complaining about the perceived unfairness of being required to pay for an extensive amount of new poles due solely to the fact that they are the next attacher.

[Paul Nicolai arrived at 10:43 a.m.]

Mr. Donnelly led a discussion that focused on the current status of the remaining unserved towns in western Massachusetts. Mr. Donnelly indicated that there are approximately ten towns that do not currently have a clear path to a broadband solution.

He cited Savoy as an example of one of the remaining towns that has not been selected by a cable company and is challenged by a lack of local funding and volunteers to support a broadband effort. Mr. Donnelly noted that Crocker Communications, through a partnership with Fujitsu, could be an option for some of the remaining towns. It was clarified that MBI is still evaluating Crocker's proposal and has not yet qualified Crocker to receive funds under the private sector provider RFP. Mr. Connelly indicated that new options may arise as towns become served that are contiguous to remaining unserved towns.

Mr. Ennen raised the possibility of engaging with Selectboards in the most challenging towns to gauge interest in a broadband solution that would result in coverage that falls below MBI's 96% target. He noted that MBI could engage with cable companies to determine the level of coverage that could be obtained based on the state investment for towns that do not have the capacity to invest municipal funds. Mr. Larkin mentioned that lower initial coverage reflects historical trends where cable companies build out the core of a town and expanded coverage over time. Mr. Ennen also discussed the option of a regional wireless network.

Mr. Donnelly presented the proposed Fiscal Year 2018 budget for MBI. He reviewed the allocation of funds that will be expended by MBI, primarily for private provider grants and the funds that will be expended by EOHED for Last Mile grants to unserved towns to build a municipally-owned broadband network. Ms. Dixon explained the revenues generated from operation of the MassBroadband 123 network. Mr. Dubendorf requested that MBI produce a balance sheet or fund balance summary in association with future budget presentations. Mr. Donnelly emphasized that the main programmatic outcomes expected for Fiscal Year 2018 include (1) all unserved towns having a viable path to a broadband solution; (2) completion of the Broadband Extensions Program; (3) optimizing operation of the MassBroadband 123 network; and (4) successfully resolving the litigation with G4S Technology, the Design-Builder of the MassBroadband 123 network.

Mr. Donnelly responded to the request of Mr. Nicolai and provided a more indepth discussion of the status of the unserved town and MBI's evaluation of the proposal submitted by Crocker Communications. Mr. Donnelly clarified that 26 towns have requested grant applications from EOHED and that up to 11 towns are considering a private sector provider proposal. He noted that there is some overlap with a few towns weighing the EOHED grant option and a private sector provider option. Mr. Donnelly indicated that MBI has reviewed a preliminary draft of an agreement between Crocker and Fujitsu. He mentioned that Crocker has followed up on MBI's suggestion and submitted an alternative proposal based on the funding model being pursued by Frontier Communications. Mr. Donnelly noted that Crocker is willing to adjust the per premise fee if a town is willing to consider covering less than 96% of the houses. Mr. Larkin indicated that it will ultimately be a policy decision for the Board on whether to loosen the 96% coverage requirement.

Mr. Donnelly highlighted that MBI is seeking price transparency from Crocker and certainty on capital costs associated with network buildout in order to protect the towns from the risk of capital cost overruns. He further noted that Crocker is willing to engage with the most challenging eight to ten towns that lack a viable path forward. Mr. Nicolai urged MBI to have an alternative plan in place if MBI is not able to qualify Crocker.

After a brief discussion about federal funding opportunities, including the Connect America Fund ("CAF") II reverse auction and the challenges associated with accessing the CAF II funds, the Board concurred with the suggestion of Mr. Dubendorf and Mr. Nicolai to differ voting on the proposed Fiscal Year 2017 MBI budget until the Board meets in executive session to discuss the ongoing litigation with Axia/KCST and the go forward plan for the next fiscal year.

Mr. Larkin, in his capacity as Chairperson, stated that he would call for a roll call vote of the MBI Board of Directors to go into executive session to discuss strategy with respect to a matter involving ongoing disputes in which the Mass Tech Collaborative is currently involved. He indicated that the purpose for meeting in executive session to discuss this matter is that discussion of the Mass Tech Collaborative's strategy with respect to this matter in an open meeting may have a detrimental effect on the litigating position of the Mass Tech Collaborative.

A roll call vote was taken to go into executive session. Mr. Larkin, Mr. Connelly, Mr. Clark, Mr. Dubendorf, Mr. Nicolai and Mr. Tiernan voted in the affirmative to enter into executive session. All staff and members of the public that was not needed for the litigation strategy discussion left the room. The meeting proceeded in executive session at 11:32 a.m. The proceedings that occurred in executive session are addressed in a separate set of meeting minutes.

Mr. Larkin, in consultation with the members of the MBI Board of Directors, determined that the executive session should conclude at 11:53 a.m. At that point the meeting proceeded in open session. Following a period of brief discussion, and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Board of Directors of the Massachusetts Broadband Institute (the "Institute") does hereby approve the Fiscal Year 2018 Operating Plan and Budget for the Institute (the "Plan"), as presented and does hereby recommend that the Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation (the "Mass Tech") take final action to approve the Plan as part of Mass Tech's Fiscal Year 2018 consolidated budget. The Plan is approved in full satisfaction of the requirements of subsection (g) of section 6B of Chapter 40J of the Massachusetts General Laws. The Board, subject to final review and approval of the Plan by the Executive Committee of the Mass Tech Board of Directors, hereby authorizes the Chair to submit the Plan for final approval

to the Secretary of Housing and Economic Development and the Secretary of Administration and Finance as required by said subsection (g).

Mr. Larkin informed the Board that the State Auditor issued a clean audit of the MBI that did not contain any findings. There being no other business to discuss and upon a motion duly made and seconded, it was unanimously and without abstention voted to adjourn the meeting at 11:56 a.m.

A TRUE COPY ATTEST: (Secretary)

DATE:

Materials and Exhibits Used at this Meeting:

- 1. Draft Minutes Open Session of the March 28, 2017 MBI Board of Directors meeting
- 2. Approval Fiscal Year 2018 MBI Budget and Operating Plan
- 3. Presentation and Motion Proposed Fiscal Year 2018 MBI Budget and Operating Plan