Governor’s Economic Recovery Sub-committee
Infrastructure (Transportation, construction, broadband, and banking)

AGENDA
Thursday, 5/28/2020
Industry Sector Resource: Broadband
Peggy Schaeffer, Director and Nick Battista, Chair – ConnectMaine Authority
Introductions
Presentation

Presentation Notes:

Guest Speakers – Peggy Schaeffer, Nick Battista

Thanks for having us, we are glad to be the first of many presentations that you will hear on infrastructure. We believe the most important aspect of infrastructure right now is broadband, which is the underpinning of whether communities are successful or not successful. ConnectMaine Authority has been around since 2006, we have an independent board, and are now part of the DECD. We have about 1.5mil in funding each year and provide two different types of grants.

Access to the internet is an extremely important part of daily life, particularly right now. Many small businesses depend on high-speed internet to stay connected and create jobs. Many remote workers in Maine must drive to libraries or other public places to access consistent internet and share files.

Survey by Mission Broadband, May 2020 – Slide #4 of presentation.
- 65% of people have service that meets their needs
- Some frustrations with cable and DSL
- Telecommuting is the biggest use of broadband
- K-12 education and telecommuting have the biggest service issues.

The past few months have shown a change in how and when people use the internet.

Often limiting factor for most applications is upspeed (speed with which you can upload information). Some broadband service diminishes over distance and with more users, making it less reliable. Broadband is a competitive market, not regulated monopoly like telephone service. In Maine we have had success with private investment and public subsidies, done through public-private partnerships.

Most recent round of applications for funding has just closed. Over 3mil in requests, with connectivity provided to around 1500 homes.

Where is there good broadband access?
Data comes from FCC Form 477. Tends to overstate the extent and availability of service. This issue of overreporting is a national issue. The problem with our data is also an issue that happens in many other states.

Speeds: downspeed/upspeed
- Green – 25/3
- Red – below 10/1
- Yellow – between 10/1 and 25/3
2014 National average was 30/10.

Oftentimes, speeds are reported as being higher than they are, because broadband is a competitive market.

Why is download speed faster than upload speed?
The technology that is used tends to have a conflict between upload and download. When you try to upload something, it takes away from the download speed. Customers generally focus more on download speed than upload speed. Fiber is symmetrical, allowing for 100/100 (for example).

For those who are working from home, upload speeds are critical. 25/3 is often too slow for these individuals. Reliability of connection is also very important. Because broadband is not a regulated marketplace, a lot of the information about how networks are built, operated, and run is not available to the public. ConnectMaine will be working on rulemaking this summer, hoping to allow the public to be provided with more information about who is getting what kind of service, and where the services are. However, it is the right of companies not to provide this information.

Connection eligibility:
Green – USDA funds.
Yellow – Tech funds.

How many providers are unwilling to share information about where their infrastructure is?
A: They all share the 477 data, and Consolidated has been the only company willing to share other data. Other companies have expressed concerns about confidentiality and competitive ability. Rulemaking this summer will update this information to be labeled as confidential. There will be an incentive added that if companies are not willing to provide accurate data, they will not be eligible for ConnectMaine grants. Charter has said that this will make it easier for them.

Q: Since the law passed, there has not been an increase in sharing?
A: No, companies are waiting for rulemaking, which will happen after the law becomes effective.

Q: Are there examples from other states that we could follow to get the information?
A: Most other states are using an approach that combines a speed test, along with other data that they collect. There are several states that have much better mapping than we do. One is Utah, whose director is skilled in GIS mapping, as well as North Carolina, which is in a similar situation. These states have also spent a lot more money on their programs.

Another aspect of this is what the data will be used for. On the Maine side of things, it’s good to consider why we want this data. We know that at least 83,000 homes in Maine lack the ability to connect to the internet. Rural areas struggle much more with this issue.

Knowing our data is inaccurate, we ask that all grants survey their area and talk to all other providers in their area, to be sure that the service is less than 25/3. A lot of this is worked out by the providers.
Polling work by the Island Institute: how divided is Maine between urban and rural areas? Broadband can help to equal perception statewide. **Most Mainers agree that expanding broadband access will have a positive impact on our economy.**

Many towns in Maine have central populations that are large enough to justify building out broadband access. Premise density allows us to understand the economic and revenue potential of an area. 23+ premise density is considered high premise density, meaning that there are at least 23 houses per-mile, meaning that broadband access is generally more consistent. 1-6 premise density is considered low premise density, making it an unpopular option for private companies.

(MAP – Broadband Economic Feasibility)

**Project Viability** – community engagement, premise density, take rates: The engagement of communities in this process (public private partnerships) allows companies to be more confident in the success of a buildout. The community support for a private investment in their community (Freeman, Alton, Argyle, Bowdoinham) helps private companies encourage the take rate of their product.

**Take rate** = % of households within a premise density that will pay for private internet service.

**Number one reason that people do not subscribe to broadband nationally**: affordability. When a community is looking to build out networks, they must look at demographics of the area. Will the community be able to afford the cost?

**Number two reason**: affordable equipment and digital literacy.

Internet companies cannot assume that they will get 100% of the customers that they pass. In rural communities, we often see higher take rates, even without community engagement. With community engagement, there are even higher take rates. When the community becomes involved (all take service), they can help to ensure that the community will have consistent and reliable internet due to a higher take rate for the company. Financial support from community and state help to increase take rates in communities.

**8/10 votes in Maine support incentives to expand high-speed internet statewide.**

In 2010, Maine received a grant to build the 3 Ring Binder, which is a line that runs from Millinocket through to Farmington. The Maine School Library Network and the University System pushed to have this 3 Ring Binder created. The University wanted all of its campuses to have equal access to internet access. This binder helps providers to build out access into rural areas.

**Maine Broadband Coalition** – community leadership network that helps to encourage community engagement in broadband buildout. Our community planning process has been nationally recognized as being a successful and engaged program. Community planning shows providers that there is engagement and interest within a community, giving them more incentive to build out in that community.

Q: Balance between building on current projects v. investing in new ones?

A: The issue currently is that within our scoring mechanism, a community build scores higher than a smaller build. We are looking to create a system that allows smaller builds to be more competitive within our grant application process. Maine has two tracks, a community build track and a “small dark holes” gap, where a
provider comes in to fill in gaps within a community that has not yet been covered. Less dense areas within a community are those that often need more support with building out access.

About three or four years ago, ConnectMaine changed their standard to 10/1 to follow industry footsteps, and to highlight the importance of upload speeds. Businesses are proposing that these be the type of builds that happen, for a variety of maintenance purposes.

Up until 2019, the standard for getting a ConnectMaine grant was 1/1. In 2019, ConnectMaine went up to the national standard, which is 25/3. If you being by driving demand through the ends of the network, you then have more demand to better service in the more populous parts of the network.

**Economic development strategy: ACTION D1, ACTION D2, ACTION D3.** Understanding that broadband is an underlying part of what makes Maine successful.

Q: Is there any data that links fiber buildouts with economic activity?

A: The data is beginning to come out in farm states. The broadband investment for community is about a 3:1 return. There is significant economic loss on a real estate sale when broadband is not available. Additionally, post-COVID Maine will have far more remote employees, making broadband access even more important.

**Take-Away:**

- **Community engagement** is very important. Maine has a nationally-recognized community engagement program. Community engagement allows for more action with less state funding.

- We need **broadband statewide** in order to stabilize and sustain almost any industry.

Add options to the capital stack through **capitalizing a loan fund at FAME** that provides private sector partners with subordinated debt and working capital and allows local public sector partners to move forward on meritorious projects without tying up municipal borrowing capacity. Conversations with FAME, the EDA, and providers are beginning to take place to see how this could be made possible. This is a significant opportunity for Maine to capitalize on a revolving loan.

**Near-Term: $15mil broadband bond on the ballot for July.**

More funding for ConnectMaine and subsequent broadband projects allows for further connection in rural areas. Many projects are ready to go, with providers available, but need funding in order to be successful.

**Note:**

- Maine West – Broadband Boot Camp – provides community support and technical assistance to individuals in Western Maine.

- Telehealth and small business focus – continue to consider in the future. A video is available on the ConnectMaine website. More about these issues will come out as the campaign for the broadband bond ramps up.