

## **Rowe Broadband Effort**

### ***Brief Summary of Where things Stand***

MBI is the state agency administering the Last Mile Broadband internet program to build networks in unserved communities. The state is supplying approximately 1/3 of the necessary construction funds and Towns are expected to supply the remainder. Rowe has approved these funds. MBI initially supported WiredWest's plan for a regional fiber network with shared ownership and operation. They have since reneged and now require that each town build and own it's own network, placing a heavy burdon on individual towns. David Dvore, appointed primary contact for working with MBI, along with Marilyn Wilson, Russ Jolly, and Janice Boudreau are working closely with MBI to make preparations and plans for our network.

WiredWest, our Coop of town MLP's, is a community based utility aimed at bringing high quality broadband internet service to residents and local businesses. When the initial plan for building a regional network was rejected by MBI, WiredWest re-focussed it's efforts on eventual regional operation. Individual member town networks, once built, can be linked with a fiber ring to form a regional network. This allows the combined network to be operated with a single administration and consolidation of services such as maintenance, customer service, etc., thus resulting in much more affordable subscription rates. Russ Jolly and David Dvore are Rowe's delegates to WiredWest and we are working closely with WiredWest to form the operational plans.

After long delays, things are now moving fast. However, it's a big undertaking and will take at least a couple of years before service is available. Many residents have signed up for WiredWest's plan. Although the game plan has changed and we can't be sure what the exact price for service will be at this point, we encourage residents to be patient and continue support for WiredWest as it's our best opportunity for supplying affordable, quality service to residents. MBI and private companies each have their own interests, but it is WiredWest who has consistently looked out for the best interest of our residents.

### ***What is Broadband and Why Do We Need It***

Broadband is currently defined by the FCC as a 25 Mbps or faster internet connection. Currently, the fastest internet connection available in Rowe is 3Mbps DSL and is only available to about 75% of the town. Efforts to get Verizon to expand DSL coverage have failed and, in fact, Verizon is no longer opening new accounts and plans to phase out DSL altogether when current equipment needs replacing. Private sector ISP's (Internet Service Providers) do not find it profitable enough to invest in infrastructure in sparsely populated areas.

The lack of sufficient broadband availability is hurting Rowe and about 40 other unserved communities in Massachusetts. Nowadays, internet is needed for education, access to a variety of services, modern communications, telemedicine, and a host of other applications. Businesses require telecommuting and teleconfering via internet. More and more, entertainment is also being delivered via internet. Without decent internet, young people don't feel their children can get a good education. Business and employment opportunities are slim. Home values and population are decreasing.

## ***Some History***

In 2008, the Massachusetts Legislature passed emergency legislation *"To provide for a capital outlay program to achieve the deployment of affordable and ubiquitous broadband access for every citizen of the commonwealth."* Forty million dollars were allocated and the **MBI, Massachusetts Broadband Institute**, was created to bring Broadband to unserved areas. Forty four communities lacked broadband. Out of those a handful had partial coverage with cable. The MBI chose to accept matching fund from the federal government as part of the recovery act. Unfortunately, the cable lobby got congress to put restrictions on how funds could be spent. In particular, they could not be spent for *Last Mile* infrastructure, ie actually connecting end users, other than Community Anchor Institutions such as libraries, police and fire departments. So the MBI chose to build the so-called MB123 Middle Mile fiber backhaul reaching 122 communities, most of whom already had broadband access. The theory given was that by providing backhaul connections to towns, private companies would surely build the last mile to connect residents in unserved communities. Needless to say, it never happened.

In 2010, members of Broadband Committees and others from unserved communities banded together to form WiredWest, an organization governed by the towns aimed at bringing high quality broadband service to all residents. WiredWest pioneered the use of **MLP (Municipal Lighting Plant)** laws, originally designed to bring electricity to rural areas, for this purpose. MLP's are community owned and operated utilities. A more recent law allows towns to form a Coop of MLP's in order to run a regional utility. After researching various technologies, WiredWest determined that Fiber is the best solution to reach all residents in these hilly, forested areas, and provide high quality broadband for decades to come. Shared ownership and regional operation was the key to making the service affordable. Rowe joined WiredWest in 2011. Currently Russ Jolly and David Dvore are our delegates.

WiredWest formulated a plan to build a regional network for member towns. Individually, most towns could not afford to operate a network and would not have the human or financial resources to plan and manage the assets. Building and operating regionally is much more efficient and cost-effective.

In 2014, the Massachusetts Legislature appropriated another \$50M for Last Mile Broadband development. MBI took \$5M off the top. Another \$5M was to be for partially served towns to incentivize cable companies to expand their networks. \$40M was for the 30+ unserved towns. MBI initially backed WiredWest's plan. Estimates showed that it would take \$120M to build a regional fiber network for the unserved towns. In November 2014, MBI and WiredWest made joint presentations to towns proposing that MBI would direct and pay 1/3 of the cost of a regional fiber network. In order for towns to participate, they must appropriate 2/3 of the cost for their town's portion of the network. Once built, ownership would be turned over to the WiredWest MLP Coop for it to operate. 24 Towns subsequently appropriated the money and a number of others were interested, but not yet ready to allocate money. WiredWest organized a pre-signup campaign to establish interest. 22 Towns reached a 40% sign-up goal. Rowe reached 50% pre sign-up.

In December of 2015, MBI suddenly reversed it's position and announced it would not fund WiredWest's proposal and insisted towns each build, own, and operate their own network. Only a small number of the larger towns could really afford to do this. Shortly after, the Governor

stepped in and reviewed the program. He put two new people in place to manage the program: Peter Larken to report to the Governor, and Bill Ennen as the liasson to the towns. They were given strict orders to make rapid progress.

### ***The Current Process***

Under the new regime, each town must build it's own network with MBI's help, however more choices are avialable about the type of network and how it's run. Towns must go through a readiness process. A single point person must be appointed from each town to interface with MBI. Rowe appointed David Dvore. The first step was to meet with Bill Ennen, which Rowe's team: David Dvore, Marilyn Wilson, Russ Jolly, and Janice Boudreau did on May 23, 2016. It was a productive meeting in which we expressed our concerns and Bill outlined the new process, still a work in progress. Bill said we were ahead of most towns in our understanding and preparedness. Soon after he assigned Todd Corcoran of MBI to be our Program Manager to walk us through the readiness process and eventually the design and construction of our network. We have had numerous communications with Todd, mostly via email, and met with him on June 28. He showed us the documents and preparations needed to plan our project and get it approved.

There are a number of choices to make about technology and extent of the network. For a fiber network, a big part of the job relates to surveying available poles, obtaining agreements with the pole owners, Verizon and National Grid, to use them, and preparing the poles for additional weight if necessary (make-ready). Also, a sustainability worksheet must be filled out in order to show we have a plan to operate the network that will at least break even. This involves estimating numerous costs of owning and operating a network. It would have been better to have done this regionally rather than for each town, but this is how it is. We are most of the way through this process.

Under the new regime that the Governor set up, it is DLS, a division of DOR, who would review and approve the financial plan rather than MBI. Marilyn Wilson, Chair of the BOS, came up with a way to finance the project without needing to issue a bond to borrow money. The costs of borrowing would nearly double the total cost over the term of the loan. Instead, we will finance it out of a combination of Stabilization Fund, Capital Stabilization Fund, and Free Cash. We should consider replenishing these funds over time from taxes. The bond process is not only costly, but time consuming and is causing delays for other towns. For Rowe, the good news is that DLS has approved our financial plan.

### ***What's Next?***

Todd Corcoran is preparing his recommendation for the readiness assessment and plan that we have worked on with him. This will need to be approved by Peter Larken and we'll then sign an MOU allowing us to proceed. We hope to have this done soon, barring unforeseen objections by MBI.

Then we get put in the queue for MBI to do a pole survey. We should have the pole attachment agreements in place soon. After the pole survey, which MBI pays for, we move into construction

related costs that is mostly paid for by the town with a little help from the state. Any make-ready on the poles will be performed.

MBI will be hiring a D/E (Design and Engineering) Firm to turn the specs we have chosen into an actual network design with estimated cost. MBI and we will work together with the D/E firm to come up with the final plans. We may have to refine some of our decisions to fit within the budget, for example, as a first pass we are trying to include the cost of connecting every home in town not only to the curb, but to the premises. If this doesn't fit within the budget, we may have to pass some of that cost onto homeowners. Too soon to tell.

After D/E, MBI will hire a construction firm. At this point, the construction firm should be able to give us hard numbers as to what it will cost before we sign a contract. The details of this are still sketchy, but we're working on it. We're probably looking at a couple of years before it is built and operational, perhaps in 2018 if things go really well, but there are many unknowns.

### ***Beyond Construction***

The original plan was for the construction of a regional network that WiredWest would own and operate on behalf of the towns. When that plan was struck down, it left WiredWest, a highly functional coop of towns, wondering how to fulfill it's mission. MBI has focused on constructing networks without WiredWest's involvement, but has left open the question of how to operate the networks. For most towns, doing that alone is prohibitive. So we've been working in WiredWest to develop a plan for regional operation of the town networks by linking them with a fiber optic ring. WiredWest has issued an RFI collecting information on companies that can perform some or all of the necessary services such as:

- Customer Service
- Billing
- Technical Support
- Line Maintenance
- Network Operations - Fiber VOIP
- Internet Access (ISP) Sales
- Marketing Accounting
- Web site development and maintenance

Arranging for these services as a region will be much easier than each town doing it, and much more cost effective. Due to MBI's change in game plan, the cost of service may be a little higher than anticipated. We will certainly do what we can to keep the cost down.

WiredWest's website, <http://wiredwest.net> has additional information and updated news about progress.