



CONNECTMAINE

ConnectMaine Authority Members: Nick Battista, Jasmine Bishop, Fred Britain, Susan Corbett, Heather Johnson, Jeff Letourneau, Liz Wyman

January 2021

Clerk to the Energy, Utilities and Technology Committee
c/o Legislative Information Office
100 State House Station
Augusta, ME 04333
EUT@legislature.maine.gov

Dear Honorable Lawrence and Honorable Berry:

Please find attached the required report pursuant to 35-A M.R.S.A §9208 from the ConnectMaine Authority, including:

- Budget
- Activities
- Investments
- Market conditions

Sincerely,

A handwritten signature in cursive script that reads "Peggy Schaffer".

Peggy Schaffer
Executive Director

ConnectMaine Authority

CONNECTMAINE

Annual Report to the Maine State Legislature
Joint Standing Committee on Energy, Utilities and Technology

January 2021

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Introduction

The ConnectMaine Authority (ConnectMaine) is pleased to submit to the Joint Standing Committee on Energy, Utilities and Technology Committee its annual report for 2020. The report includes the budget, activities and investments of ConnectMaine, as well as market conditions and observations.

In recognition of the critical importance of modern technology for education, healthcare, and business success in Maine, the legislature created the ConnectMaine Authority in 2006, as a public instrumentality of the state, to develop and implement a broadband strategy for Maine.

ConnectMaine is governed by seven members appointed by the Governor or specifically identified and designated by statute.¹

The legislature established ConnectMaine to achieve these statutory goals:

- Broadband service being universally available to all residential and business locations and community anchor institutions in Maine;
- Broadband infrastructure being secure, reliable, competitive and sustainable, and meeting future broadband needs; and
- All Maine residents, businesses and institutions being able to take full advantage of the economic opportunities available through broadband service.

In 2007, the legislature approved major substantive rule² that defines the state's broadband strategy and describes how that strategy is implemented. Having up to three staff in the past, currently ConnectMaine is supported by two employees, an executive and assistant director. In 2015, the legislature modified the duties of and added members³ to ConnectMaine. By the end of 2020, ConnectMaine had instituted policies for increased stakeholder engagement in its activities and programs.

Based on its statutory goals, ConnectMaine envisions a state where all residences, businesses and community institutions have broadband service available that is reliable and competitive, with future-looking infrastructure that is secure and sustainable, and where all residents, businesses and institutions are able to take full advantage of broadband service for economic and social opportunities. Broadband is essential to support economic development, remote work, distance education, telehealth and meaningful community connections.

¹ The ConnectMaine Authority statute, 35-A M.R.S.A. Ch. 93, is hereafter referred to as the statute.

² The ConnectMaine Authority rule, 99-639 Ch. 101, is hereafter referred to as the rule.

³ Members are listed on the ConnectMaine website: <https://www.maine.gov/connectme/board-meetings/members>

Budget

ConnectMaine is funded primarily through two assessment fees on landline telephones. The first assessment is one quarter of one percent (0.0025%) of Communications Service Provider State revenues, and the second is ten cents per landline telephone number, in accordance with the statute. These are anticipated to generate about \$1.8 million per year, currently; however, these funding sources are declining year-over-year as subscribers discontinue landline-based services and migrate to wireless services that are not assessed these fees.

Assessment fees are paid on a quarterly basis to the ConnectMaine Fund, which is managed by an independent fiscal agent. Allocations are directed by ConnectMaine, and unused funds are invested by the fiscal agent. Interest generated by the Fund are added to the Fund balance. Solix is currently the contracted fiscal agent for the ConnectMaine Fund.

The fund balance at the start of our fiscal year in July 2020 was \$1,451,280, with \$1,248,200 in encumbered contracts and awarded grants, including matches for successful recipients of federal grants. ConnectMaine administers grant programs, in accordance with the statute: The Broadband Infrastructure Grants program supports investments in expanding the availability of broadband service; the Community Broadband Planning Grants program develops plans for expanding the availability of broadband service. All infrastructure grants to-date have been awarded to private communications service providers to build infrastructure in Maine. In 2020, ConnectMaine awarded \$559,500.

Additionally, ConnectMaine collaborated with other state agencies to administer coronavirus relief funding in 2020. About \$30,000 in mobile hotspot devices for student households were deployed. ConnectMaine awarded \$6,201,842 to communications service providers to expand broadband availability to student and teacher households.

In total, ConnectMaine expended \$6,791,342 in 2020 on the above. Additionally, \$62,250 is scheduled to be awarded on January 6, after a fall 2020 application window for planning grants.

The following annual budget captured the federal funding, as well as anticipated bond funds. On July 14, 2020, Maine voters passed the first broadband bond, \$15 million. Fiscal year 2021 will see upwards of \$22 million flowing through ConnectMaine, which is well over 30 times its historical amounts. Given this, ConnectMaine has undertaken transformation activities and engaged stakeholders in the design of its programs to invest in broadband expansion in Maine. ConnectMaine anticipates awarding grants from the bond funds before July 2021.

ConnectMaine Authority Annual Budget FY21

Version with Current Revenue Accounts

BUDGETS	DETAIL	FY19	FY20	PROJECTED	INITIATIVES	OBLIGATED	PROPOSED	Q1	Q2	ACTUAL
REVENUE	Carryforward	\$1,614,092.01	\$0.00	\$1,451,280.05		\$18,340.64	\$1,451,280.05	\$1,451,280.05	\$1,650,709.75	\$1,451,280.05
Fund	Assessment Fees	\$1,142,030.66	\$2,975,000.00	\$1,800,000.00		\$36,682.24	\$1,800,000.00	\$400,000.00		\$400,000.00
Interest		\$4,927.27				\$116.19				\$0.00
Refunds		\$1,921.00		\$525.00			\$525.00	\$525.00		\$525.00
Bonds				\$15,000,000.00			\$15,000,000.00			\$0.00
Federal	CRF, etc.			\$10,000,000.00			\$10,000,000.00			\$0.00
SUBTOTAL		\$2,762,970.94	\$2,975,000.00	\$28,251,805.05	\$0.00	\$55,139.07	\$28,251,805.05	\$1,851,805.05	\$1,650,709.75	\$1,851,805.05
Available	excluding Obligated, Bonds & Federal			\$3,251,805.05			\$3,251,805.05			\$1,851,805.05
EXPENSES	Carryover	\$96,621.12	\$0.00	\$0.00			\$0.00	\$0.00		\$0.00
Assessment	Solix	\$25,500.00	\$25,655.00	\$18,000.00		\$10,500.00	\$18,000.00	\$4,500.00	\$3,000.00	\$7,500.00
Financial	DAFS		\$10,296.00	\$10,296.00			\$10,296.00	\$2,574.00		\$2,574.00
Website	InforME, OIT & Sewall	\$37,404.00	\$81,234.68	\$34,992.00		\$31,142.00	\$34,992.00	\$962.91	\$1,502.60	\$2,465.51
Administration	Salaries, etc.	\$225,071.77	\$258,700.17	\$230,180.00		\$157,887.34	\$232,910.22	\$44,129.28	\$30,893.60	\$75,022.88
Cellphones	FY19 captured in Administration		\$830.24	\$1,124.74			\$1,124.74	\$330.94	\$161.82	\$492.76
Travel	FY19 captured in Administration		\$7,278.85							\$0.00
Bond Fees				\$10,000.00			\$10,000.00			\$0.00
Personnel	temporary hires				\$50,000.00		\$50,000.00			\$0.00
Support Services	systems setup & facilitation				\$100,000.00	\$13,030.00	\$100,000.00			\$0.00
Mapping	excluding Sewall	\$58,000.00	\$10,000.00		\$70,000.00	\$30,000.00	\$70,000.00			\$0.00
Planning Grants		\$118,362.50	\$144,060.00	\$85,410.00	\$200,000.00	\$53,375.00	\$285,410.00	\$32,035.00		\$32,035.00
Operations	conference fees or sponsorship		\$3,536.33		\$15,000.00		\$15,000.00			\$0.00
Digital Inclusion	device deployment				\$70,000.00	\$30,000.00	\$70,000.00			\$0.00
Grant Matches			\$50,000.00	\$500,000.00	\$500,000.00	\$75,000.00	\$1,000,000.00			\$0.00
Infrastructure Bond				\$14,990,000.00			\$14,990,000.00			\$0.00
Infrastructure CRF				\$10,000,000.00		\$1,802,700.00	\$10,000,000.00			\$0.00
Infrastructure Fund		\$225,071.77	\$932,128.68	\$662,790.85	\$100,000.00	\$365,937.50	\$762,790.85	\$116,540.85	\$180,312.50	\$296,853.35
Miscellaneous	covers likely deviations	\$1,830.54		\$20,000.00			\$20,000.00	\$22.32	\$117.51	\$139.83
TOTAL		\$787,861.70	\$1,523,719.95	\$26,562,793.59	\$1,105,000.00	\$2,569,571.84	\$27,670,523.81	\$201,095.30	\$215,988.03	\$417,083.33
Internal	excluding Bonds & Federal			\$1,562,793.59			\$2,670,523.81			\$417,083.33
BALANCE		\$1,975,109.24	\$1,451,280.05	\$1,689,011.46			\$581,281.24	\$1,650,709.75	\$1,434,721.72	\$1,434,721.72
Difference	excluding Interest, Bonds & Federal			\$1,689,011.46			\$581,281.24			\$1,434,721.72
ALLOTMENT	excludes personal services			\$1,046,334.83		\$34,000.00	\$1,046,334.83	\$0.83	\$1,012,334.00	

Activities

ConnectMaine reaffirmed the designation of broadband service as 25mbps download and 3mbps upload; areas lacking access to these speeds are designated as unserved. Areas where less than 20% of the households have access to broadband service is designated as underserved. The build-to standard for broadband service, using ConnectMaine funds, is designated as 10/10mbps.

ConnectMaine awarded four planning grants and three infrastructure grants in the first half of 2020. With ConnectMaine support, about 26,000 hotspot devices were deployed through superintendents across the state. One additional planning grant was awarded this fall, and another eight are scheduled to be awarded in early January. ConnectMaine also awarded seven Connect Kids Now! grants with federal coronavirus relief funding.

A rulemaking process began to incorporate statutory changes made by the 129th Maine Legislature through the Act To Encourage the Development of Broadband Coverage in Rural Maine. While deemed routine technical, a public hearing on the proposed rule⁴ was held on November 2. ConnectMaine anticipates adopting the proposed rule before March 12.

To improve understanding of broadband service in Maine and target its investments, ConnectMaine is supporting a speed testing initiative launched this fall by the Maine Broadband Coalition. A speed test measures real-time speeds of an internet connection between a device, such as a computer, and a server, through which data flows. These tests will help improve ConnectMaine broadband availability mapping. Its current Broadband Availability Map depicts data as reported from the industry, largely the same as reported to the FCC at the census block level, which overstates the availability of broadband. By the end of 2020, over 9,000 unique locations submitted speed tests.⁵

Following the passages of the state broadband bond, ConnectMaine initiated a stakeholder engagement process that is examining the broadband infrastructure grants program to better align it with the state's goals⁶ for expanding broadband availability and to maximize the impact of grants. Setting objectives and designing the framework for the grants program with stakeholders will inform the application materials and review process for future grants. In so doing, ConnectMaine aims to encourage and leverage public-private partnerships between communications service providers and Maine communities; all infrastructure grants to-date have been awarded to the private sector.

This engagement is indicative of ConnectMaine's transformation, to being more open to the public and inclusive of a wide variety of stakeholders. Early in the year, ConnectMaine changed its meeting day and time from Fridays 2:00 PM to Wednesdays at 10:00 AM; now with remote meetings becoming the norm, meetings often have 30-50 attendees. While 10 meetings were held in 2019, ConnectMaine held a meeting each month of 2020 including two emergency meetings with its typical December meeting held early in the New Year. To increase information sharing, ConnectMaine now posts draft meeting materials ahead of meetings, and posts draft notes and recordings shortly after meetings, for stakeholders to access information sooner than in the past.

⁴ Proposed rule may be downloaded from the ConnectMaine website: www.maine.gov/connectme/about/statutes-rulemaking

⁵ The map of speed tests can be viewed at: <https://expressoptimizer.net/projects/Maine/speedtestmap.php>

⁶ In addition to the statute, the Maine Economic Development Strategy, State of Maine Broadband Action Plan and the Governor's Economic Recovery Committee recommendations are also being considered.

Holding a public listening session during the rulemaking process, increasing the information and resources posted and updated on its website, and the anticipated strategic planning process are other examples of this transformation. Another public listening session was held in summer 2020, where ConnectMaine heard from stakeholders about program areas needing improvement. With about 100 attendees at both of these listening sessions, significantly more stakeholders are informing ConnectMaine's processes.

The State of Maine Broadband Action Plan (action plan) set the 2025 goal of 95% of all potential subscriber locations in Maine having access to expanded availability of broadband with sufficient capacity needed for full participation in our society, to enable civic and cultural participation, employment, lifelong learning, and access to essential services. A step toward this goal was identified in the ConnectMaine Triennial Strategic Plan for 2019-2021 (triennial plan): For 93% of locations, 25/3mbps internet service is available by 2021. Based on FCC data, which overstates the availability of actual internet service, it's estimated that 95% of the state has access to this level of internet service.

With a new strategic planning process starting this coming year, ConnectMaine anticipates affirming goals to achieve universal availability of broadband in Maine that supports economic development, remote work, distance education, telehealth, and meaningful community connections. The next triennial plan will consider investments needed, including a focus on accountability of projects funded; digital inclusion efforts needed, including digital equity considerations and promotional activities, to remove barriers to broadband use; and mapping activities for efficacious deployment of funds as well as measuring progress on goals.

Investments

Through its grant programs, ConnectMaine invests in expanding the availability of broadband service in the state. Grants awarded to projects that have contributed to the goals of the action plan have expanded broadband to 3726 of households, business locations and other institutions. Connect Kids Now! grants could reach almost 2000 more premises with fixed broadband and nearly 44,000 with wireless service.

In 2020, broadband infrastructure grants were awarded to communications service providers in order to expand the availability of broadband service to at least 327 premises in the municipalities of Argyle, Bremen and Hudson. This \$501,250 investment represented 30% of the total costs of these three projects.

Since March 2020, the pandemic has added urgency to the long-standing need for universal broadband and magnified its importance to attracting and retaining talent in Maine. In response to this pandemic, the Governor's Office launched an initiative called Connect Kids Now! under which several programs were developed, including a deployment of mobile hotspot devices to households of students having to move to remote education. ConnectMaine administered a grant program developed in cooperation with the Department of Education to fund broadband infrastructure projects deployed by internet service providers. A third program was planned in a collaboration between the Department of Economic and Community Development and the Department of Human and Health Services to address affordability of internet service at low- and moderate-income households where broadband infrastructure already exists; however, the federal bill passed at the end of 2020 created a program more attractive to communications service providers. Federal and other sources of funding for these types of programs have been very limited compared to need.

Many external factors limited the number and types of projects that could be proposed and awarded Connect Kids Now! grants, not least of which was executing the project between October and December of 2020, including completion of connecting student- or teacher-locations in order to receive any of the funds. Due to confidential information constraints, ConnectMaine was unable to provide potential applicants with specific addresses so provided address ranges that included student- or teacher-locations. Communications service providers applying for funds did so at some risk and took significant initiative to ensure projects included eligible connections.

While about \$10 million was available for Connect Kids Now! grants, ConnectMaine was able to award seven grants, to expand broadband availability in 72 of communities, reaching up to 1948 premises with fixed broadband and a possible 43,880 premises with wireless service. The grant funds are available with a deadline of December 30 to complete these projects. Having proposed these projects, and with many of them commencing, the communications service providers are highly likely to complete these projects. Only a few are likely to need the extension passed by congress due to the pole attachment process being lengthy, labor shortages and backordered fiber optics.

**ConnectMaine Authority
Awarded Infrastructure Grants**

Rev. 11.09.2020

Grant Title	Communities	Firms	Premises	Project Cost	Award	Percent of Cost	Status
Alna Tidewater Round 14	Alna	LCI	130	\$185,000	\$92,500	50.0%	Done
Alton Round 11	Alton	Otelco	33	\$156,000	\$78,000	50.0%	Done
Alton Round 14	Alton	Otelco	260	\$700,000	\$260,000	37.1%	Done
Amity FTTH	Amity	Pioneer Broadband	25	\$23,146	\$11,573	50.0%	Done
Argyle Otelco Round 15	Argyle	Otelco	134	\$325,000	\$81,250	25.0%	Started
Plunkett Pond Benedicta	Benedicta	Pioneer Broadband	168	\$252,795	\$184,650	73.0%	Done
Big Lake FTTH	Big Lake	Pioneer Broadband	40	\$152,100	\$76,050	50.0%	Done
Bowdoinham LCI Round 14	Bowdoinham	LCI	214	\$580,630	\$90,000	15.5%	Done
Bremen Tidewater Round 15	Bremen	LCI	400	\$600,435	\$120,000	20.0%	Progress
The Schoodic Lake Rural Fiber Project Lake View & Brownville	Brownville & Lake View	Cornerstone Communications	68	\$143,871	\$95,914	66.7%	Done
Lowell & Burlington	Burlington, Lowell	Otelco	38	\$142,000	\$71,000	50.0%	Done
Cambridge Premium Choice Round 14	Cambridge	Premium Choice Broadband	263	\$650,000	\$200,000	30.8%	Progress
Chapman FTTH Chapman & Presque Isle	Chapman, Presque Isle	Pioneer Broadband	98	\$158,867	\$127,367	80.2%	Done
Islesford Cranberry Isles Round 11	Cranberry Isles	Axiom Technologies	140	\$752,240	\$69,066	9.2%	Done
Plymouth & Dixmont Round 13	Dixmont, Plymouth	Otelco	127	\$207,320	\$103,665	50.0%	Done
Maple Grove Fort Fairfield Round 11	Fort Fairfield	Pioneer Broadband	34	\$104,824	\$59,824	57.1%	Done
Maple Grove FTTH Fort Fairfield	Fort Fairfield	Pioneer Broadband	95	\$244,162	\$199,162	81.6%	Done
Fiber to the Premise Notched Pond Area Gray New Gloucester	Gray, New Gloucester	OTT Communications	36	\$60,000	\$30,000	50.0%	Done
Walker FTTH Hodgdon	Hodgdon	Pioneer Broadband	60	\$70,537	\$55,537	78.7%	Done
Hudson Premium Choice Round 15	Hudson	Premium Choice Broadband	448	\$762,820	\$300,000	39.3%	Started
Bangor Road & County Road FTTH Linneus	Linneus	Pioneer Broadband	135	\$149,485	\$114,853	76.8%	Done
Fiber to the Premise Webb Cove Lowell	Lowell	OTT Communications	50	\$44,000	\$22,000	50.0%	Done
Parsons FTTH Mapleton & Presque Isle	Mapleton, Presque Isle	Pioneer Broadband	84	\$159,961	\$128,191	80.1%	Done
Pretty Marsh & North West Mount Desert	Mount Desert	Charter Communications	325	\$774,876	\$100,000	12.9%	Done
Newbury Neck Fiber Surry	Surry	Premium Choice Broadband	220	\$419,800	\$167,920	40.0%	Done
Lincolville Communications Waldoboro Round 10	Waldoboro	LCI	67	\$219,960	\$119,845	54.5%	Done
Union Road Waldoboro Round 11	Waldoboro	LCI	34	\$67,000	\$36,850	55.0%	Done
Totals			3726	\$8,106,829	\$2,995,217	36.9%	

Market

As documented in the triennial plan, ConnectMaine estimates well over 83,000 premises in Maine lack access to fixed broadband service of at least 25/3mbps. This is an underestimate because the data submitted by communications service providers to the FCC vastly overstates actual internet speeds available. While communications service providers are expanding their networks, this expansion mostly replaces areas reported as *could be served* to *being served*, having a negligible effect on the total unserved areas of Maine.

In part, the stakeholder engagement activities aim to improve on the accuracy of data collected. ConnectMaine continues its commitment to collect and disseminate data from communications service providers and others. It is crucial to present current infrastructure and service information for both setting strategic direction and public consumption, and the new strategic planning process expects to better benchmark progress on the state's goals. Individuals and entities continue to rely on ConnectMaine as a statewide resource for broadband information.

As a private-sector service, broadband is available where the customer base is large enough for financial solvency of internet service providers. This kind of private-sector-driven expansion of broadband isn't economically viable in sparsely populated or remote areas of the state. These areas are too small or remote to attract or prioritize deployment of limited private resources there. Some communications service providers receive federal subsidies through the Universal Service Fund and FCC programs. The low density of potential customers can also affect the sustainability of ongoing operations. With the presence of one provider in an area, other providers can't justify investing in the same area, effectively limiting consumer choice.

Based on FCC data, which overstates the availability of actual internet service, the proportions of Mainers who subscribe to broadband, or the "take rate" in Maine, is only slightly higher than the nationwide. About 55% of Mainers subscribe to internet service of at least 25/3mbps, which is about 65% nationwide. According to the American Community Survey, 83% of US households subscribe to internet service at any level of speeds. Where take rates are lower, there is less financial incentive for private companies to invest in the expansion of broadband service.

Cost or price of internet service also affects take rates. With the planned mapping activities, ConnectMaine aims to better understand retail prices of internet subscriptions. This is increasingly important to ConnectMaine and stakeholders since the Ratewatcher Guide is no longer published by the Office of the Public Advocate. With better data, ConnectMaine can start to address affordability, which will be included in the new strategic planning process.

Observations

ConnectMaine consistently receives more applications for infrastructure grants than can be awarded with available funds. This, along with outreach from the public and political leaders, clearly indicates the need for broadband in homes, businesses and other institutions throughout the state. It is increasingly important for ConnectMaine to efficaciously award grants, emphasizing the value that public-private partnerships contribute. The action plan estimated over 50 communities are waiting for sufficient funds to execute their plans for expanding broadband infrastructure. These communities represent a significant portion of rural Maine.

The first-in-the-nation community broadband planning grant program continues to be well received in Maine. Communities use the broadband planning process to build support and understanding of the importance of broadband, and community broadband planning also helps increase take rates that can make infrastructure projects more feasible. Throughout the planning process, communities reach out to ConnectMaine staff for information and assistance. In 2020 ConnectMaine, the Maine Community Foundation and the Island Institute aligned membership of their review teams for planning grants. This has led to better understanding of the progress toward universal broadband throughout the state, including what lessons are being learned and what factors are essential for successfully transitioning from planning to expanding broadband.

ConnectMaine anticipates increased legislative activity around broadband, especially funds for infrastructure, which remains the largest challenge for implementing the action plan. Given the economic circumstances from the current pandemic, this is a worsening challenge for the state. The action plan set a goal of contributing \$200 million of public funds toward to the \$600 million broadband vision in the plan; however, the required state contribution will likely be somewhere in between \$200 million and \$450 million. Investing in broadband has a high economic payback, a 4:1 return on investment. While the plan recommended \$30 million in the first year and \$42.5 million in each of the following four years, only \$15 million has been committed in a state bond. Bond funds being limited to capital expenses only means that administrative and compliance activities of ConnectMaine must be otherwise funded.

In addition to the lack of funding, staff capacity has been observed as a constraint on ConnectMaine activities. Until 2018, ConnectMaine had three staff positions; one of which was eliminated due to declining revenue, but the programs involved awarding only \$750,000 per year. Now, ConnectMaine has begun to administer 30 times that. To compensate the lack of internal capacity, board members engaged more deeply on programmatic operations, and ConnectMaine contracted for expert assistance on mapping and application reviews. Moving forward, administration of taxpayer dollars behind state bonds requires greater accountability throughout the grantmaking process. These activities are estimated to cost of 3% of total grant funds, \$400,000-\$700,000 starting today, which is half of the current ConnectMaine budget. Without other, consistent funds for these activities, the amount available for other efforts such as community planning and digital inclusion will be affected.