

**Town of Waldoboro Maine
Communications Technology Committee Minutes
Municipal Building – 1600 Atlantic Highway
August 22, 2016
6:00 p.m.**

1. Call to Order and Quorum

Richard Genthner called the meeting to order at 6:00 p.m.

(Note: Richard had to leave the meeting early to attend an EMS callout. John Lawrence took over in his absence.)

Committee Members present were: Robert Butler (RB), Richard Genthner (RG), Richard Glidden (DG), Richard Hoffses (RH), and John Lawrence (JL).

Others present were:

Kyle Santheson, Town of Waldoboro

Jim Troutman, Lincolnville Communications, Inc.

Jeff McNally and Sam Chapman, Waldoboro Utility District, Chairman and Clerk, respectively

Mary Ellen Crowley, Executive Director and Jim Blier, Volunteer, LCTV

Reuben Mahar and Seth Hall, Waldoboro Residents

2. Approval of August 8, 2016 Minutes

RH moved to approve the August 8, 2016 minutes. DG seconded the motion. The vote to approve was unanimous.

3. Chairman's Report

Utility District. RH attended the Utility District Board meeting and will report to the Committee later in the meeting.

Recent Supreme Court Ruling: According to newspaper reports, attached, the Court has ruled that the FCC cannot allow municipalities to compete with commercial providers. RB questioned whether the ruling

applies to single-municipality networks as opposed to multiple municipality and regional networks. JL advised that the committee should determine the State's position on the issue. The Court decision conflicts with historical FCC policy allowing municipalities to own networks. JL also asked whether one town would be allowed to have multiple providers on their networks. RG suggested that the ruling could put a halt to Federal Funding for future broadband projects in Waldoboro.

JL said we continue to have pockets of individuals and housing areas that have no broadband access or that are under-served. RG added that we would now be hard-pressed to find areas in Waldoboro that would qualify for grant support. How, going forward, do we determine whether an area is unserved or under-served? JL concluded by saying that the Federal Government still has about \$7.4 million in its "Connect All" fund. Our committee needs to look at all the options available before we start applying for them.

4. Richard Hoffses' Report

The e-mailed report follows:

"I attended the Waldoboro Utility District board meeting today, 8/18/2016, at 4:00 PM. In attendance were Jeff McNally (conference phone), John Fancy, Samuel Chapman and Liam Ducharme. In reference to legislation, which includes a provision for utilities districts to form broadband networks, the Board unanimously agreed to have discussions with the CTC in that regard. Sam asked for explanation on the importance of broadband and high speeds. Liam and I responded. The Board would like to meet with all of us at our next meeting 8/22/2016, Monday at 6 PM to present questions. I told them I saw no reason why they could not attend. This is my report, which can be read at the next meeting. Because this would involve our agenda I am sending it to you all now. Richard Hoffses"

5. Public Comments

Seth Hall said that the Supreme Court decision is important, but it should not lull the committee into rejecting the

municipal network model. He said that if we proceed with LCI, we run the risk of locking ourselves into a situation, which we cannot back out of. He added that as a commercial entrepreneur in Waldoboro (Seth now owns 970 Main Street and recently bought Fieldcrest to house a small business incubator where high tech capabilities will be necessary) he will want access to broadband that is more reasonably priced than that which LCI offers.

JL added that broadband end-users must be satisfied. We need to figure out how to accomplish that goal without increasing taxes. He said that Time Warner has been selective about the areas it serves in Waldoboro, and has left many without service. LCI, a much smaller company, has been responsive. The committee should help LCI establish a take rate that encourages people to use LCI fiber. He concluded that the committee must do more educating.

Mary Ellen Crowley, Executive Director of LCTV, is interested in the committee's efforts to stream local meetings. The committee advised Mary Ellen that it would stream, live, the Planning Board meeting at the committee's event on September 14th. Mary Ellen is interested in sharing with others what Waldoboro is doing.

6. Update from Jim Troutman, LCI

Jim apologized on behalf of Randall Manning for Randall's absence. Jim said that LCI had installed 3 miles of fiber on OAR and predicted that fiber on that road would be operational before the end of September for some customers. LCI now has 19 committed OAR customers and 41 prospects with 8 in service. The precise take-rate is still unavailable. LCI will make serious efforts to sign up and

connect customers on OAR in September, when much of the system will have been installed.

LCI will build out any area of Waldoboro that has a commercial justification. LCI does not want to lose money, however the company does not have to make money, either. The density of customers in a given mile of road is critical. It costs LCI anywhere from \$3,000 to \$20,000 per mile. They will go anywhere north and south on Route 220 and Route 32 where they can identify a cluster of interest in fiber.

RG asked what the committee could do to help. Jim responded that the public should be better educated about the differences between fiber and other technologies, pointing out that fiber is symmetrical, with identical up- and download speeds. Consequently, fiber is ideal for cloud-based programs.

Jim said that the Committee needs to identify areas that are unserved or underserved, emphasizing that it's a lot easier to get grant money for unserved areas. He underscored that ConnectME is a great program, but it does not have a lot of money, and Maine is big state. ConnectME might support 10 to 20 applications annually.

Jim mentioned that USDA has grant programs for underserved farmers and fishermen.

RB asked about LCI's expected payback. Jim responded that LCI takes long-term view. The business generates all required funding internally. Moreover, LCI, unlike many of the major national broadband companies, is not in business to grow its markets with a view to selling. He contrasted companies which private equity funds own. The grow businesses and flip them. LIC is privately held and locally

owned. While Jim cannot speak for the family owners, he was confident in saying that there are no plans to sell the business within this generation's lifetime.

The owners want to build a reasonably stable company that they can pass on to future generations. LCI has a five- to 10-year decision-making horizon. They are not looking to recover costs in 1 to 3 years. Consequently, they need to keep their customers for a very long time.

Historically, LCI does not borrow to fund its capital projects. Its cost of funds has been zero. The company focuses on doing reasonable projects for reasonable amounts of money. They are very careful with spending their money.

RH said that fiber itself is "passive". The choice is to install have dedicated fiber per customer or to design a network with some level of sharing. Jim said up to 16 customers are doable. In Waldoboro, LCI serves almost everybody out of Nobleboro. They are in the process of transitioning equipment to Waldoboro. The cabinet at OAR will be served from Nobleboro and Union. LCI is mindful of the need for additional capacity to permit expansion of its new Waldoboro network, but they also want to ensure utilization of installed capacity. The OAR project will provide is fiber to every customer. Labor is the most expensive component of the installation.

Seth Hall asked how a Waldoboro revenue bond might affect LCI. Jim responded that there are a number of examples of public/private partnerships. They can be complicated. He compared it to a municipally owned electric utility. Jim said the Islesboro model would work out well. It guarantees revenues per home. A related scenario is a declining revenue bond, which the commercial entity can purchase at

a pre-agreed point in the bond's maturity cycle. . Fiber has a 20- to 30-year useful life, and it could be longer than 30 years. So, a 20-year Bond is feasible. LCI is open to the idea of a public/private partnership. Regardless, LCI will continue to build out fiber in those areas where there is sufficient demand.

Seth Hall asked if Jim could imagine a scenario where LCI would be a service provider in an open municipal network? Jim responded, "Yes", subject, of course, to LCI senior management approval. He emphasized the Waldoboro is not the only town where LIC is active. LCI is looking at every town in the Mid-Coast region.

Kyle Santheson asked how progress is to be tracked. Is there a map, which is regularly up-dated, one that shows existing and future build-out?

Jim encouraged the committee to do its own mapping and said that GPS mapping technology is available in Waldoboro.

7. Discussion of September 14th Fiber Demonstration: 6:00 p.m. to 8:00 p.m. at Space #9

RB said that Jeff Hurd had told him Space #9 would be available for the CTC event regardless of the status of MAP as lessee. Butler said the only real problem would be accessing the key. He will be in contact with Jann Minzy who reportedly has one.

JL created a list of FAQ—attached—to which the LCI needs to be responsive. The FAQ covers issues the fiber to home user will face. The committee practiced covering the material during a discussion summarized as follows:

Where is the fiber cable attached to the house? Jim responded that IPTV and VOIP services would drive the location of the box.

How many computers can be attached? How do they attach? Is the connectivity wireless? Jim said the answer depends on a number of factors. LCI will typically work with the homeowner in advance to survey the site and figure things out. LCI prefers to put its box on the same outside wall as the electric meter. A location outside the building means LCI can work on the connection if the homeowner is not available. LCI runs the Internet jack into the building. They will install additional outlets inside the home for \$20 apiece. The owner is responsible for the cost of the router. LCI sells one for \$80. They will rent one for \$10 per month. If the owner chooses to purchase the router, LCI will recommend a good one. LCI will move any existing phone line to take the new service if the homeowner opts for fiber telephone in addition Internet and television. LCI will charge its hourly rate to move phone jacks.

LCI will pay for the first 250 feet from the pole to the house. LCI charges \$0.55 per foot for aerial installations and \$1.00 per foot for underground installations assuming a conduit is already in place.

JL asked if LCI would make a handout available. Jim responded it would and will work with the CTC to produce it.

JL said that we must impress, during the demonstration, what 10X10 service is like compared to what is now available.

Jim responded (somewhat tongue-in-cheek) that speed in

the home largely comes down to how many teenagers live in the household.

There was discussion of a self-demo kiosk for hands-on experimentation.

Jim said LCI typically increases bandwidth within one business day if needed. Jim said broadband capacity is essentially unlimited. LCI does not intend to over subscribe the network.

The committee asked LCI to review its price list so options are clearly understood.

JL suggested a diagram of a typical hook-up. LCI will provide it. All agreed on the need for crystal clear guidelines for homeowners.

JL also pointed to a need for examples of routers, why they are critical and how they hook up and operate. Jim typically recommends that customer allow LCI to run cables to all TV's. If there is an existing co-ax cable, they can use it with additional equipment.

RH suggested a human-interest demo, possibly a grandmother in Waldoboro skyping to grandchildren in California. The purpose of the demo is to elicit from attendees an emotional connection to fiber broadband.

Seth pointed out that fiber technology requires power at each customer's premises. Jim said LCI is no longer selling battery back up. If a residence has unreliable power LCI will suggested the customer spend an extra \$50 for a battery. Bigger battery packs that operate for up to 8 hours are available at a cost. The bottom line is that power is required

inside the house.

There was a discussion of IPV-4 versus IPV-6 technology. The point is that North America ran out of IP addresses last year. IPV-6, with 128-bit capacity, provides a staggering amount of IP space. LCI, itself, has sufficient IP address capacity.

Contract or Service Agreement Document is available. LCI is offering a 3-year contract with special pricing for services and no installation fee (up to 250 feet). LCI will have application forms available at the demo on the 14th.

Mary Ellen said that LCTV could put up a notice about the event on its televised bulletin board. The notice must be an 800 X 600-pixels jpg.

JL touched on apps and other software that performs well with Fiber. He mentioned “latency” and described it as the amount of time it takes a computer to pass information to the server and to receive information from the service. Fiber broadband, because of its symmetry, reduces latency far more effectively than copper-based services.

8. Utility District

Sam Chapman said the use of broadband jargon does not work and advised it could alienate some people. As a committee, he suggested, we need to address the public in very plain language and stop using jargon. Jeff McNally added that people watching the demo on the 14th of September or future CTC meetings may or may not have computers. The CTC needs more than one digital literacy session, and it needs to address the lowest common denominator so that people can benefit from CTC meetings

and public demos.

Jeff said the Utility District needs a clear definition of “Unserved”. The absence of cellular does not count for grant purposes and is not included in the definition of unserved.

Jeff stated that the Utility District trustees have to understand what the CTC is proposing. Is the CTC addressing one town (Waldoboro) or is it talking about more than one town.

RB asked about the Utility District’s charter, which comes from the State of Maine Legislature. Jeff said that in 2016 the Maine Legislature passed LD912, which permits parties to establish a regional utility district:

“A. To provide or, through public-private partnerships, to support or promote the provision of any of the following:

(1) Broadband services; and

(2) Internet services; and

B. To issue revenue bonds in support of any of the activities undertaken pursuant to paragraph A.

Nothing in this subsection exempts a regional municipal utility district from any applicable provisions of Title 35-A.

LD912 is attached to these minutes. Jeff also mentioned Title 35-A and Title 30-A, both of which can be accessed

using Google.

Jeff said it's not overly complicated, but it is complex. He emphasized, again, that the Trustees of the Waldoboro Utility District have to understand broadband.

RB nominated RH to serve as a liaison between Communications Technology Committee and the Utility District. DG seconded the motion.

Three members, comprising a quorum, voted in favor of the motion. RH abstained.

9. Adjourn

RB moved to adjourn at 7:28 p.m. DG seconded the motion, which passed unanimously.

Redzone Wireless, LLC Completes Acquisition of GWI Fixed Wireless Network Assets

Acquisition Expands Redzone's Rural Maine Residential & Commercial Broadband Service Area Across Midcoast, Coastal and Island Communities

August 18, 2016

August 18, 2016 – Rockland, Maine. Redzone Wireless, LLC, a leading local Maine wireless Internet service provider (WISP), has completed a transaction to acquire and operate GWI's (Biddeford Internet Corporation) wireless Internet network assets which serve residential and commercial customers primarily in Maine's Midcoast region and numerous Penobscot Bay coastal and island communities.

Through the acquisition, Redzone will immediately provide service to hundreds of new wireless Internet subscribers in underserved communities including Union, Jefferson, Georgetown, Somerville, Waldoboro, Northport, Owls Head, Rockport, Lincolnville, Warren & Belfast. Redzone will also serve new and existing customers living on the island communities of North Haven, Westport, Vinalhaven, Monhegan, Matinicus, Squirrel Island, and Islesboro.

"We are pleased to announce this Redzone broadband service expansion. The new areas now covered by Redzone are extremely complementary to our existing network. We are particularly excited to be adding services to many rural and island communities." said Jim McKenna, Redzone Wireless, LLC President. "We respect GWI's experience in fiber optic network development, and we hope to use GWI's fiber network resources to support our expanding wireless networks in the future." said McKenna. "Redzone is a state-leader in wireless broadband deployment and will be able to leverage their expertise to improve and expand the purchased wireless network. This is an example of two Maine-based companies coming together to help bring better broadband to coastal communities," GWI's CEO Fletcher Kittredge stated. "Our company's focus is on fiber optic deployment and given our trajectory, selling our wireless assets to a company whose primary attention is on wireless deployment will be better for business and residential customers alike."

Existing GWI wireless Internet customers can visit <http://www.redzonewireless.com/GWI-Transition> or call 207-596-5700 for more detailed information regarding their account transfer to Redzone. Additional financial terms of the private transaction were not disclosed.

Redzone Media Contact: □ Shannon Maguire □ Marketing Programs Manager □ website: www.redzonewireless.com □ email: smaquire@redzonewireless.com □ phone: 207-596-5700

The FCC Gets Throttled

Aug. 10, 2016 7:39 p.m. ET 58 COMMENTS

While the Obama Administration is speeding up its rule by fiat, the judiciary is sometimes standing up to it. On Wednesday the Sixth Circuit Court of Appeals throttled the Federal Communications Commission's attempt to pre-empt state laws regulating municipal broadband.

Last year the FCC overruled state laws in North Carolina and Tennessee that restricted municipal broadband networks in Wilson and Chattanooga from expanding to neighboring jurisdictions. About 20 states impose limits on municipal broadband, not least because public utilities can discourage private competition and cost taxpayers a bundle.

The Supreme Court in *Nixon v. Missouri Municipal League* (2004) rejected federal pre-emption of a state ban on municipal telecom services, so FCC Chairman Tom Wheeler tried an end run. The agency claimed authority under Section 706 of the 1996 Telecommunications Act, which instructs the commission and states to “encourage the deployment” of advanced telecommunications and to “promote competition in the local telecommunications market.”

Tennessee and North Carolina sued the agency for impinging on states' sovereign authority to regulate municipalities, which is enshrined by the Tenth Amendment. According to longstanding judicial precedent, Congress must clearly articulate its intent to interpose itself between a state and its political subdivisions. The FCC sought to distinguish the municipal broadband cases from *Nixon* by noting that the Supreme Court had then been upholding rather than reversing an FCC order. Yet as Judge [John Rogers](#) notes in the decision for the three-judge panel, “the distinction only makes a difference if we are required to apply

[Chevron CVX 0.75 %](#) deference to the agency ruling in this case.” Judge John Rogers found that Section 706 does “not authorize the preemption attempted by the FCC,” so the court did not need to defer to the agency’s false interpretation.

In other words, the feds can’t simply claim a law says something the law doesn’t say and then demand that courts defer. Judge Rogers concludes that the “FCC order essentially serves to re-allocate decision-making power between the states and their municipalities.” Not even the Obama Administration can get away with breaking the law every time.

wsj.com

Court Strikes Down Federal Rules Supporting Local Broadband

Drew FitzGerald

Aug. 10, 2016 4:37 p.m. ET

An appeals court on Wednesday reversed federal rules designed to bolster internet service provided by local governments, handing a victory to cable and telephone companies that oppose public broadband.

The Court of Appeals for the Sixth Circuit said the Federal Communications Commission overstepped its authority last year with an order pre-empting state and local laws restricting municipal broadband projects.

The telecom regulator [at the time said](#) laws on the books in North Carolina and Tennessee were discouraging broadband internet access, a resource the government is supposed to make more widely available.

Both states sued to block the order, arguing that without explicit authority the FCC couldn't override state laws dealing with local matters. Advocates for the telecom industry [also fought the federal rules](#), arguing that publicly financed broadband projects hurt their competitiveness.

The FCC order responded to earlier complaints from city-owned internet providers in Wilson, N.C., and Chattanooga, Tenn. Municipal authorities there started selling internet service to residents years ago but later encountered state laws that restricted their ability to raise funds and expand.

Jim Baller, an attorney who represented both cities in the case, said the state laws hurt community efforts to provide cheaper internet access. “We hope that state legislatures will appreciate that local choice should be encouraged, not thwarted,” Mr. Baller said. The ruling will allow states to keep restrictions in place that make it harder for cities, towns and public utilities to compete with for-profit companies like [AT&T Inc.](#) [T -0.25 %](#) and [Comcast Corp.](#) [CMCSA -0.25 %](#)

AT&T policy chief Jim Cicconi praised the court’s decision. “This case was never about the best way to get broadband into rural communities,” he said. “It was about whether the FCC had legal authority to pre-empt state law.”

FCC Chairman Tom Wheeler on Wednesday said the decision would hurt local communities and offered to testify on behalf of other groups trying to overturn broadband-restricting laws.

“The efforts of communities wanting better broadband should not be thwarted by the political power of those who, by protecting their monopoly, have failed to deliver acceptable service at an acceptable price,” he said.

The chairman stopped short of promising to appeal the ruling, however. Asked whether the agency would fight the court’s decision, spokesman Mark Wigfield said the agency was reviewing its options.

Write to Drew FitzGerald at andrew.fitzgerald@wsj.com

STATE OF MAINE

IN THE YEAR OF OUR LORD

TWO THOUSAND AND FIFTEEN

H.P. 632 - L.D. 912

An Act To Allow the Establishment of Regional Municipal Utility Districts To Support Broadband Communications

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 30-A MRSA §2203, sub-§9 is enacted to read:

9. Included powers. Without limiting the powers, privileges or authority that may be jointly or cooperatively exercised pursuant to this chapter, any 2 or more parties may enter into an agreement to establish a regional municipal utility district for any or all of the following purposes:

A. To provide or, through public-private partnerships, to support or promote the provision of any of the following:

(1) Broadband services; and

(2) Internet services; and

B. To issue revenue bonds in support of any of the activities undertaken pursuant to paragraph A.

Nothing in this subsection exempts a regional municipal utility district from any applicable provisions of Title 35-A.

FAQ'S FOR FIBER OPTIC DEMO SCHEDULED FOR SEPTEMBER 14, 2016 FROM 6:00 P.M. TO 8:00 P.M. AT SPACE #9 (9 Friendship Street, Waldoboro 04572)

How will "Fiber To The Home" (FTTH) fiber cable be attached to the premises?

To attach my computer(s) to the LCI distribution box on the outside of my home, what do I, the subscriber, have to provide? I understand I could select Internet, Telephone or IPTV (Internet Protocol Television) connectivity or combinations thereof. Must I provide anything other than the phone, TV and/or computer I intend to connect?

What are the prices for each service or combinations of services? Can we review your price list, OPEN, so that we can fully understand the options?

What are the terms of the LCI contact, including installation costs, contract length, and termination?

I understand our town office is to be set up with a kiosk demo capability so I can evaluate if your FTTH service will meet my needs. How can I see the services and where is the kiosk demo? Is your demonstration tonight an example of 10X10 Mbps (Megabits per second) service? Can you demonstrate speeds that are faster than 10X10 Mbps, as well? Can you please explain "Mbps" and "broadband width"?

Can LCI provide a diagram of the hook-ups for the in-home installation? I want to understand how you would intend to install the fiber services to my TV, computer or telephone.

Can LCI supply or recommend Internet Routers or "airports" that are locally available and that can be connected to and be entirely compatible with your service box?

Can I have LCI configure for my home the services I select? If LCI configures and completes the in-home installation of the in-home equipment, what is LCI's additional charge, if any?

Is there a tech support contact number I can call if there is an outage or other technical problem?

Meeting of Waldoboro Communications Technology Committee
August 22, 2016
Attended by McNelly and Chapman

In 2015 the Maine Legislature enacted LD 912, (Public Law Chapter 222), which allows for the establishment of regional municipal utility districts to provide or, through public-private partnerships, to support or promote the provision of broadband services or internet services. This Communications Technology Committee has approached WUD as to prospect of “partnering” with the district, conceivably (I guess) relative to the provision of broadband or internet services.

There are questions, issues, nuances related with a municipal network. Many issues would have to be considered relative to what the best model for Waldoboro might be.

Waldoboro has 2 ½ mile of roads (out of 100+ total miles) that are unserved. Unserved is defined as lacking cable, fiber or DSL (cellular coverage and satellite are not included in the definition of “unserved”). The committee applied for and received a grant from CONNECT ME to install fiber on the Old Augusta Rd. That fiber is being installed by Tidewater LCI. It appears that the broadband operation will be operated by Tidewater. All indications are that Tidewater is proactively moving forward on the fiber front.

The goal is to have fiber to all homes and businesses. The committee is discussing the prospect of additional grants for fiber installation. Likely, those might be federally based, as CONNECT ME only has \$1.5M in grants annually.

Fiber is symmetrical product, i.e. upload and download speeds will be the same. For the Old Augusta Road, 20/20 and 50/50 packages will be offered. Installation costs runs form \$20 – 50 K per mile. Fiber has a 20 – 30 year life.

The Tidewater representative indicated that, personally, he was not opposed to a municipal network. However, he noted that they can be complicated. He also stated that Islesboro may prove to be a good model of a municipal network. If memory serves me correctly, once the municipal network is constructed on the island, the annual cost would be \$360 per residence.

I will review the notes I took at this meeting at our next Board meeting on 9/15, but be aware that there will be a public meeting on digital literacy on September 14th from 6-8 PM at Old Number 9 on Friendship Street.

I believe that I will be able to make that meeting; it should be an opportunity to learn much more about is being proposed.

Jeff