



Fiber Broadband Completion Task Force Meeting Agenda

Date: Thursday, March 31, 2022

Time: 6:30 PM

Topic: Fiber Broadband Completion Task Force Meeting
Time: Mar 31, 2022 06:30 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/83288858490?pwd=ampZVWpJSTIVMDk5Z2F0TDVpVVFzQT09>

Meeting ID: 832 8885 8490

Passcode: 000431

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Meeting ID: 832 8885 8490

Fiber Broadband Completion Task Force Members:

Gordon Brockway - Light Board Representative

Scott Hopkinson - PEG Access Advisory Committee Representative

David Hesel - HOA (Home Owners Association) Representative

Gail Hire – Citizen at large Representative

Mark Howell – Citizen at large Representative, Task Force Chairperson

I. Call to order/Roll Call/Assign Clerk – Announcement of Recording in Progress

- Meeting recordings are posted by MMN on YouTube as available:

<https://www.youtube.com/c/MinutemanMediaNetwork/videos>

II. Minutes – Review and Approve as available

- Pending Minutes – February 24, 2022 Clerk: S Hopkinson
- Pending Minutes – March 2, 2022 Clerk G. Brockway
- Pending Minutes – March 9, 2022 Clerk: G. Hire

- Pending Minutes – March 24, 2022 Clerk: D. Hesel

III. Chair's Report

- Future meetings: 4/7 at 6:30 PM – Finalize Draft Report
- Light Board 4/13 7:30 AM presentation of action item for Light Board
- Public Hearing 4/14 7:00 PM – Townhouse Hearing Room Overview of Report
- 4/21 school vacation week, 4/28 6:30 PM

IV. Update on efforts to design coordination fiber construction with the roads program.

V. ARPA (American Recovery Plan Act)/Infrastructure Proposal Development

- o Lost Revenue estimate statement

VI. Discussion of the Draft Report Sections and Content

VII. Report recommendation votes if needed

VIII. Wrap up and Next Steps

IX. Public Comment Period

X. Adjournment

The page contains links to Reference Materials pertaining to Telecommunications:

Task Force Web Page: <https://concordma.gov/2958/Fiber-Broadband-Completion-Task-Force>

Objectives Document: [Focus Area Defintions](#) (9/30/21 version)

GIS Data Analysis – Preliminary map link:

<https://www.arcgis.com/home/webmap/viewer.html?webmap=33ab6e1bd086442994735c945614ae10&extent=-71.4463,42.4187,-71.2517,42.5013>

Broadband Availability Map: [Broadband Available](#) ArcGIS Online tools from Concord Broadband to check for known availability.

Telecommunication Financials:

Enterprise Budget Books: <https://concordma.gov/253/Enterprise-Fund-Budgets>

FY22 CMLP Operating Forecast (Telecom starts on page 97):

<https://concordma.gov/DocumentCenter/View/34364/2022-CMLP-Forecast---Final-Public>

FY22 Enterprise Budget Book: Telecom on p.38 and following.

<https://concordma.gov/DocumentCenter/View/29426/FY22-Enterprise-Budget-Book>

[2021 Telecommunication Budget](#):

[July 2021 Telecomm Financial report](#):

2018 Enterprise Budget Hearing: [Article 47 - Light Plant Expenditures and PILOT PH Pres 03-12-18](#)

Town Meeting Calendar [2021-2022 ATM Calendar \(Final\)](#)

Underground Bylaw [No New Construction of Utility Poles and Overhead Wires Bylaw \(PDF\)](#) from Town Bylaws Page: [Town Bylaws](#)

Fiber Completion Task Force Minutes 2022-03-02

Minutes for meeting of the Fiber Broadband Completion Task Force March 2, 2022

Mr. Howell opened the meeting at 6:30

In attendance were Mark Howell (chair), Gail Hire, Gordon Brockway, Mr. Hesel, Scott Hopkinson, and Terri Ackerman (SB Liaison). Also present were Carlin Reed, and Vince Carlson.

Upcoming Meetings

Wednesday March 9th at 6:30.

No meeting is planned the following week to attend enterprise hearing.

Thursday March 24 at 6:30.

Thursday March 31 at 6:30.

Roads Program

Mr. Howell met with Public Works director Alan Cathcart to discuss roads program and fiber expansion.

Mr. Howell plans to meet with LP director to discuss integration with roads resurfacing.

ARPA Funding

ARPA funding is available to fund Covid recovery. The task force discussed ways to estimate the theoretical loss of revenue due to COVID, using a spreadsheet model of payback intervals attributed to incremental installments.

Mr. Hopkinson clarified that a loss of new subscriptions for a two-year period has consequences for several years into the future. There is an area under the curve that could define this.

Mr. Brockway compared the estimation to a net present value calculation. The take rate is an upper limit on the value.

Mr. Hopkinson: The expected level of business in the town is an important consideration.

Preliminary outline of recommendation sections

No changes have happened since the group edited last meeting

Mr. Howell defined the take rate as the percentage of addresses which have access to service who take it.

Subscription rate is monthly

Saturation could cause the take rate to stop rising.

Mr. Hopkinson: installations have not dropped to zero.

Mr. Howell, rate of installations during warm weather, they went to single digits.

Mr. Hesel: Retirement, board, fiber committee. Hadn't heard of concord broadband. Explained. But he has Comcast.

Mr. Hopkinson: Comcast is a one stop shop.

Mr. Howell: When started, there were a lot of concerns with quality of service over cable. Cable service has improved. DOCSIS 3.0, 3.1. Documentation shows that areas with a single provider don't have as good service.

Mr. Hesel: Apple is a closed ecosystem. (Like the way Apple locks you in). What is the cost of increasing the number of available addresses?

Mr. Hopkinson: Survey of people with broadband in front of house who aren't taking the service (3000), pick 200 for a survey or some statistically sound number, ask them if they know what the service provides. Confidence interval. Goal is to estimate the likely available Mr. Howell, how many more customers we can find.

Mr. Howell: this may be a way of estimating the max take rate. Take 2000 residences not being served right now. These are MDUs, Wright Farm, etc. These may be different than the ones that did get served. Take two surveys.

Mr. Brockway: can ask a neighborhood if they will take new service if we install fiber in your street? Prioritize streets with more enthusiasm.

Mr. Hesel: Ask Concord Greene, if we've wired all of the apartments, will you take it?

Mr. Howell: Value of each new subscribers times the number of them. This is a value. Google Fiberhood. Moderately successful.

Mr. Hopkinson: Comcast is offering very high bandwidths.

Mr. Brockway: Concord should offer services that can complement a Comcast subscription:

Mr. Howell: Modems are capable of supporting sophisticated services, like Alexa

Mr. Howell: Suggests survey

Next two meetings

There is a two week and one day period, need work done by end of March. Will be looking for sign-ups next week.

Mr. Hesel: What are the sign ups in last two months? Jason Bulger joined last two meetings. Greg Marcinek no longer works. Jason Bulger is responsible for broad band business. Mr. Howell said Jason was a commitment to track the subscribers and report to light board. Mr. Howell is planning to meet Wendy Roveli (Light board chair), to plan when to meet the light board in April. Mr. Brockway: Light Plant hired a fourth technician.

Public Comment

Mr. Carlson asked about Concord Greene condo board decision about bringing in service. A survey described the service, stated a projected cost of \$100,000. (Really costs \$400,000). Would residents favor installation? 76% said no 24% said yes.

Mr. Carlson said that when Verizon installed fiber in a lot of places.

Mr. Hopkinson: Could they use a vibratory plow?

Mr. Mr. Hesel: There isn't a lot of grass for the vibratory plow.

Mr. Howell: There need to be more options on the table, and to be more clear about what they can spend to reach customers. Road program, Stacey Circle is going to be resurfaced, but it may be too late.

Mr. Brockway moved, Mr. Hesel second to adjourn. Unanimous. 8:15

DRAFT

Fiber Broadband Completion Task Force - March 9, 2022

Meeting held virtually via Zoom.

Meeting was called to order at 6:42 pm. Chairman Mark Howell and members Gordon Brockway and Gail Hire were present. Gail Hire volunteered to be clerk for this meeting.

Minutes for Feb 10 and Mar 2, 2022 are available. It was decided that it would be a better practice to review these at a future meeting when all committee members are present. Mr. Howell has asked Mr. Carmody in the Town Manager's office to check on the lag between recordings and posting on the Youtube channel.

Chair's Report.

Enterprise Budget Hearing is next Thursday, March 17, so the Task Force will resume its normal Thursday schedule on the 24th and 31st of March.

The Light Board met and heard a substantial Broadband update. Mr. Howell's summary of the update is as follows:

Jason Bulger, interim Broadband manager, has developed a plan to return to the previous organization of the Broadband business. He is recruiting for a Telecom manager who would report to Mr. Bulger. There is a

Request for Proposals out for the Broadband Help Desk. Mr. Bulger has suggested an initiative to better communicate the status of orders. Vendor contracts should help with repair backlog. Mr. Bulger stressed communicating proactively about potential outages (announcing them in advance). The Broadband operation is looking to coordinate with the Risk Committee. The community needs to weigh in on the Broadband mandate. The Broadband staff is trying to audit data on subscribers. There will be an extra Light Board meeting on March 30. Broadband is looking at expanding its marketing outreach and also at service levels. Mr. Bulger invited any comments.

Mr. Brockway added: the most important point - Concord needs to decide whether Broadband is an enterprise, which pays for expansion, or a “must serve” utility. He wondered whether the Task Force’s report should be written from the perspective of one or both goals.

Mr. Brockway noted that measuring the backlog and how many installations are completed needs to be a repeatable exercise. These metrics should be institutionalized. Mr. Howell noted that technicians used to work off of a Google sheet, and that the pandemic threw a wrench into their system. He suggested that some system should be picked and stuck with. One suggestion to measure current subscribers could be how many bills are being sent that Concord Light expects to be paid?

The Broadband update showed an appropriate level of attention to Fiber.

Mark Howell - whether we may be able to meet in person will be discussed next week. Gail Hire asked if we should schedule a public hearing. Mark Howell said that Wendy Rovelli, Light Board Chair, said the Light Board would like to have a meeting at which the Task Force report could be discussed. Erin Stevens works on public relations and communications at the Town office and can be asked to make an announcement. We should talk with other Task Forcer members about whether to have a public hearing.

Mark Howell offered an alternative to the Lost Revenue estimate that Scott Hopkinson presented at the last meeting. The resulting numbers are similar. He documented a model showing revenue loss from suspending installations. [See PDF of screen share, attached] Mr. Howell's spreadsheet originated from Matt Cummings. Looked at Residential/Commercial/Total subscribers.

Mr. Howell found that month-to-month change shows slowing in 2020. The average new customers per month is declining. Assumed Dec 2019 was the last pre-pandemic month. If the rate of new users had continued, we would have 131 more subscribers as of 12/2020, and continuing through 2021, we would have 295

more customers.

Mr. Brockway noted that COVID affected operations and made everyone operate at a lower level.

Mr. Howell estimated loss of total \$234,093.40. Average revenue per customer is \$70/month. In the first year, there are 131 fewer customers or \$55,165.

[Gail Hire left the meeting at around 7:20 pm for a few minutes]

Mr. Howell. In 2017, averaged 21 new installs per month.

Mr. Brockway - the current Broadband group seems like they want to turn this around (increasing subscribers).

Mr. Howell noted that the revenue per subscriber is a function of churn rate. For comparison purposes, Mr. Hopkinson's spreadsheet had a \$291,000 loss.

Mr. Brockway suggested that we need to show the good that the money (ARPA or other) would be spent on.

Mr. Howell - the Capital Plan indicates how Broadband revenue money would be used. Does not do much fiber construction for a couple of years. He recommends this lost revenue go to capital construction. Mr. Brockway - will this analysis go into the report or minutes? How get to work product with all this great thinking? Mr. Howell - recommend Light Plant to submit reimbursement of Lost Revenue for Select Board to consider.

Mr. Brockway wondered if the Task Force should write a letter now instead of waiting for a report; the issue could also be raised at the Fincom Enterprise hearing.

Mr. Howell said the Select Board and Town Manager are working on a list for ARPA funding. At the Jan. 31 SB meeting, Mr. Howell discussed the idea that revolving fund for Broadband could be created with ARPA funding. The Lost Revenue concept is an additional idea that could be put before the Light Board on April 13.

Mr. Brockway wondered how to write without picking sides. Mr. Howell suggested it is OK to provide alternatives. Gail Hire said that all of the Task Force members will read the sentences. She suggested not worrying about being one-sided because all of the TF members must agree on the wording. Mr. Howell said we should provide both paths in the document; list the outcomes, ask for a policy-based choice. Mr. Howell noted that Broadband is a new enterprise and therefore these policy decisions have not been made. It is OK to say how things appear. There is a need to make these policies overt so staff has a basis for their actions. Where the prime directive was initially "don't fail," the enterprise became self-sustaining and now the question is should we change course? Mr. Howell thinks we should suggest a course change.

Mr. Brockway noted that Comcast is getting help - government funding to support its low income customers. Mr. Howell said it is not our role to implement, but our report should include how to get this funding (it is possible for Concord to register and get reimbursed for serving low income customers). As an example, the Town decides that certain funds, like the Residential Assistance Fund have benefits, are worthy of public funding. Report should propose a way for community to reach a decision.

Mr. Brockway discussed the concept of organic growth rate. If the Broadband operation becomes more profitable that would drive growth. Mr. Howell also raised the concept of a dividend. It can be paid out as a Payment In Lieu of Franchise, or leftover cash could be put back into the business; subscribers also have a claim on the excess.

With an investor-owned Internet Service Provider, it should be possible to return some amount to the Town or residents. The Light Plant has an obligation to serve the whole community with electricity. In contrast, Water and Sewer serve only a sub-set of the community. Our report should give readers a way of thinking about how to decide whether Broadband should serve the entire Town.

Mr. Howell said fiber construction is analogous to a road network. Mr. Brockway said fiber construction redounds to the Town as a whole. After the backlog is met, there

may be an inflection point of installs not depending on productivity of staff.

Mr. Brockway wondered what percentage of the Town might the Fiber ultimately reach, 1/3? Mr. Howell said an additional 600 or 700 customers would mean 30% of the Town is reached. Ms. Hire asked about the significance of a 30% goal. Mr. Howell said it is helpful to build to a realistic goal; what support will be needed? 8,000 customers is too much. Take rate - market share - it helps to understand how much \$ will be available for building. Ms. Hire cautioned against sticking with the 30% number. In the future, there may be more reasons to have homes connected via fiber (not just for internet customers). Distributed energy, schools, virtual reality are all potential uses for fiber.

Mr. Brockway noted that new ideas are a challenge for the Broadband organization, which does not want to take risks. Mr. Howell noted that connecting all Town offices avoided costs; putting fiber along the water pipe to Nagog Pond is another 'new idea.'

The discussion turned to organization of our meeting on March 24th. Members should claim a section of the report, or be assigned.

Ms. Hire voiced support for Mr. Howell making the point that the Broadband operation's PILOF to Minuteman Media Network should be further evaluated from a policy

standpoint. Mr. Brockway noted that payments from Comcast should be greater because the value of the service that Comcast provides is higher.

Public Comment

Joan Densberger: She found Mr. Howell's data compelling on how the pandemic played into the build-out of the fiber network. Had the network been in place town-wide, it could have made a difference for communication during the pandemic, such as a private Healthnet or a reliable public health network. Ms. Densberger also suggested when drafting that we lay all information out there and err toward including more ideas.

Pamela Dritt, 13 Concord Greene. Upper level systemic review is fantastic - go for it all. People will be grateful for the information and even the hard issues.

Vince Carlson - on lost revenue, suggest we look at Comcast annual reports nationwide for 2020 and 2021. Record revenue in 2021. He thinks they were not doing installs in 2020, either. There are dozens of use cases: security cameras take a lot of bandwidth, require low latencies. Comcast had 5051 subscribers in Concord three months ago. They know how much bandwidth is being used; it went up 30%. There is an opportunity post-pandemic for more usage, particularly for symmetrical speeds. He asked about the Advanced Meters project and whether there would be overlap with

coverage/build-out with the fiber network.

Mr. Howell said the original application for the fiber network was for smart metering - a combination of fiber and wireless to the meters. It is more common in industry for smart meters to have big radio towers communicating with all the meters. As an IT person, he knows it is great to have fiber, but the electric utilities would rather have a private system. The Broadband network covers a huge percentage of where the AMR network could cover. The Light Plant will need to make a decision.

Mr. Carlson asked if AMR bids were public. Mr. Brockway said no, it was competitive information. Ms. Dritt noted that the Light Board has picked the finalists; Brian Foulds would know.

Mr. Carlson commented on low income Internet customers. The Federal government is paying ISPs that participate \$30/month/subscriber. Concord Light Broadband could use the \$30/month as a number for budgeting. Mr. Howell said with that level of reimbursement, it is do-able to offer \$10/month to low income customers who qualify for subsidized Broadband.

Mr. Brockway moved to adjourn. Ms. Hire seconded. A roll call vote was taken and the meeting was adjourned at 8:49 pm.