



STATE OF MAINE
CONNECTME AUTHORITY
3RD FLR. CROSS STATE OFFICE BUILDING
78 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0078

JEAN WILSON
CHAIR

**TESTIMONY of Richard Thompson
Chief Information Officer, University of Maine System
Member, Connect Maine Authority**

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LD 1167 – An Act to Modernize Maine’s Broadband Standards

**JOINT STANDING COMMITTEE ON ENERGY, UTILITIES
AND TECHNOLOGY
April 21, 2015**

Senator Woodsome, Representative Dion and Members of the Joint Standing Committee on Energy, Utilities and Technology, I am Richard Thompson, CIO of the University of Maine System and a member of the ConnectME Authority, and I am pleased to speak on behalf of the Authority neither for nor against LD 1167, *An Act to Modernize Maine’s Broadband Standards*.

The ConnectMe Authority has been responsible for setting the definition of unserved and underserved areas since its inception. Section 1, Paragraph A of this bill alters the statute, instructing the Authority to consider Federal Communications Commission definitions and other nationally competitive Broadband performance expectations during that process. This practice happens now informally. It also instructs the Authority to ensure any rules changes strengthen the definition of Broadband to contribute to the State’s economic development status. This requirement will be difficult for the Authority to measure in an objective way.

Paragraph B is essentially what is in Statute today.

Section 2, Paragraph G is new language. This directs the Authority to enhance broadband services to achieve actual speeds equal to or greater than the average of all New England states actual speeds. The definition of “actual speeds” is not included, but seems to be an attempt to address actual experiences at the premise. The Authority does not currently have this information and would have to develop a mechanism to collect and maintain this data and include the results in its award criteria.

Thank you for the opportunity to speak and I will be available at the work session to assist with any discussion or modifications that may be proposed. I will be happy to answer any questions.

**Richard Thompson
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April 21, 2015

**Office of the Public Advocate Testimony on LD 1167 “An Act to Modernize Maine’s
Broadband Standards”**

Chairman Dion, Chairman Woodsome and Members of the Energy, Utilities and
Technology Committee,

The Office of the Public Advocate testifies in opposition LD 1167, An Act to
Modernize Maine’s Broadband Standards. While the bill is well-intentioned, we are
concerned that it replaces an existing, effective and objective standard currently used by
ConnectME Authority to establish Maine-specific broadband standards.

In 2007 the Connect ME Authority adopted major substantive rules, subsequently
approved by this Legislature, that govern the process for defining broadband service and un-
and underserved areas. Those rules (excerpt attached) require the Authority to set minimum
broadband performance criteria based “on the state of the market as well as the performance
necessary to meet the current broadband needs of common applications and network
services in use in the State.” Applying this standard, the Authority adopted a definition of
10 MBps download and 10 MBps upload in January of 2015.

The bill leaves in place language that requires the Authority to take into account
whether its definition of un-served and underserved would “diminish the value of prior
investment in advanced communications technology infrastructure within any area” and
“whether investment is planned in an area within a reasonable time.” Other legislation
under consideration by this Committee removes this language. The definition of broadband,
and by extension the definition of un- and underserved, should be based on objective,

performance-based criteria, and not its effect on prior investment.¹ By definition, the determination that an area is unserved would reflect a conclusion that the prior investment is inadequate. Any reduced value would be the result of this inadequacy, and not the Authority's determination.

The Authority's existing rules for defining broadband largely omit this consideration in lieu of the objective criteria described above. Nonetheless, the bill reflects a concern that for many years, the Authority was slow to revise its definition in response to changes in the market.

The adoption of the 10/10 symmetric standard is an indication that the process established by this rule is working. The Authority, with the input of the Advisory Council, updated its definition to reflect changing needs and the state of the market.

The changes proposed by the bill, while not harmful, move the definition of unserved away from standards based on Maine's needs to external standards, such as the definition established by the FCC, or the actual broadband speeds in other New England states. While we do not believe that any change is necessary, the Committee should ensure that in considering any changes, ConnectME retains the authority to set state-specific broadband standards based on objective criteria.

Respectfully submitted,



Timothy R. Schneider
Public Advocate

¹ Similarly, the language in the existing statute implies a third category of "about to be served": those areas where "investment is planned . . . within a reasonable time." Providers have proven reluctant to provide information regarding their existing infrastructure, much less planned future upgrades, so as a practical matter this consideration has proven moot.

§ 5 DESIGNATION OF BROADBAND SERVICE AND ELIGIBLE AREAS

A. **Broadband Service.** At least annually, the Authority must update the minimum performance criteria for broadband service, for the purposes of this Chapter. The Authority must base its criteria on the state of the market as well as the performance necessary to meet the current broadband needs of common applications and network services in use in the State.

1. **Criteria Governing Performance.** To determine minimum performance criteria, the Authority may consider:

- a. Minimum sustained bandwidth for both upstream and downstream transmission;
- b. Maximum latency;
- c. Maximum jitter;
- d. Minimum reliability; and
- e. Any other performance criteria necessary for the use of common broadband applications and network services.

2. **Criteria Governing Common Applications and Network Service.** To determine common applications and network services, the Authority may consider:

- a. Real-time voice and video communication;
- b. Audio and video streaming;
- c. Network applications;
- d. Network storage;
- e. Collaborative work environments;
- f. Interactive gaming;
- g. File-sharing; and
- h. Any other application or network service that facilitates communication, and data and content exchange.

3. **Initial Standard.** Until the Authority makes the performance designation provided for in subsection 5(A), broadband is designated as a service capable of being used for the transmission of information at a rate that is not less

than 500kbps in both directions (symmetric or bi-directional) for residential and small business users, providing access to the Internet.

- B. **Unservd Areas.** At least annually, the Authority must designate unserved areas for broadband service and mobile communications service, using data under section 3 of this Chapter. The Authority may also designate unserved areas based on verifiable data provided by an individual or group.
1. **Broadband Unserved Areas.** In designating an unserved area for broadband service, the Authority must find the following characteristics:
 - a. The area is currently unserved by a broadband service provider; and
 - b. A project to provide broadband service will not be completed in the area within one year.
 2. **Mobile Communications Service Unserved Areas.** In designating an unserved area for mobile communications service, the Authority will designate as unserved any area:
 - a. Outside the -95dB area as indicated in maps provided pursuant to subsection 3(B) of this Chapter; and
 - b. For which a project to provide mobile communications service will not be completed in the area within one year.
- C. **Underserved Areas.** At least annually, the Authority will designate underserved areas for broadband service and mobile communications service, using data under section 3 of this Chapter. The Authority may also designate underserved areas based on data provided by an individual or group.
1. **Broadband.** In designating an underserved area for broadband service the Authority will consider the following:
 - a. The lowest cost broadband service that is available is provided at a price that exceeds 150% of the statewide average for reasonably similar service; or
 - b. The overall capacity, reliability, or quality of the broadband service available is inadequate to meet current or projected needs for the area.

§ 6 ConnectME AUTHORITY SUPPORT

- A. **Eligible Areas.** The Authority will determine whether an unserved or underserved area is eligible for ConnectME support. The Authority's first priority will be to support projects in unserved areas where there are no prior plans to develop infrastructure improvements. In determining eligibility, the Authority will consider the following criteria:

1. **Broadband.** An eligible unserved or underserved area for broadband service may create an overlap in existing broadband coverage for less than twenty percent (20%) of households in the proposed coverage area;
2. **Mobile Communications Service.** An eligible unserved or underserved area for mobile communications service, one or more of these priorities:
 - a: Population data census blocks with more than 100 people per square mile;
 - b: Any public road with over 500 vehicles per day usage; or
 - c: Service center communities and high usage service “holes.”
3. **Private Investment.** Authority support for projects in the unserved or underserved area will not inhibit or impede private investment in the area; and
4. **Prior Investment.** Authority support for projects in the unserved or underserved area will not diminish the value of prior investment in advanced communications technology infrastructure used to provide broadband service or mobile communications service within the area.

Testimony of FairPoint Communications

Before the Joint Standing Committee on Energy, Utilities & Technology

Regarding LD 1167, An Act To Modernize Maine's Broadband Standards

April 21, 2015

Good afternoon, Chairman Woodsome, Chairman Dion, and distinguished members of the Joint Standing Committee on Energy, Utilities & Technology. My name is RoJean Tulk, and I am Director of Government Relations for FairPoint Communications. On behalf of FairPoint, I am here today to offer the following comments on LD 1167.

In the fast-paced telecommunications industry, it's important to evaluate the status of Maine's broadband infrastructure and, when necessary, update the state's broadband policies and goals. Regarding telecommunications and broadband, what was considered unachievable just a few short years ago may now be quite doable, and in fact, may now have a variety of solutions and competitors providing those solutions with innovative products and services. Therefore, FairPoint applauds the intent of LD 1167 to "modernize Maine's broadband standards."

LD 1167 proposes some important concepts. It would require the ConnectME Authority to consider how broadband service is defined by the Federal Communications Commission (FCC) when defining the state's broadband requirements. We agree with the goal to ensure that Maine is in sync with federal broadband policies. Doing so will enable the efficient development of concise, consistent broadband public policy at the state level.

LD 1167 would also require the Authority to establish procedures that would not inhibit or impede private investment in advanced communications technology infrastructure throughout the state. As stated in FairPoint's previous testimony on LD 1063, Maine has limited public and private financial resources, and public policy should be developed to maximize these scarce resources to obtain the greatest return on current and future investments. In FairPoint's view, this portion of LD 1167 exemplifies sound public policy.

However, another section of LD 1167 proposes to "enhance broadband services to achieve actual speeds for downloads and uploads that are equal to or greater than the average

of all the New England states' actual speeds." We question how such a standard would be defined and then measured. We also question whether such a standard, if definable and measurable, is sensible in all areas of the state, particularly the rural portions of the state. In our view, this section of LD 1167 may be a worthy aspirational goal rather than a requirement for projects supported by the ConnectME Authority.

As a state we need to ask ourselves - are we willing to sacrifice the good for the perfect? Does it make sense to require every project to meet the average of all New England states' actual speeds, as opposed a lower level of speed in certain cases that meets the needs of consumers in that area while costing significantly less money? It goes without saying that higher speeds are better, but for those without access to internet service, a smaller, less costly project that delivers adequate consumer speeds should not be overlooked.

FairPoint applauds the efforts of LD 1167 to review and update the state's current broadband public policy, and we look forward to working with the bill's sponsor, co-sponsors and the EUT Committee to craft an appropriate and achievable broadband public policy for Maine. We're pleased to answer questions now and at the work session on LD 1167.



**Testimony of Chris Hodgdon, Vice President Government Relations
Joint Committee on Energy, Utilities and Technology
April, 21 2015**

Chairman Woodsome, Chairman Dion and distinguished members of the Committee; thank you for the opportunity to offer comments today regarding our concern with LD 1167 which establishes new criteria for the determining of the definition of unserved and underserved areas as well as adds a new duty to the ConnectME Authority, which is to enhance broadband performance to a level which is greater than or equal to the average of other New England states.

It is this final provision which is found in Section 3 which I would like to offer our concern. While Comcast neither supports nor opposes this legislation it would like to offer some context and perspective on how potentially misleading the issue of average speeds are when trying to understand broadband performance and form public policy from this data. It would be a mistake to require the ConnectME Authority to make investments based on average speeds.

This issue of average download or upload speeds of Maine's broadband networks is often a data point that is used to argue that the quality of Maine's broadband infrastructure is somehow lacking. One of the most common and often cited of these test sites is www.speedtest.net and is owned by a company named Ookla. This site promotes itself as the most popular and most accurate speed test site on the web with global coverage.

The site's results illustrate quite clearly why basing one's understanding of overall network capacity on average speed tests is problematic. First of all average download and upload speeds are only representative of what consumers are buying in any given market. Responding to consumer demand Maine broadband providers currently offer a range of services, some offer very large bandwidth and some do not. Average speeds have more to say about what consumers are buying than what they have available to them.

Secondly, and I would argue most important to the question of whether this data is useful when trying to determine public policy issues, this is an average of many different networks operated by many different providers. To illustrate this on 4/15/2015 Ookla's speedtest.net site listed Maine's average download speed as 17.81 Mbps which is roughly half the national average of 34.96 mbps over the same testing period.

What does that number really tell us? Not much as it turns out because Maine like other states has multiple overlapping broadband networks which are widely available. The vast majority of Maine homes and businesses have access to Cable broadband, broadband provided by a telephone company and recently wireless broadband, there isn't one network delivering one average speed. In reality there are many overlapping networks providing broadband.

If you break the speedtest.net results out by provider you get a dramatically different picture. Comcast's results are 43.50 Mbps and Time Warner Cable's is 42.64 Mbps roughly 50% higher than the national average. When combined with other providers who have slower average speeds which when averaged together pull down Maine's overall performance to the average often cited. So as it turns out this average speed data really doesn't tell anyone a whole lot which is useful when trying to determine proper public policy course.

The last reason we would urge you to strike Section 3 from the Bill is that investing the ConnectME Authority's limited resources towards increasing average speeds will likely result in investment in existing broadband networks. Comcast believes that the focus should be on investing public resources in unserved areas rather than areas where broadband already exists and recommends that Section 3 be struck from LD 1167.

Thank you for the opportunity to provide comment on this legislation, I would be happy to answer any questions that you may have.

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April 21, 2015

Senator David Woodsome, Senate Chair
Representative Mark Dion, House Chair
Members of the Committee on Energy, Utilities and Technology
127th Maine Legislature
100 State House Station
Augusta, ME 04333

Re: LD 1167, An Act To Modernize Maine's Broadband Standards

The Telecommunications Association of Maine (TAM) offers the following comments neither for nor against LD 1167, "An Act To Modernize Maine's Broadband Standards".

TAM does not have a position on this legislation primarily because it is not clear what exactly the legislation is seeking to accomplish or how it would accomplish its goals. For example, the legislation states that:

"Any changes to rules that amend how broadband service is defined must strengthen the definition to ensure it contributes to the State's nationally competitive economic development status."

While TAM supports the concept of benefiting economic development in the State through broadband deployment, it is not clear how exactly a specific speed definition for Broadband would "contribute" to the competitive status of the State, nor is it clear what it means to "strengthen" a definition. Would reducing the current upload definition of broadband service in order to permit a greater number of grants to support farms in Aroostook County "contribute" to the competitive economic development status of Maine? Would it be a "strengthening" of the definition of broadband?

Similarly, while TAM does not disagree conceptually that advertised speeds may not always accurately reflect user experiences, the language of the bill would require that the Authority consider "actual" speeds equal to or greater than the average "actual" speeds in New England. The bill does not, however, define what "actual" means. For example, is the actual speed the throughput on a device when there is only one device operating at the location at 2 a.m. or is actual speed the throughput on a device when 5 devices are in use at the location at 4 p.m. on a school day? The reality of broadband speeds is that they are frequently affected by actions of the end user that are beyond the control of the broadband provider. Moreover, TAM is not aware of any reliable data for what these "actual" speeds might be throughout New England.

Accordingly, TAM can neither support nor oppose this legislation because it is not clear what this legislation would do or how it would do it.

Sincerely,



Benjamin M. Sanborn, Esq.
Telecommunications Association of Maine