

**Hardwick & Montague Response
To DTC Regarding
5/4/16 MBI Staff Review of Matrix and Comcast Proposals**

The MBI staff recommendation document is completely one-sided and has no public merit. A thoughtful analysis would consider the pros and cons of each vendor vs. constructing a legal brief with a single point of view. As a taxpayer this is heavily flawed work.

Comcast Fails on Numerous Fronts

1. The FCC definition of broadband is a *minimum, sustained* speed of 25MB down/ 3MB up – and actual experience with Comcast in Hardwick and Montague is 12-15MB down. Comcast is at best a part-time purveyor of broadband services, but only in highest service tiers. Given their shared loop and provisioning ratios, even if they provision a line at 25MB, the user could well experience a small fraction of that. Comcast technology is transmitted over coaxial cable is has speed limitations. There is no physical way that copper can ever carry as much capacity as fiber optic cable. Copper also oxidizes and degrades relatively quickly vs. fiber. To argue otherwise fails to appreciate the physics of fiber vs. copper transmission and upgradeability.
2. Known as the worst customer service in the industry as evidenced by the American Customer Satisfaction Index report. While the MBI touts Comcast as a big company it doesn't mean capable service. And when they get it wrong, our citizens are dealing with an impersonal call center. During Hardwick's most recent build Comcast routinely dispatched representatives only to find out the line wasn't built there yet. We had one resident who had taken two days off of work to be home and meet representatives only to find out the service wasn't available yet. That's real impact to a resident who earns an hourly paycheck resulting from really impersonal service.
3. Comcast routinely ignored contract dates in the recent Hardwick build without communicating any updates or expected completion and never built Meadow Rd in Montague with the 2003 franchise renewal. They get to it when they get to it, knowing the small towns wouldn't dare take them on legally. That's not a partner to the town and certainly not one to which the Commonwealth should be expending corporate welfare.
4. By their absence throughout this process we've learned how little interest they have in building out these towns. Even if the money is set aside for Comcast there is no guarantee they'll ever build anything.
5. Comcast does not negotiate, work with or partner with the town in any way. In the franchise agreement renewal 3 years ago, they simply walked in, told us what they're doing and didn't negotiate anything. When they have a monopoly they're hardly motivated to work with the town.
6. Comcast's financial contribution is redacted and unclear. It would be irresponsible to select them without public disclosure of their financial contribution to the project. This redaction was a key point for us early on, yet MBI permitted it.

Matrix is the Superior Choice for the Commonwealth and the Town

1. The highest risk in these projects is the design and build phases as evidenced by middle mile litigation and the controversy with Leverett where multiple vendors were involved in the design and build. The Matrix proposal completely rolls those into one vendor with Matrix/Millennium overseeing the design, build and operation end to end. They have deep experience in these areas and multiple vendors introduce risk. And incentives to do nefarious things in any phase are mitigated since Matrix ends up owning and running the network. Thus, the Matrix project lowers the risk of our builds.
2. Millennium Communications' financial condition was called into question as the result of a D&B report pulled by MBI. Anyone experienced with D&B would know that you have to receive private company data under NDA and that D&B specifically lowers ratings of companies that don't send in their financials and pay their fee. Experienced bankers never rely on D&B to make financial decisions.
3. No material facts have changed since October 29, 2015 when the MBI qualified Matrix. Their ownership, business model and experience running rural broadband systems have not changed. MBI's own staff qualified them in the fall. So how were they qualified then and not now?
4. Matrix uses the Mass Broadband 123 network and each town contributes approximately \$500K over 20 years to the MBI. Comcast uses their proprietary network, thus the Commonwealth foregoes this revenue.
5. Matrix project anticipates town ownership in the future, thus the assets are isolated in an LLC up front to permit ease of transfer when the option is exercised. The assets transfer to the town in 20 years for \$10.
6. Response to Matrix's inexperience managing retail broadband: They handled all home drops in Leverett and warranty work for a year. As a result of the Leverett and EC Fiber builds, we think they can handle truck rolls and service the lines very capably. Toward the experience of being an ISP and billing customers, they run a large network operations center in New Jersey now, have built large scale projects for Homeland Security and other complex environments so we are fully confident they can operate the network and provision accounts. And keep in mind that in Leverett Crocker had no experience as a broadband ISP and with Matrix's help Crocker was able to learn relatively quickly. For accounts receivable they already have staff to handle customer billing for millions in revenue. Not a stretch for Matrix in our opinion.
7. To date we have had no concerns for the financial wherewithal of Matrix Design and Millennium Communications. We had a CPA review Millennium's financials under NDA and upon initial review see no financial concerns. This was further supported by a trade letter from TD Bank. If they are willing to invest their own capital of approx. \$1.5MM in Hardwick and Montague, these are not gestures of financially weak companies. They are making a real investment and have been a true partner in the spirit of a public/private partnership.
8. Matrix Design experience in Leverett. The MBI report shows one side of this controversy, but not a balanced, objective assessment. How can we rely on the Tilson report that only presented one side?

9. Comcast technology is industry standard for cable, not broadband Internet. DOCSIS 3.1 currently being tested in one market and Comcast will have no incentive to bring it to Hardwick anytime soon.
10. Comcast is imposing data limits in some markets, so unlimited will not be an option forever. This is likely to be an impediment to someone using video for education or work-related matters with extensive Webex or Skype video use.
11. Comcast head-end is loaded up in Hardwick. No ability to add nodes without expensive upgrades, but still engineered for marginal data use. Comcast has told one key business in town that to meet their needs that they need to have fiber and want the business to fund it. Hardly foreshadowing a good future investment with Comcast for the town.

Comments on Process Surrounding this Report

1. We continue to have flawed process combined with poor communication from MBI. There have been two sets of rules throughout the evaluation of these vendors. Comcast redacted all financial contribution and cost information requested in the RFQ and has repeatedly maintained incorrect information in their bid. The MBI required Matrix to make all information shared with MBI public, thus not able to handle financials from a private co. since NDA wasn't available to them. Eric Nakajima boasted at a meeting of having dozens of meetings with Comcast regarding our towns, we knew they had not yet met with Matrix.
2. The MBI has comported themselves very unprofessionally throughout this process, getting heavy handed with cease and desist orders with Millennium when the truth didn't suit them. In fact, Matrix/Millennium received no notice of the MBI review of them on May 4 and only got a copy of the report when we forwarded it to them. There has been no official correspondence with Matrix to date on this adverse report about them - none at all. And Petersham, materially impacted by disqualifying their chosen vendor, has not been in the communication loop for the report or invited to the public meeting. MBI takes arrogance to another level.
3. Qualified Matrix on 10/29, nothing material changed, yet planned to disqualify them at March Board meeting without discussing with towns. Hardly a transparent, constructive interaction with towns and vendors.
4. Not respecting the thoughtful analysis and will of the community. The MBI is ramming this down on our throat without respecting local analysis and preference to invest in our future.
5. MBI continues to provide poor stewardship of limited Commonwealth resources. Matrix build is actually lower risk and higher quality. Moreover, towns won't need to return to ask for an upgrade to fiber in future years. Plus the MBI spent over \$1.9M in salaries this year and over \$3.3M in professional fees (consultants and attorneys) to dispense \$147K in public funds. Hardly a good use of taxpayer money.
6. Throughout the Town's entire relationship with MBI, they have never published guidelines for the program in which we're included. Thus, at every turn it appears the rules change. Once again, this document is no different. For instance, in MBI's review they claim fostering competition is not a purpose of this program, yet it is a requirement of the enabling legislation of the MBI. Never once in almost 2 years had an allocation schedule of the funds. We can

provide one: \$5,000,000 divided by total # of unserved in all 9 cable towns multiplied by each town's total.

7. Neither consultant is independent nor objective. Both consultants have a conflict of interest. Wipro received \$400,000 from MBI last year and consulted with Comcast in drafting the funding legislation. Tilson is a direct competitor of Matrix and both produced completed unobjective 1-sided reports – of no value to taxpayers whatsoever.
8. The Harvard Berkman Center study of Wired West had 3 key takeaways. The MBI recommendation fails on all 3. The Harvard Study key points:
 - a. Prefer fiber over copper
 - b. Defer to local control/decisions
 - c. Encourage competition vs. perpetuating monopolies
9. Comparative grids – used in Hardwick town info meeting – this was our side by side comparison for the Hardwick town informational meeting. This is an objective assessment.

	Matrix	Comcast
Coverage	99.5%	Stated 97% - Unserved homes nos. inaccurate
Time to Market	18 months	36 Months
Price	\$95	\$115
Speed <i>*FCC Std 25/3</i>	50 MB dn 50 MB up	22.4 MB dn 3 MB up
Data Caps	No	Yes in some mkts
Cooperative	Yes	No
Town Ownership	Yes	No
Meets Contract Commitments	Yes	No
Sustainable	Yes	Yes
Cooperative	Yes	No
Town Ownership	Yes	No
Meets Contract Commitments	Yes	No
Sustainable	Yes	Yes
Disclosed Financial Contribution to Project	Yes	Redacted
Accurate Information	Yes	No
Interact & Meet with Broadband Committee	Yes	No
Uses Mass Broadband123 Network	Yes	No

Other Relevant Information

- Matrix has been in Broadband Communities Magazine Top 100 FTTH providers for the past 3 years.
- Matrix is currently on GSA, substantial evaluation of financials required to be on GSA
- Story from MBI keeps changing –
 - Sustainability came on the radar early December simultaneous to analysis of Wired West Towns. This was never uttered in the fall.
 - Mar. 17 concerned with Matrix doing substandard work, installing inferior equipment (comments to Gobi & Kulik on conf. call 3/17)

From the Public Meeting 5-24-16

1. The Tilson slides, toward the end, contained the accurate bullet that mentioned the criteria of 1,000 homes passed which contradicted their earlier video capture of Chris Lynch's public statement miscue saying 1,000 homes served. This contradiction was in their deck, yet they used the "served" language to justify Tilson's errant economic analysis.
2. Tilson should have examined the public record and reported on Matrix's side of the dispute.

Our Ask

We want this process changed. The change we expect will include each town ultimately deciding what is best for their town. It makes sense because we will be contributing to 75-80% of the cost of the solution over a twenty-year period. The money should be awarded to the towns' MLP in the form of a grant that will be used for "Make Ready" expenses. The town MLP's would then issue an RFP that reaches the most un-served immediately while utilizing fiber optics. We will use the MassBroadband 123 network giving the state a return on its investment in both the middle mile and us in the last mile. MBI can assist us with technical guidance, mapping software, other sources of grant monies and contractual advice. The new regime of the MBI can have a public victory by having a true collaboration with the town and have a voice equal to their proportional contribution (20%).

In order to do this the following must happen:

1. The Legislation that has Montague and Hardwick grouped with the other cable served towns needs to be amended. Our allocated share of the money needs to be carved away and set aside for us. The towns will have the negotiating power and MBI will offer guidance, sharing their expertise.
2. The MBI, Hardwick and Montague and a separate agency for oversight (perhaps DTC) must have a "roll up the sleeves" meeting where we all agree on the desired outcome, ground rules and roles.
3. New RFP is designed, publicized and awarded in 120 days