Annual Report on the Activities of the ConnectME Authority

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

January 13, 2012

EXECUTIVE SUMMARY 3
INTRODUCTION 7
I. BACKGROUND 7
A. The Importance of Broadband 7
B. The ConnectME Initiative 9
II. SUMMARY OF AUTHORITY AND BROADBAND ACTIVITIES 10
A. Budget 10
B. Investments 10
C. Grant Activities 11
D. ConnectME Authority Advisory Council 13
E. Maine Fiber Company Advisory Board 14
F. State Legislation 14
III. FEDERAL BROADBAND ACTIVITIES AND INITIATIVES 14
IV. ONGOING AUTHORITY ACTIVITIES 15
A. Coordinate Broadband Initiatives 15
B. Broadband Mapping and Inventory Project 16
C. Broadband Planning Project 17
D. Broadband Capacity Building Project 18
E. Technical Assistance Project 19
F. Access to Facilities and Rights of Way 20
G. Health Information Technology 20
V. CONCLUSION 21
Attachments: 22
Attachment A – Glossary 23
Attachment B – ConnectME Authority and Advisory Council 26
Attachment C – Balance Sheet 27
Attachment D – MPUC Reply Comments 28
Attachment E – ConnectME Grant Awards 32

2012 Annual Report on the Activities of the ConnectME Authority

Report to the Joint Standing Committee on Energy, Utilities and Technology

January 13, 2012

EXECUTIVE SUMMARY

In recognition of the critical importance of technology for education, health and business success in Maine, the Legislature created the ConnectME Authority (Authority) in 2006, to develop and implement its broadband strategy for Maine.[1] In 2007, the Legislature approved the Authority's major substantive rule that defines the state's broadband strategy and implementation process.

The goal of the Authority is to facilitate universal availability of broadband service and to increase the "take rate" or adoption to greater than the national average. Increasing access and take rates is critical to Maine's education and economic prosperity. Nearly four years ago, approximately 86% of the state had access to high-speed Internet service with an adoption rate of approximately 40%. In the four years since the Authority was established, broadband access or availability has risen to over 91% with 73% of Maine households subscribing to some type of broadband service (compared to 68% nationally).[2],[3]

The Authority increased access and take rates through its efforts in identifying areas that do not have broadband access and then, to select projects for broadband expansion; administer the projects; and to provide funding, resources and incentives for the projects. Additionally, the Authority voted to approve adopting the Federal Communication Commission's (FCC) seven tiers of broadband service as its definition of broadband. The Authority stated that preference will be given to projects that will provide Tier 3 or better service. As this currently applies only to unserved areas, previously funded projects would not qualify for grants to upgrade service

During 2011, the Authority continued to manage four major projects through $5 million of Recovery Act funding from the National Telecommunications and Information Administration's (NTIA) Broadband Technology Broadband Technology Opportunity Program (BTOP). The Broadband Mapping and Inventory project facilitates a more proactive approach to funding infrastructure projects by designating those parts of the state that are unserved. The Planning Project provides benchmarking of the uses of broadband, the benefits, and the drivers for greater adoption of broadband with a particular focus on the telemedicine industry sector. The Capacity Building Project

[1] PL 2005, c. 665, and PL 2008, c. 698.

[2] "Developing Broadband in Maine: Needs Assessment Volume I" ConnectME Authority, June 2011, (1-2).

[3] New Commerce Department Report Shows Broadband Adoption Rises but Digital Divide Persists http://www.esa.doc.gov/news/2011/11/09/new-commerce-depart-report-shows-broadband-adoption-rises-digital-divide-persists

increases the use of broadband through growth and adoption by businesses, residents, and local support organizations. The Technical Assistance Project provides Maine citizens across the state assistance and training necessary to promote broadband education through community presentations, workshops, and coursework making 21st century skills available to all. These projects, in conjunction with broadband projects being managed by other Maine Recovery Act awardees, adhere to the mantra of being non-duplicative in work and inclusive in efforts. The Authority's NTIA funding will expire in December of 2014.

To meet these broadband goals, more work needs to be done. The Maine Development Foundation surveyed over 1,000 businesses in 2010 seeking responses as to what factors positively impact their businesses. High speed internet ranked as number one. [4] Maine's Governor Lepage states "The expansion of broadband capacity in the state will help accomplish one of our major initiatives, which is workforce attraction and economic development for Maine." [5] As important, continued work needs to be done to bring all levels of government and agencies together to work collaboratively to get the best results for Maine's future.

In 2011, the Authority awarded its sixth round of grants from the ConnectME Fund, based on smaller, more focused proposals. The Authority suggested grant limits of $100,000 per project, funding no more than 50% of the total project although many of the recent grants have been above our guidelines.

The following table summarizes all the Authority's grant activities to date:

Grant Round/ Year	# of Grants	Grant Range In Thousands	Total Grants	Total Project Amount In Millions	Household Availability	Increased Availability [6]
1/2007	6	$38 - $370	$739 K	$1.53	13,836	2.5%
2/2008	5	$45 - $533	$1.19 MM	$3.89	8,678	1.6%
3/2009	8	$43 - $232	$610 K	$1.23	4,227	.7%
4/ 2010	22	$23 - $114	$788 K	$1.5 1	2,957	.5%
5/2010	12	$7-$191	$1.09 MM	$1.66	1545	.6%
6/2011	23	$5-$242	$1.55 MM	$2.34	2,296	.4%
Total	**76**	**$5 - $533**	**$5.9 MM**	**$12.16**	**33,532**	**6.3%**

[4] "Investment Imperative II: Survey with 1,000 Businesses" Maine Development Foundation, February 2010 (11,13).

[5] "Eight Appointed to Maine Broadband Task Force" http://www.maine.gov/tools/whatsnew/index.php?topic=ConnectMaine_News&id=318107&v=Article

[6] Based on the 2010 Census for estimates of population and number of households in Maine, obtained from the State Planning Office. Total est. occupied housing units = 562,873, population = 1.328 MM, 2.36 = average household size.

The grant dollars per household availability is higher for the last three rounds and is expected to continue to rise, because the areas seeking broadband are becoming more difficult to serve and the projects are smaller.

In 2012, the Authority will:

- Adopt and implement "Developing Broadband in Maine: Strategic Plan" to increase broadband availability and adoption. The plan acknowledges the critical economic and social role broadband plays in Maine.
- Monitor the Broadband Sustainability Fund that was created to support "last mile" high-speed Internet expansion to unserved areas." [7]
- Continue the NTIA BTOP funded comprehensive Broadband Mapping and Inventory Project which defines served and unserved areas of the state through an online interactive map;
- Manage the NTIA BTOP funded Planning Project to provide updated benchmarking indices that measure uses of broadband, the benefits and drivers for greater adoption and barriers to adoption;
- Provide oversight to the NTIA BTOP Broadband Capacity Building Project to increase the use of broadband through growth and adoption by businesses, residents and local support organizations;
- Provide oversight to the NTIA BTOP Technical Assistance project designed to increase digital literacy among Maine's adult learners;
- Continually refine the Authority's goals, minimum performance criteria for broadband service and areas eligible for Authority support, with guidance from the Legislature and the Advisory Council;
- Serve as a conduit for Maine's broadband initiatives at all levels and as a point of contact and broadband resource clearing house for communities, businesses and communications service providers;
- Monitor and assist the, the twenty three sixth round grantees to ensure that they have the resources necessary and that they meet grant requirements; and
- Conduct a seventh grant round in early spring 2012.

[7] The MPUC plan to reform telecommunications states that in the Commission's view, this fee is anti-competitive. Maine Public Utilities Commissions, Plan of the Maine Public Utilities Commission to Reform Telecommunications Regulation Dec. 30, 2011.

In addition, Authority staff will:

- Assist Networkmaine (a consortium including the Maine Department of Education, Maine State Library, Office of Information Technology and University of Maine System) with efforts for the Maine School and Library Network (MSLN) to make available to every K-12 public school and public library a high-speed, fiber-based connection to the internet; [8]

- Participate in the State's Health Information Technology (HIT) initiatives to integrate health care through the use of Electronic Health Records (EHR) including the use of broad band to provide high speed exchange of data and medical tests which brings more efficient health care and better health outcomes;

- Be an engaged participant on the Maine Fiber Company (MFC) Advisory Board providing advice to MFC with the respect to the construction and operation of the middle mile Three Ring Binder;

- The Executive Director will submit comments to the FCC for the many dockets and cases needed to implement the Connect America Fund.

- Monitor and participate in the MPUC efforts to comprehensively reform the regulatory environment in Maine for telecommunications.[9]

- Examine low-cost broadband internet and computer ownership programs being offered by various Internet Service Providers (ISP) such as Time Warner and Comcast, and computer companies such as Microsoft.[10]

This report summarizes the Authority's activities; describes federal activities and initiatives; and outlines the Authority's ongoing activities.

---

[8] The Maine School and Library Network (MSLN) began in 1996. MSLN provides internet access to approximately 950 schools and libraries statewide. MSLN is funded from the Federal E-Rate program (approximately 60% of the cost) and the Maine Telecommunications Education Access Fund (MTEAF) (approximately 40% of the cost). Funds are generated through an assessment on interstate phone bills for the Federal E-Rate portion and on intrastate bills for the MTEAF portion (0.6%).

[9] Resolves 2011, ch 69.

[10] FCC Low Cost Broadband Internet Program, http://www.fcc.gov/document/fcc-and-connect-compete-broadband-fact-sheet Includes cable companies such as Time Warner Cable and Comcast (Internet Essentials).

INTRODUCTION

The ConnectME Authority 2011 annual report is divided into five sections: I. Background; II. Summary of Authority and Broadband Activities; III. Federal Broadband Activities and Initiatives; IV. Ongoing Authority Activities; and V. Conclusion and Attachments.

I. BACKGROUND

A. The Importance of Broadband

The Internet is an extraordinary platform for innovation, economic growth, and social communication. High-speed Internet services delivered over broadband networks are critical to maintaining the United States' competitiveness in a global economy. A strong correlation exists between broadband (both deployment and adoption) and indices of economic growth, such as increases in Gross Domestic Product, employment, and property values.[11]

Broadband serves as a key engine of economic growth and opportunity.

- Consumers with broadband at home can save more than $7,000 a year
- Annual revenues of broadband-connected small businesses are $200k higher than those without broadband[12]

In the near-term, investments in broadband infrastructure will create jobs by supporting the installation and upgrade of fiber-optic networks and other high-tech components. Sustainable broadband adoption efforts will help low-income and other vulnerable populations learn about the benefits of broadband technologies and become proficient in computer-related skills. In the long-term, expanding broadband access and adoption will facilitate small business growth and innovation, enhance health care delivery, promote energy independence, improve public safety, and lay a foundation for long-term economic development in communities throughout the United States.[13]

---

[11] "Exploring the Digital Nation Computer and Internet Use At Home" Economics and Statistics Administration and National Telecommunications and Information Administration, Nov. 2011 (5).

[12] FCC Daily Press Releases http://www.maine.gov/connectme/resourceinfo/doc/113011fccbb[1].pdf Nov. 2011.

[13] "Testimony of Assistant Secretary Strickling regarding H.R. ___, a Bill to Clarify NITA and RUS Authority to Return Reclaimed Stimulus Funds to the U.S. Treasury" http://www.ntia.doc.gov/speechtestimony/2011/testimony-assistant-secretary-strickling-regarding-hr-bill-clarify-ntia-and-rus, April 2011.

> *"Today, high speed Internet is transforming the landscape of America more rapidly and more pervasively than earlier infrastructure networks. Like railroads and highways, broadband accelerates the velocity of commerce, reducing the costs of distance. Like electricity, it creates a platform for America's creativity to lead in developing better ways to solve old problems. Like telephony and broadcasting, it expands our ability to communicate, inform, and entertain."*
>
> *Federal Communications Commission*
> *National Broadband Plan*
> *March 2010*

The ConnectME Authority's Developing Broadband in Maine: Needs Assessment Volume I indicates that Maine's businesses, residents and telemedicine community share the top two barriers that are reflected in surveys and research across America; lack of perceived need or value and cost.[14] The FCC "identified three major barriers that keep non-adopters from getting broadband: cost, digital literacy, relevance and an important and cross-cutting issue is accessibility for people with disabilities."[15]

A recent study from the PEW Center on the States, *Bringing America Up To Speed* addresses ConnectME Authority's primary goal of expanding broadband availability. "Whether and how quickly the nation realizes broadband's potential depends heavily on states: specifically, their efforts to increase availability of the service among those who lack it, including building necessary physical infrastructure; to spur adoption among those who do not yet use it; and to apply technology to improve and expand health care, education, public safety, government transparency, elections and other essential services."[16]

Maine's economy relies on tourism. Realizing rural Maine's potential for sustainable tourism growth demands bold, creative, and tenacious leadership at the state, regional and local levels. The Maine Center for Economic Policy Survey respondents clearly recognizes that high speed internet and reliable cell phone service are basic needs in today's tourism economy. They are important business tools as well as amenities that many tourists now take for granted. Better communication links might even increase participation in regional tourism planning by reducing the need for travel to meetings.

The federally-supported "Three Ring Binder" program to expand "middle mile" broad-band connectivity in rural Maine is a promising response to this need. For many rural tourism destinations, the remaining needs are "last mile" cable connectivity and

---

[14] "Developing Broadband in Maine: Needs Assessment Volume I" ConnectME Authority, June 2011 (4-8 – 4-39).

[15] National Broadband Plan, page XI – XV (Executive Summary) March 2010.

[16] "Bringing America Up To Speed, State's Role in Expanding Broadband" Pew Center on the States, June 2010 (33).

local cell phone towers.[17] By lowering the cost of last-mile connections, investments in middle mile facilities allow existing Internet service providers to enhance or expand their offerings and facilitate the entry of additional Internet service providers into the market to build connections to homes and businesses. NITA funded middle mile projects will therefore leverage public and private dollars to extend the reach of high-speed Internet into communities that would otherwise lack adequate access to broadband and its many opportunities.[18]

B. The ConnectME Initiative

As early as 1995, the Maine Legislature recognized the value of broadband when it stated:

> The Legislature further declares and finds that computer-based information services and information networks are important economic and educational resources that should be available to all Maine citizens at affordable rates. It is the policy of the State that affordable access to those information services that require a computer and rely on the use of the telecommunications network should be made available in all communities of the State without regard to geographic location.[19]

In 2006, the Legislature created the ConnectME Authority to develop and carry out its broadband strategy by identifying unserved areas of the state; developing proposals for broadband expansion projects, demonstration projects and other initiatives; administering the process for selecting specific broadband projects; and providing funding, resources and incentives.[20] In 2007, the Legislature also approved the Authority's major substantive rule that defines the state's broadband strategy and describes how that strategy is to be implemented. The Authority consists of a board of five members, an Executive Director, Associate Executive Director, and an Advisory Council. Attachment B - Authority and Advisory Council members

---

[17] "Amenity Investments and Tourist Destination Development" Maine Center for Economic Policy, August 2010 (8,11,50).

[18] "The Broadband Opportunities Program; Expanding Broadband Access and Adoption in Communities Across America" National Telecommunications and Information Administration, Dec. 2010 (3).

[19] Title 35-A M.R.S.A. §7101(4).

[20] PL 2005, c. 665.

II. SUMMARY OF AUTHORITY AND BROADBAND ACTIVITIES

The ConnectME Authority statute requires the Authority to report on four components: Budget; Investments; Activities; and Market Conditions. This Section covers the first three items. Market Conditions are reported on in Section IV.

A. Budget

The funding mechanism for the Authority is a 0.25% (one quarter of one percent) surcharge on all communications, video, and internet service bills for retail in-state service.[21] It is expected to generate between $1.25 million and $1.4 million per year.

The 76 grants awarded in 2007 through 2011 total nearly $6 million. The sixth grant round awarded in 2011 totaled $1.56 million. The ConnectME fund balance on December 31, 2011, was $3,193,205. From that amount, plus upcoming assessments, $2.2 million is committed for awarded grants not yet completely funded; $1.5 million for the seventh grant round; matching funds for NTIA grants; and Authority operating expenses.

The Authority also receives funding from the Broadband Sustainability Fee, a fee collected by a dark fiber provider (currently only one, Maine Fiber Company) for each fiber strand mile leased by the dark fiber provider. [22] For 2010, the fee generated approximately $1,254, and through November 2011, an additional $4,911. The funds are to be disbursed to the incumbent local exchange carrier in whose territory the strands were leased, to be used to deploy broadband infrastructure in unserved areas within the carrier's service territory. The fee sunsets on December 31, 2017.

B. Investments

The ConnectME Fund is administered by an independent fiscal agent who manages the assessment process, invests the unused funds, and makes payments as directed by the Authority. The fund administrator operates under contract at the direction of the Executive Director.[23] Interest generated by the fund is added to the fund balance.

---

[21] Also included are retail revenues received or collected from mobile communications services (i.e. cellular telephone) that voluntarily agree to be assessed by the Authority.

[22] M. R. S. A. Title 35-A, Section 9216.

[23] The quarterly assessments are paid to an independent fund administrator the month after the end of each quarter. Rolka Loube Saltzer Associates (RLSA) is the fund administrator for the ConnectME Fund as well as the Maine Universal Service Fund and the Maine Telecommunications Education Access Fund.

C. Grant Activities

Awarding Process and Grants Awarded

The Maine Legislature established the Authority "to stimulate investment in advanced communications technology infrastructure in *unserved* or underserved areas."[24] The Authority believes that the goal to expand broadband access in the most rural, *unserved* areas that have little prospect of broadband service from a traditional or existing provider is a priority. The Authority accomplishes that goal primarily by awarding broadband expansion grants for projects that serve unserved areas.

Grant applications are reviewed by three non-industry members of the ConnectME Authority Advisory Council, the Executive Director, and the Associate Executive Director. The applications are scored on the four criteria specified in the statute and rule: cost-benefit; community support; project scope; and project value. The public-private partnership concept is considered in the review, yet "getting the most for the money" is also a high priority because of the limited funds available.

In the sixth round of grant funding the Authority was presented with a total of 27 applications. Twenty three projects were funded for $1.6 million with a total project value of $2.3 million, for 61% funding of total project cost. These Authority awards go to eight of Maine's service providers ranging in size from small, one office operations to those with a New England or national based footprint. All the providers have implemented broadband projects through the ConnectME grant process in the past, demonstrating the importance of funding the gap to deploy broadband where it may not otherwise occur.

Oversight

The progress of the projects supported by the Authority is tracked through a monitoring and reporting process. The grant recipients document the expenditure of Authority funds which ensures that the funds are used only for appropriate purposes. Three reporting forms were developed with the assistance of the Authority Advisory Council:

- Notice of Commencement – This requires a schedule of project milestones and the expected completion date. Each vendor for the funded project is identified on the form along with appropriate reports and documentation such as invoices and purchase orders.

[24] 35-A, M.R.S.A. §9203(1). See also 9202(2)(C).

- Progress Report – This provides a project update to demonstrate to the Authority that the funded project is on track. The Executive Director monitors each project's progress and use of funds.

- Final Completion Report – This is a final report that documents the completion of the project with attached financial spreadsheets and a listing of the communities newly served with broadband service as a result of the project.

Attachment E - summaries for projects that have been funded

The ConnectME Authority is a component unit of the State of Maine and as such falls under Title 5 Section 1547 requirements to provide audited financial statements to the State of Maine Controller's office. The ConnectME Authority contracted with Macdonald Page & CO LLC of Augusta to perform the required audits for fiscal year ending June 30, 2010 through November 7, 2013 with two optional successive one-year terms, beginning November 8, 2013 and November 8, 2014.

Attachment C - ConnectME Authority Balance Sheet

In Macdonald Page & CO LLC's opinion, the financial statements referred to above present fairly, in all material aspects, the respective financial position of governmental activities and major fund of ConnectME Authority, as of June 30, 2011, and the respective changes in financial position for the year then ended in conformity with accounting principles generally accepted in the United State of America.

Monitoring the Sixth Round Grants

The Authority will monitor and assist the 23 sixth round grant awardees to ensure that they have the resources necessary to complete their projects as required by the grant award.

The Authority notes that two of the 27 initial grant awards were cancelled because there were two preliminary challenges to the pre-application letters and full applications, plus not all that submitted pre-application letters submitted complete applications. The Authority strongly encourages parties to work together in crafting solutions that would provide the best expansion project while minimizing the impact on existing service providers.

Two high cost special installations proposals to subsidize high cost, difficult to serve locations within each company's service territory were not granted. The Authority did fund a similar pilot project for Axiom in the fourth grant round. While both of these applications address a recognized problem in providing broadband service, the review team recommended not funding these at this time for two reasons. One, the Authority's focus for funding projects continues to be for last mile infrastructure projects in defined

unserved areas of Maine. Two, if all recommended projects were funded, the proposed allotment for this round will be exhausted.

The grant review team recommended that the Authority continue to explore a program for all providers that could assist with high cost, difficult installations. A separate program with a specific application and tracking process may be more appropriate.

Implementing the 2012 Seventh and Eighth Grant Round

For the seventh round, the Authority estimates that $1.5 million will be available and is again requesting smaller, focused proposals. A suggested grant limit for each project is $100,000, funding no more than 50% of the total project, while recognizing that we can be flexible for exceptional proposals. The Authority looks for creative solutions for expanding affordable broadband service to the unserved areas of Maine, encouraging more targeted solutions, making the projects more manageable and easing oversight. The Authority will also consider crafting a “reverse auction” or RFP process to address identified unserved areas for potential projects.

D. ConnectME Authority Advisory Council

The ConnectME Advisory Council assisted the Authority in redefining “broadband” for grant purposes. The Advisory Council group recommended following the lead of the FCC which made two decisions a few years ago. First, the FCC said that the minimum data rate speed necessary to quality as “broadband” is 768 kbps download. Second, it adopted a seven-tier classification as follows:

Basic Broadband Tier 1	768 kbps to 1.5 Mbps
Broadband Tier 2	1.5 Mbps to 3 Mbps
Broadband Tier 3	3 Mbps to 6 Mbps
Broadband Tier 4	6 Mbps to 10 Mbps
Broadband Tier 5	10 Mbps to 25 Mbps
Broadband Tier 6	25 Mbps to 100 Mbps
Broadband Tier 7	Greater than 100 Mbps

Using the tier method will give the Authority maximum flexibility and will allow newer, faster technologies to be recognized and encouraged. Projects will be “scored” based on tier level of service provided with strong preference for projects that provide Tier 3 or better. Request For Proposal responses will be ranked based on the tier level projected. This has to be balanced against the cost of the project.

E. Maine Fiber Company Advisory Board

The Authority's Executive Director, representing the ConnectME Authority, sits as one of nine members on the Advisory Board. The Advisory Board provides advice to MFC with the respect to the construction and operation of Three Ring Binder, including; the choice of appropriate anchor institutions to which the project should connect in order to meet federal grant obligations and promote the broadband goals of the State; how to maximize the economic benefits of the project to the State; ensure the project is constructed in a manner consistent with federal grant obligations and public purposes.

MFC is a dark-fiber leasing company supporting all telecom carriers in Maine. MFC was formed to oversee the construction, maintenance and leasing of a one, 100-mile, high-capacity fiber optic network in the state of Maine. Five hundred miles of the project will be completed by the end of 2011, and the remaining 600 miles are pegged for completion during the fall of 2012. The network is being built through a combination of a federal grant and private investment. MFC mission is to enhance ´middle mile´ fiber access for carriers looking to provide quality broadband services to customers in many areas of Maine, including some of the most rural areas of the State.

F. State Legislation

"Resolve, To Direct the Public Utilities Commission To Develop a Plan To Reform Telecommunications Regulation."[25] This resolve directs the MPUC to develop a plan to reform telecommunications regulation in the state. The Authority supports the MPUC efforts to comprehensively reform the regulatory environment in Maine for telecommunications. The Authority is primarily concerned with the important connectivity issues as described in the FCC's National Broadband Plan (NBP). Of particular importance to Maine is the NBP detailed analysis in the National Purposes section on Health Care, Education, Energy and the Environment, Economic Opportunity, Government Performance, Civic Engagement, and Public Safety. Each and all of those areas are made much more effective and efficient with high-speed broadband connectivity. Ubiquitous broadband enables economic development, tele-health services, educational opportunities, and better participation and access to government.

III. FEDERAL BROADBAND ACTIVITIES AND INITIATIVES

The FCC has released its comprehensive reforms to expand access to high-speed Internet and voice services nationwide and benefit consumers by accelerating deployment of modern communications networks. Adopted unanimously late last month, the overhaul transforms the FCC's outdated universal service and intercarrier compensations systems into a new Connect America Fund, or CAF, representing the most significant policy step ever taken to connect all Americans to broadband.

[25] Resolve, Chapter 69, 125th Legislature, First Regular Session.

The high cost piece of the CAF – with an annual budget set at no more than $4.5 billion, the same as the current universal service funding level – is expected to help connect 7 million Americans to high-speed Internet and voice in rural America over the next six years, generating approximately 500,000 jobs and $50 billion in economic growth over this period. Main Street businesses across the country will benefit from the opportunity to sell to new customers throughout the U.S.

The Order adopted by the FCC recognizes the growing importance of mobile broadband and makes it an independent universal service objective for the first time. Dedicated support to expand mobile broadband nationwide to tens of thousands of road miles where millions of Americans live, work, and travel will be provided through a new Mobility Fund.

The Order also phases down antiquated, opaque, regulated charges for the exchange of voice traffic among carriers—known as intercarrier compensation—and transitions to a simplified, uniform "bill-and-keep" framework, which removes hidden subsidies on consumers' bills, increases efficiency, and eliminates impediments to the deployment of modern networks. Intercarrier compensation reform will provide benefits to all Americans through improved service and lower costs.

The CAF will put America on the path to universal broadband and advanced mobile coverage without increasing costs. By eliminating waste and targeting support where it is most needed, these reforms keep universal service funding on a firm budget, and they will ensure rigorous accountability for Fund recipients.[26]

IV. ONGOING AUTHORITY ACTIVITIES

There are many opportunities and responsibilities for the ConnectME Authority in 2012, including expanded participation in federal and state initiatives, additional grant rounds, mapping served and unserved areas, building broadband capacity, improving digital literacy through technical assistance, and working with local governmental organizations.

A. Coordinate Broadband Initiatives

Looking at the mid and long term, perhaps the most important role for the ConnectME Authority will be to continue to serve as a conduit for Maine's broadband initiatives at all levels and across state agencies. The Executive Director participates and contributes to efforts which identify and coordinate solutions to regulatory, policy

[26] Press Release: FCC Releases Connect America Fund Order http://www.fcc.gov/document/press-release-fcc-releases-connect-america-fund-order

and structural challenges to expanding the availability of advanced communications infrastructure in Maine.

At the forefront of broadband initiatives in Maine is the MPUC Inquiry into Telecommunications Regulatory Reform.[27] The ConnectME Authority's Executive Director filed comments to the inquiry reaffirming broadband's dependence on Maine's telecommunications infrastructure. The Authority noted that in the short term, the MPUC should address access to infrastructure issues that seriously and negatively impact the spread of competitive telecommunications services, including broadband. In the long term, regulation and support should be directed only towards last mile transport, or the "pipe," not to the services or applications that flow through the pipe. For current and future subsidy needs, any new cost model and support mechanism developed by the MPUC should definitely be company – and technology – agnostic. Some form of "reverse auction" is worth consideration both for the near term determination of a provider of last resort and the long term supplier of the "pipe."[28]

Of particular interest is the Authority's work with the MFC Advisory Board and the Networkmaine Coordinating Council. The Executive Director sits as one of nine members on the MFC Advisory Board. The MFC Advisory Board provides advice to MFC with the respect to the construction and operation of Three Ring Binder.

The Authority participates in the Networkmaine Coordinating Council, a newly established unit within the University of Maine System created by the restructuring of its communications and network services group. It was created in 2009 to provide the public entities served with greater involvement in shaping the future of Maine's research and education network and the Maine School and Library Network (MSLN).

B. Broadband Mapping and Inventory Project

The ConnectME Authority's activities confirm that not only are communications services, especially broadband services, in Maine not "reasonably comparable" with services provided regionally and nationally, but are not reasonably comparable within the state. A primary goal of the ConnectME Authority is to expand broadband access in the most rural, unserved areas of the state. It would be very difficult for unsupported projects to be financially viable in these areas. The support from ConnectME Authority grants alters the financial equations enough to allow the services to be offered. To meet this goal, the ConnectME Authority must determine with the highest degree of certainty it can, where broadband is and, more importantly, is not.

The ConnectME Authority is required to collect, aggregate, coordinate, and disseminate information and data concerning communications services and advance

[27] Resolve, Chapter 69, 125th Legislature, First Regular Session.

[28] Maine Public Utilities Commission, WC Docket No. 2011-224, released July 6, 2011. Reply comments submitted August 1, 2011.

communications technology infrastructure in the state.[29] For many years, the FCC has provided broadband reports that allow a reasonable comparison picture across the states. However, they tend to seriously overstate the availability of broadband services in each state, because if one broadband subscriber was located in a particular zip code, the FCC considers the entire zip code to have broadband. This overstatement is particularly true in a rural state like Maine.

In 2009, the ConnectME Authority began a comprehensive mapping and inventory project to obtain more granular, Maine-specific information regarding broadband availability. In early 2010, the Authority was awarded approximately $1.3 million for a two year broadband data collection and mapping activities grant from NTIA as part of its BTOP program funded under the Recovery Act. In late 2010 the Authority was awarded an additional $3.2 million from NTIA to fund years three, four, and five of the mapping project, as well as fund the projects described below. The grant funds facilitate a much more detailed and complete analysis of broadband than would have been possible with only the Authority's modest resources. We are working with the Office of Information Technology, Maine Office of GIS, and the James W. Sewall Company to conduct a mapping project that will use a combination of provider and public data to refine our understanding of unserved areas of Maine.

In collaboration with industry service providers, state and federal agencies and local communities, a searchable geographic map was developed.[30] The map indicates where broadband service is available from one or more technology platforms: fixed wire, fixed or point-to-point wireless and mobile or satellite wireless systems. The end product enables community leaders, consumers, and businesses to access information on service options and potential service providers for their locations of interest. The Authority has leveraged the same geographic data to also implement an online static map gallery which offers high density PDF layered broadband maps that are created to address specific needs.[31] All states received mapping and inventory Recovery Act funding to create online geographic maps. Data from each state is sent to the NTIA for populating a nationwide broadband map.[32]

C. Broadband Planning Project

The ConnectME Authority is managing a statewide comprehensive planning project that was funded through a $440,000 BTOP grant. Contractor James W. Sewall Company is teaming with Packard Judd Kaye Strategic Marketing Group; broadband

[29] 35-A, M.R.S.A. §9204(3)(A).

[30] Maine Broadband Availability Map: http://www.maine.gov/connectme/broadbandmapping/index1.htm.

[31] Maine Broadband Static Map Gallery: http://www.maine.gov/connectme/broadbandmapping/staticgallery.htm.

[32] National Broadband Map: http://broadbandmap.gov/.

expert Jeff Latourneau, Executive Director of Networkmaine; and Todd Gabe, Associate Professor of Economics at the University of Maine, to form the Sewall planning team.

A major concern of the Authority beyond the simple availability of broadband service is the low take-rate or adoption and subscribership to available broadband services. Factors contributing to a lower than average adoption rate are socio-economic, low income consumers cannot afford the computer or the cost of subscribing to broadband service; lower education level, consumers are not aware of the services available online; and many consumers do not see value in being online. Increasing the adoption rate for broadband services changes the economic "tipping point" for investment by service providers.

This project provides benchmarking of uses of broadband, the benefits, the drivers for greater adoption of broadband and the barriers to adoption focused on household and on business establishments in Maine. One particular focus, although not exclusive to the focus area, will be on the telemedicine industry sector.

In June of 2011, *Developing Broadband in Maine: Needs Assessment Vol. I* was released.[33] This Needs Assessment is one deliverable in the Authority's Broadband Planning Project. It establishes a baseline measure of broadband availability and use in Maine, and identifies barriers to the adoption of broadband technologies throughout the State. It will be used to plan the Authority's strategies for increasing broadband awareness and uptake, and to provide the baseline against which such implemented strategies can be evaluated.

The Developing Broadband in Maine: Strategic Plan was a deliverable of the Planning Project and derived from the information gathered and published in the Needs Assessment Vol. I. The primary objective of the Strategic Broadband Plan is to recommend strategies to the ConnectME Authority Board for increasing Maine broadband availability and adoption. The Strategic Plan acknowledges the critical economic and social role broadband plays in Maine and presents five strategic recommendations focusing on consumers and stakeholders.

D. Broadband Capacity Building Project

Additional opportunities were funded by the NTIA through the original State Broadband Data and Development Program (SBDD) BTOP program. The ConnectME Authority carefully examined the opportunities available and submitted applications in two categories: broadband capacity building and technical assistance. The Maine State Planning Office (SPO) was chosen to administer the Broadband Capacity Building Project.

[33] Developing Broadband in Maine: Needs Assessment Vol. I: http://www.maine.gov/connectme/arragrants/needsassessment.shtml.

The SPO convened a Broadband Capacity Building Task Force and will manage the creation and implementation of a Broadband Capacity Building Plan throughout the state. The Task Force and the SPO staff will utilize the statistics and demographics collected through the planning portion of the BTOP grant to determine focus areas for the Broadband Capacity Building Project. The two initiatives will work together with the planning project providing data and information to the broadband capacity building project.

The Task Force will develop the Broadband Capacity Building Plan to support broadband growth and adoption with inclusion of suppliers of IT services. This will be accomplished by convening statewide conferences and meetings intended to disseminate technical information about broadband availability data collection and the results of research collected to date to further improve understanding of and opportunities to enhance broadband within Maine. This includes the completion of strategic planning based on gap analysis of availability, adoption and the existing capacity of residents, businesses and local support organizations. Programs that currently exist to support broadband growth and adoption will be assessed.

The Broadband Capacity Building project will help stimulate the health of Maine's workforce and its economy in two ways:

1. By supporting broadband growth and adoption to the private sector, skilled workers and entrepreneurs who can live anywhere but want to live in Maine because of its distinctive quality of place; and

2. By increasing the quality and efficiency of health care service delivery.

E. Technical Assistance Project

The second opportunity that was funded with additional BTOP Recovery Act grant monies was the Technical Assistance Project. The ConnectME Authority, in collaboration with the Maine Department of Education (DOE) Adult and Community Education Program, is providing Maine citizens across the state the technical assistance and training necessary to fully utilize the broadband capacity now available or being planned and deployed.

The ConnectME/Maine Adult Regional Technology Initiative (MARTI) Project, as this initiative is known, combines a proven model of professional development with the statewide coverage of Maine's adult education programs to provide citizens technical support on ways to utilize our expanding broadband capacity for education, economic development, and personal enrichment. The state's one hundred and seven adult education programs will be become the local ConnectME *Community Connection* to broadband knowledge. Using resources developed by ConnectME Authority, adult educators will provide community presentations, workshops, and coursework making 21st century skills available to all.

Adult education programs choosing to be a Connect ME *Community Connection* site complete a Memorandum of Understanding agreeing to provide presentations to individuals or community organizations on the benefits of high-speed internet connections. The program also agrees to promote the availability of presentations through its course catalog for the duration of the project, to have staff trained to deliver the presentations, and to have instructors share broadband information with students in those courses that benefit from high-speed internet access. Each local adult education program will receive a grant of $500 a year for duration of the project, paid in two equal installments on receipt of the seasonal course catalog showing the ConnectME information and course identification.

F. Access to Facilities and Rights of Way

An ongoing challenge for broadband service providers, especially fixed-wireless providers, is obtaining access to existing towers, bridges, high points, roadways for conduit and public buildings for the location of equipment. The issue of access to existing utility poles and the cost and time for make-ready work is a large challenge for independent wired broadband service providers, both for last-mile and middle-mile facilities. These two issues cause unnecessary delay and higher cost for the expansion of infrastructure to serve the most unserved areas of the state.

The Center for American Progress reports that a recent study by the New America Foundation suggests that road construction and repair can be an enormous help for the broadband middle mile problem. Construction costs for highways are generally at least $3 million per lane, per mile. By contrast, it only costs between $10,000 and $30,000 per mile to install conduit pipe that can hold the fiber-optic lines used for high-speed Internet purposes. Thus, "adding fiber would increase highway construction costs by as little as one percent on average."[34]

The Broadband Capacity Building Project will explore and develop policies and procedures for use of private and public facilities such as radio towers, buildings, and rights-of-way by private service providers for expanding broadband and cellular service.

G. Health Information Technology

The ConnectME Authority participates in the state's HIT initiatives. A healthy citizenry and workforce are central to Maine's quality of place. High speed Internet allows instantaneous, interactive contact between health professionals and patients permitting remote monitoring, efficient chronic disease management and more effective responses to emergencies. High speed Internet can help senior citizens and people with disabilities live independently, improve their quality of life, and reduce costs of care.

[34] "Smart Grid, Smart Broadband, Smart Infrastructure" April 2009 (3).

Under Maine's Director of the Office of the State Coordinator for HIT, Maine received $6.6 million federal funds to build the capacity for exchanging health information across the health care systems within and between states. In 2011, Maine's Health Information Exchange (HIE) signed agreements with 1,000 health care professionals and hospitals to participate in the HIE. Broadband infrastructure and adoption is critical to building that capacity and advancing Maine's HIT initiatives. The Connect ME's Broadband Capacity Building Project's efforts are aligned with the HIT initiatives to provide efficient and coordinated programs for this important work.

Maine's Medicaid agency (Office of MaineCare Services or OMS) implemented a program in October 2011 that provides federal funds for MaineCare professionals and hospitals to adopt, implement, or upgrade Electronic Health Records (EHR). In the first three months of the program, more than twenty of Maine's hospitals (approximately two-thirds) and 350 professionals received payments totaling more than $15 million. (The HIT initiative runs until 2021.)

The Office of the State Coordinator's initiatives and the Medicaid program are integrated with rural health care and ConnectME's initiatives to provide efficient and cost-effective technology and the "pipe" to carry critical medical information and data.

V. CONCLUSION

The short history of the ConnectME Authority has shown that supporting small public-private initiatives and partnerships to expand broadband has been and will continue to be the best strategy. Much has been accomplished in the past four years to better position Maine as a state that embraces what technology can offer.

Broadband removes the barriers of space and time. A broadband "pipe" enables economic development, tele-health services, educational opportunities, and better participation and access to government. Broadband provides people in rural areas with enhanced access to technology; transforming our state economy, and expanding business opportunities for more Mainers.

In the report *Making Maine Work: Critical Investments for the Maine Economy* one of the top recommendations made is to make high speed internet service available at reasonable costs to businesses throughout Maine by:

- Encouraging on-going private investment in communications infrastructure to increase access to and availability of high-capacity broadband.
- Working with communications providers and Maine's Congressional Delegation to modernize federal communications regulations.
- Supporting ConnectME's efforts to identify and fill gaps in the communications network.[35]

[35] "Making Maine Work: Critical Investments for the Maine Economy," Maine Development Foundation, July 2010 (17).

Maine is on its way to realize its universal broadband availability goals. Yet much work remains for Maine to become a leader and to gain from the benefits of broadband including employment opportunities, education, healthcare, and public safety. We also need to coordinate state and federal activities to ensure that we take advantage of all opportunities for funding and collaboration. The ConnectME Authority commits to working with all levels of government and public and private stakeholders to bring broadband advantages to fruition in Maine.

Attachments:

Attachment A – Glossary
Attachment B – ConnectME Authority and Advisory Council Members
Attachment C – ConnectME Balance Sheet
Attachment D – MPUC Reply Comments
Attachment E – ConnectME Grant Awards

Attachment A – Glossary

BPL (broadband over power lines), a technique for delivering high-speed Internet access over electrical power lines, with the ability to use house wiring to connect to computers.

Broadband, an elastic term describing high-bandwidth, two-way, always-on data connections. The wider the pipe, the more data can be moved at the same time and hence the higher the effective speed. The FCC has seven broadband tiers with "basic broadband tier 1" referring to services equal to or greater than 768 kbps but less than 1.5 Mbps in the faster direction. A typical home user broadband connection today usually is 512 kbps upstream and 2-7 Mbps downstream. In a few years, those numbers are likely to be significantly higher. The term "broadband" is often used as shorthand for "high-speed Internet access."

business user, a user in a business setting constituting a broad "middle class" in terms of bandwidth, reliability, and security needs. See also *home user, enterprise user.*

cable internet, or cable modem service, a means of delivering broadband via coaxial cables, almost always simultaneously with cable television service and VoIP telephone service.

Central Office (CO), a switching station maintained by an ILEC where DSLAMs are generally deployed and from which the maximum range of DSL service (reckoned in "circuit feet," distances over twisted-pair copper lines, not "as the crow flies") can be determined.

CLEC, Competitive Local Exchange Carrier.

DS3, a fiber-based digital signal carrier with a rate of 44.736 Mbps.

DSL, digital subscriber line. There are many subtypes of DSL (xDSL, ADSL2, SDSL, etc.) of varying speed, range and technical characteristics.

dark fiber, the optical fiber infrastructure (cabling and repeaters) that is currently in place but is not being used. Optical fiber conveys information in the form of light pulses so the "dark" means no light pulses are being sent.

DSLAM, digital subscriber access multiplexer.

enterprise user, the most demanding, industrial strength broadband consumer that usually represents large, technology-intensive organizations.

fixed wireless, a non-mobile method of delivering broadband service to homes and businesses using line of sight radios.

FTTH/FTTP, fiber to the premises, home, et al. a method of connectivity using fiber optic cabling direct to the end user.

home user, the class of broadband consumer with the least demanding broadband needs but which also faces total unavailability of service in many areas.

ILEC, Incumbent Local Exchange Carrier.

ISP, internet service provider.

last mile, a term for connection to the end user, also known as the "local loop" for telecommunications services that makes the final connection to the premises.

middle mile, also known as backhaul, connects the last mile internet service provider with an Internet backbone service provider.

municipal network, a broadband network owned and operated by a city or town, often by lease arrangement with an ILEC/CLEC.

Narrowband, low-speed data connections (such as dialup Internet access, a typical maximum of 56kbps and is generally even lower in real-world applications).

PON (passive optical networking), a family of networking standards using a point-to-multi-point architecture for delivering last-mile connectivity without any active (i.e., powered) components in the distribution network. PON may provide hope for a last-mile solution because it involves fewer upgrades to the current infrastructure than competing technologies.

Remote Terminal, a remote switching station, or "sub-station" maintained by an ILEC where DSLAMs are generally deployed and from which the maximum range of DSL service (reckoned in "circuit feet," distances over twisted-pair copper lines, not "as the crow flies") can be determined.

symmetrical/asymmetrical, describes whether a data connection operates at the same speed or bandwidth when traveling upstream as it does when traveling downstream. A symmetrical connection is the same speed up or down; an asymmetrical connection is usually much slower on the upload than on the download.

T-1, trunk level digital carrier, originally provided over copper facilities, with a signaling speed of 1.544 Mbps.

take rate or penetration rate or adoption rate, a measure of the ratio of potential subscribers to whom service is available to those who actually sign up for that service.

triple play, the application of broadband that delivers voice, data, and video service over the same transport pipe.

VoIP, voice over internet protocol. Voice "telephone" service provided over a data connection such as DSL or cable internet service.

WiFi (wireless fidelity), a form of wireless networking in the IEEE 802.11x family of standards that is generally used for connectivity of wireless large-area networks (WLANs) inside buildings and small outdoor areas, but which has shown remarkable usefulness as a way of providing high-speed Internet over wider distances via towers, high-gain antennae and mesh-network technologies that significant exceeds what WiFi was originally intended to do.

WiMAX (Wireless Interoperability for Microwave Access), an emerging form of fixed wireless broadband access in the IEEE 802.16x family of standards. The licensed version has a theoretical range and distance of up to 30 miles and 50Mbps or higher but is only available to the larger carriers. WiMAX is able to overcome some of the topographical issues faced by other forms of wireless broadband.

WISP, wireless internet service provider.

Attachment B – ConnectME Authority and Advisory Council

Authority Members:

1. Jean Wilson, Chair, Senior Vice President of Information Services, LL Bean
2. Mitch Davis, Chief Information Officer, Bowdoin College
3. Greg McNeal, Chief Technology Officer, Maine State Government
4. Vendean Vafiades, Commissioner, Maine Public Utilities Commission
5. Dick Thompson, Chief Information Officer, University of Maine System

Advisory Council:

1. Fletcher Kittredge, CEO, GWI, Chair
2. Reggie Palmer, TDS Telecom, Deputy Chair
3. Armando Ruiz, VP Engineering, Time Warner Cable
4. Linda Lord, Maine State Librarian
5. Jeff Letourneau, Executive Director, Networkmaine - University of Maine System
6. John Burns, Small Enterprise Growth Fund
7. Wayne Jortner, Office of the Public Advocate

Attachment C – Balance Sheet

ConnectME Authority

Balance Sheet – Government Fund

June 30, 2011

	Special Revenue Fund
ASSETS	
Cash and cash equivalents	$ 3,652,879
Accounts receivable	353,403
Due from other governments	76,972
Other receivable	30
Total Assets	$ 4,082,284
LIABITLITIES AND FUND BALANCE	
Liabilities	
Accounts Payable	$ 247,271
Accrued Liabilities	185
Deferred Revenue	1,559
Total Liabilities	249,015
Fund Balance	
Reserved for:	
Advanced communications technology Infrastructure	3,834,269
Total Liabilities and Fund Balance	$ 4,083,284

Attachment D – MPUC Reply Comments

ELECTRONICALLY FILED ON AUGUST 1, 2011

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

MAINE PUBLIC UTILITIES COMMISSION	)	**August 1, 2011**
	)	
Re: Inquiry Into Telecommunications	)	**Docket No. 2011-224**
Regulatory Reform Plan	)	
	)	

THIS IS A VIRTUAL DUPLICATE OF THE ORIGINAL HARDCOPY SUBMITTED TO THE COMMISSION IN ACCORDANCE WITH ITS ELECTRONIC FILING INSTRUCTIONS

The ConnectME Authority (Authority) supports the Maine Public Utilities Commission (MPUC) efforts to comprehensively reform the regulatory environment in Maine for telecommunications.[36] The Authority is primarily concerned with the important connectivity issues as described in the FCC's National Broadband Plan (NBP). Of particular importance to Maine is the NBP detailed analysis in the National Purposes section on Health Care, Education, Energy and the Environment, Economic Opportunity, Government Performance, Civic Engagement, and Public Safety. Each and all of those areas are made much more effective and efficient with high-speed broadband connectivity.[37] Ubiquitous broadband enables economic development, tele-health services, educational opportunities, and better participation and access to government.

In concert with the NBP analysis, the Authority's comments in this inquiry will address short term and long term goals that will provide Maine with more competitive options and a communication system that will contribute to the future economic health and well being of Maine.

Experience has shown that many areas of Maine are just too expensive to serve with broadband without government support. The Maine Legislature approved the operation of the Authority with the goal of expanding broadband access in the most rural, un-served areas of the State that have little prospect of service from a traditional provider. The Authority funds proposals through grants made on behalf of, in

[36] Resolves 2011, ch 69.

[37] National Broadband Plan, page 193.

partnership with, or in support of, one or more eligible communications service providers.[38] To date, the Authority has awarded nearly $6 million in grants, to 76 projects, with total project values of over $12 million (see attached spreadsheet). One project worth highlighting is a "Link-Up" like pilot to provide subsidy for high-cost fixed-wireless broadband installations. The Authority plans include development of a more general high-cost installation program that could be available to any type of provider.

The ConnectME Authority recently adopted the FCC's seven tiers of broadband service for our grant funded projects with a preference for those projects that provide 3 Mbps or higher download speed. For a household or business without access to terrestrial broadband service or using dial-up, 3 Mbps would be a tremendous improvement.

Short Term Goals

All last mile, and middle mile, ILEC (incumbent local exchange carriers) and CLEC (competitive local exchange carrier) facilities should be available to all providers on an open and non-discriminatory basis, especially if subsidized with any of the federal or state support funds (Federal USF, Maine USF, MTEAF, ConnectME Fund, etc.). For the short term, we believe that the MPUC should address access to infrastructure issues that seriously and negatively impact the spread of competitive telecommunications services, including broadband. These negative impacts include pole attachments, make ready work, line sharing, collocation, and right of way access.[39] While some may consider this related to wholesale issues, we feel that comprehensive changes are vital to bring about competitive retail services that depend on open access. These are clearly monopoly services and facilities, where the pole owners or managers may have little incentive to make the process easy, quick, or fairly priced. Several ConnectME grantees have stated that pole attachments and make ready work is a serious and ongoing barrier to completing grant projects. In some cases we have had to grant extensions so projects can be completed. All pole owners and managers should be required to make their facilities available quickly at reasonable, uniform rates.

The FCC's NBP agrees with the contention that these issues are a serious concern saying that "government should take steps to improve utilization of existing infrastructure to ensure that network providers has easier access to poles, conduits, ducts, and rights-of-way." Two recommendations in the

[38] The Authority is to "identify un-served areas of the State; develop proposals for broadband expansion projects, demonstration projects and other initiatives; and administer the process for selecting specific broadband projects and providing funding, resources, and incentives." The Authority is funded by a 0.25% surcharge on instate retail communications services.

[39] The issue of line sharing was discussed in a letter from the MPUC to the Chairs of the Joint Standing Committee on Utilities and Energy, December 30, 2004, stating, "To the extent that line sharing is allowed, more competitive providers would be able to provide (DSL) service."

NBP reflect this concern. One (6.1) says that the FCC should establish rental rates for pole attachments that are as low and close to uniform as possible. Another (6.2) says that the FCC should implement rules that will lower the cost of pole attachment "make ready" process.[40]

Long Term Goals

In the long term, we feel that regulation and support should be directed only towards last mile transport, or the "pipe," not to the services or applications that flow through the pipe. In today's digital world, all services are just ones and zeros, whether voice, video, or data. It is transport service capable of an established bandwidth standard that is important. If all households in unserved areas have access to a pipe capable of at least 3 Mbps actual download speed, they then have access to a variety of providers that can supply VoIP voice service, as well as all the other services and applications available from the network. Again quoting from the NBP, "Increasingly, broadband is not a discrete, complementary communications service. Instead, it is a platform over which multiple IP-based services – including voice, data, and video – converge." While the public switched telecommunications network will be useable for some years to come, we need to begin planning now for the certain eventuality that all communications services will be IP-based needing an ever greater pipe capacity, likely consisting of fiber optic cable.

For current and future subsidy needs, any new cost model and support mechanism developed by the MPUC should definitely be company- and technology-agnostic. The cost model should include estimates of costs from various current and soon to be deployed technologies. That would ensure the least cost, most efficient solution. The MPUC should broaden the contribution base of the support mechanism to include all companies that provide broadband transport service and all services that are delivered with that broadband service. Likewise, the eligibility requirements for obtaining support should be widened to be company- and technology-agnostic. Competitive neutrality and support for only one provider in a designated area are critical components of the next generation support program. These are the attributes that the Authority applies to its grant awards. We also believe that any support model should take into account revenues from all services provided over the supported network or pipe, such as voice, video, and data services.

We do believe that some form of "reverse auction" is worth consideration both for the near term determination of a provider of last resort and the long term supplier of the "pipe." The Authority has discussed that form of a proactive approach to funding broadband infrastructure in unserved areas of Maine. It does require accurate, granular data regarding availability. Our current method of funding build-out projects is reactive. Grant applicants are required to demonstrate that the grant project will only

[40] National Broadband Plan, Chapter 6.

provide service to unserved areas. The lack of accurate data means that incumbent providers in the area are required to review the grant applications for potential overlap with their current or proposed service. A very cumbersome process.

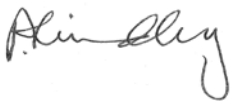
We recognize that the MPUC does not have access to a granular, comprehensive data set regarding broadband availability. The Authority may be able to assist. The Authority participates in the NTIA's State Broadband Data and Development (SBDD) grant program that is generating granular broadband availability data that will allow states and the FCC to better understand where broadband is, and more importantly, where it is not. The newly available granular data sets will allow the MPUC and the FCC to fine tune estimates and better craft support mechanisms and cost models.

Unfortunately, while the accelerated schedule dictated by the Resolve may preclude a bottom to top review of all wholesale and retail telecommunications regulatory issues, we believe that the MPUC has a unique opportunity to make bold changes to the telecommunications environment, much like when the MPUC ordered the development of the highly successful Maine School and Library Network in 1996.

The Authority appreciates the opportunity to provide these brief comments and will provide any additional information the PUC may require in developing its report to the Legislature.

Respectfully submitted this 1st day of August, 2011

By:



Phillip Lindley, Executive Director
ConnectME Authority
78 Statehouse Station
Augusta, ME 04333-0078

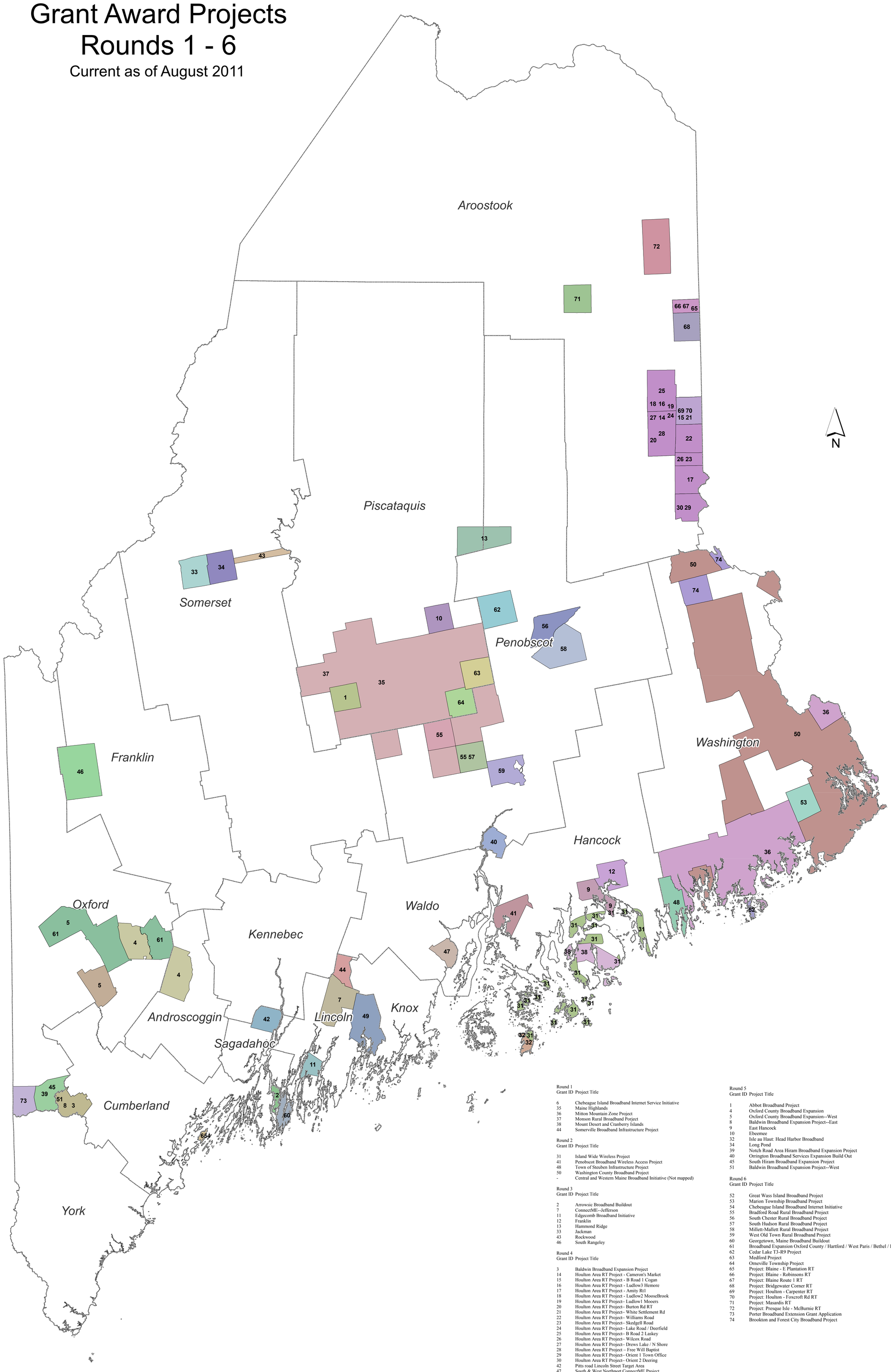
Attachment E – ConnectME Grant Awards

	A	B	C	D	E	F	G	H	I
1	**Applicant**	**Community Partner or Eligible Partner**	**Communities Served**	**Estimated Household Availability**	**Total Project Cost**	**Grant Award**	**Percent Grant**	**Notes**	**Grant Round**
2	Axiom Technologies	Washington County: One Community	Addison, Beals, Centerville, Cherryfield, Columbia, Columbia Falls, East Machias, Jonesboro, Jonesport, Machias, Machiasport, Marshfield, Roque Bluffs, Whitneyfille, Calais, Eastport, Milbridge, Pleasant Point Res.	7,614	$284,369	$79,947	28%	Mitton Mountain Zone Project.	1
3	Chebeague.net, Inc.	Chebeague Is.	Chebeague Is.	499	$175,392	$75,000	43%	With MainelyWired	1
4	Cornerstone Communications, I	Piscataquis County Economic Development Council	Abbot, Atkinson, Barnard Twp, Blanchard Twp, Bowerbank, Bradford, Brownville, Charleston, Corinth, Dexter, Dover-Foxcroft, Elliotsville Twp, Guilford, Hudson, LaGrange, Lakeview Plantation, Milo, Monson, Orneville Twp, Parkman, Sangerville, Sebec, T5 R9 NWP, Williamsburg Twp, Willimantic	4,000	$518,875	$368,377	71%		1
5	Monson, Town of	Cornerstone Comm.	Monson, Blanchard	634	$83,200	$62,400	75%	Granted extension to 6/30/09	1
6	Redzone Wireless	Mount Desert and Cranberry Isles	Cranberry Isles, Seal Harbor, Somesville, Pretty Marsh, Great Cranberry, Islesford, Sutton, Baker Is.	810	$325,000	$115,000	35%		1
7	Somerville, Town of	Midcoast Internet Solutions	Somerville	279	$143,500	$38,000	26%		1
8	Axiom Technologies	Town of Steuben	Town of Steuben	453	$150,428	$45,078	30%		2
9	Axiom Technologies	Washington County: One Community, Sunrise County Economic Council, Washington County Emergency Management Agency	Alexander, Baileyville, Baring, Charlotte, Codyville, Cooper, Crawford, Cutler, Danforth, Dennysville, Edmunds, Grand Lake Stream, Harrington, Indian Township, Lubec, Marion, Meddybemps, Northfield, Pembroke, Perry, Princeton, Robbinston, Talmadge, Topsfield, Trescott, Vanceboro, Waite, Wesley, Whiting	5,785	$1,868,091	$532,640	29%	Washington County Broadband Project	2
10	Franklin Community Health Network	To be determined by RFP under FCC guidelines.	Rural areas of Franklin, Oxford, and Androscoggin Counties.	NA	$724,080	$108,612	15%	Extension to 10/09/10. Grant request is for 15% match requirement for first year of a two year Federal grant = $3.6M over two years.	2
11	Mainely Wired LLC	Town of Penobscot	Penobscot, *parts of Blue Hill, Brooklin, Castine, Orland*	900	$327,400	$157,300	48%		2
12	Redzone Wireless	Support from many of the listed communities.	All or parts of the following: Bar Harbor, Tremont, Frenchboro Is., Swans Is., Winter Harbor, So Gouldsboro, Trenton, *other (So Surry, Lamoine, Hancock, Sullivan, Sorrento, Stonington, Deere Isle, Brooklin, Isle Au Haut)*	1,540	$816,420	$346,370	42%	Extension to 9/18/10	2
13	Edgecomb Broadband Committee	Time Warner, Lincolnville Comm.	Town of Edgecomb	758	$464,498	$232,250	50%	Extention to 9/30/10. Grant Conditions: Cooperate with incumbent company and not to install end-user equipment in Fairpoint normal service areas.	3
14	Fairpoint Communications	Town of Arrowsic	Town of Arrowsic	238	$105,120	$52,560	50%		3
15	Jefferson, Town of	Midcoast Internet Solutions	Town of Jefferson	684	$120,000	$52,550	44%	Grant Conditions: Cooperate with incumbent companies and not to install end-user equipment in Time Warner or Fairpoint normal service areas.	3
16	Premium Choice Broadband		Town of Franklin	736	$105,500	$52,750	50%	Grant Conditions: Cooperate	3
17	Premium Choice Broadband		Town of Hammond	221	$157,500	$78,750	50%	Extenion to 1/24/11.	3
18	Premium Choice Broadband		Town of Jackman	312	$97,500	$48,750	50%	Grant Conditions: Cooperate with incumbent company and not to install end-user equipment in Fairpoint normal service areas.	3
19	Premium Choice Broadband		Town of Rockwood	836	$99,000	$49,500	50%	Extension to 1/24/11.	3
20	Premium Choice Broadband		South Rangely area	442	$85,500	$42,750	50%	Extension to 1/24/11. Grant Conditions: Cooperate with incumbent company and not to install end-user equipment in Fairpoint normal service areas.	3

	A	B	C	D	E	F	G	H	I
1	**Applicant**	**Community Partner or Eligible Partner**	**Communities Served**	**Estimated Household Availability**	**Total Project Cost**	**Grant Award**	**Percent Grant**	**Notes**	**Grant Round**
21	Axiom - NSLB		Washington Cnty	375	$100,000	$73,080	73%	High cost, special installations. Plus, $23k from previous Eastbrook cancelled award.	4
22	Baldwin, Town of	Time Warner Cable	West Baldwin	69	$94,231	$65,961	70%	Estimate for total project.	4
23	Midcoast Internet	Northport	So. & West Northport	120	$84,700	$27,500	32%	Revised	4
24	Pioneer Broadband	Amity	Amity	60	$43,980	$26,450	60%	Amity Rt1 RT	4
25	Pioneer Broadband	Cary Plantation	Cary Plantation	50	$43,920	$27,570	63%	Skedgell Road RT	4
26	Pioneer Broadband	Cary Plantation	Cary Plantation	70	$32,080	$15,970	50%	Wilcox Road RT	4
27	Pioneer Broadband	Hodgdon	Hodgdon	100	$32,260	$16,060	50%	Williams Road RT	4
28	Pioneer Broadband	Houlton	Houlton	100	$43,200	$21,100	49%	White Settlement Rd RT	4
29	Pioneer Broadband	Linneus	Linneus	250	$63,520	$31,420	49%	Burton Rd RT	4
30	Pioneer Broadband	Ludlow	Ludlow	200	$52,180	$25,950	50%	Ludlow1 Mooers RT	4
31	Pioneer Broadband	Ludlow	Ludlow	100	$41,460	$19,960	48%	Ludlow2 MooseBrook RT	4
32	Pioneer Broadband	Ludlow	Ludlow	100	$43,300	$21,100	49%	Ludlow3 Hemore RT	4
33	Pioneer Broadband	Houlton	Houlton	60	$47,280	$20,530	43%	B Road 1 Cogan RT	4
34	Pioneer Broadband	Hammond & Ludlow	Hammond & Ludlow	70	$45,880	$22,470	49%	B Road 2 Laskey RT	4
35	Pioneer Broadband	New Limerick	New Limerick	300	$60,140	$27,040	45%	Cameron's Market RT	4
36	Pioneer Broadband	New Limerick & Linneus	New Limerick & Linneus	150	$42,680	$21,130	50%	Free Will Baptist RT	4
37	Pioneer Broadband	New Limerick	New Limerick	100	$45,260	$21,810	48%	Lake Road / Deerfield RT	4
38	Pioneer Broadband	New Limerick	New Limerick	150	$44,520	$21,770	49%	Drews Lake/N Shore RT	4
39	Pioneer Broadband	Orient	Orient - Combined	133	$183,970	$100,980	55%	Orient 1 and 2 combined	4
40	Pioneer Broadband	Orient	Orient 2						4
41	Pioneer Broadband	X	Houlton Area RT Project (17 grant awards)		*$865,630*	*$441,310*		*Pioneer subtotals not included in totals.*	
42	Richmond, Town of	Time Warner Cable	Richmond	43	$87,260	$66,010	76%		4
43	Waldoboro, Town of	Midcoast Internet	Waldoboro	350	$275,000	$113,889	41%		4
44	Baldwin, Town of	Time Warner Cable	East Baldwin	44	$32,847	$21,847	67%		5
45	Baldwin, Town of	Time Warner Cable	West Baldwin	45	$101,691	$90,441	89%		5
46	Hiram, Town of	Time Warner Cable	Hiram - North	82	$187,392	$166,892	89%		5
47	Hiram, Town of	Time Warner Cable	Hiram - South	52	$79,796	$65,946	83%		5
48	Island Telephone Co./TDS	Isle Au Haut	Isle Au Haut	16	$64,140	$51,312	80%		5
49	North Country BB		Abbot	215	$365,860	$271,596	74%	PCB & Cornerstone Comm.	5
50	Orrington, Town of	Time Warner Cable	Orrington	38	$56,353	$46,854	83%	Sean Trahan	5
51	Oxford County Tel & Tel.		Sumner, Turner, No. Turner	238	$336,888	$168,444	50%		5
52	Oxford West		Bethel, No. Norway, W. Bethel	265	$349,250	$174,625	50%		5
53	Premium Choice BB		Long Pond	75	$15,298	$7,649	50%		5
54	Premium Choice BB		East Hancock	325	$39,698	$19,849	50%	Schoodic Mtn.	5
55	Premium Choice BB		Ebeemee	150	$26,788	$13,394	50%		5
56	Axiom Technologies		Great Wass Island	30	$105,970	$95,198	90%		6
57	Axiom Technologies		Marion	40	$111,115	$67,040	60%		6
58	Chebeague.Net	Town of Chebeague Is.	Chebeague Island	50	$153,105	$75,000	49%		6
59	Cornerstone	Town of Charleston	Charleston, Hudson	86	$218,108	$152,116	70%	Bradford Road area.	6
60	Cornerstone	Town of Chester	Chester	161	$115,260	$86,445	75%	South Chester area.	6
61	Cornerstone	none indicated	Hudson	52	$93,034	$69,775	75%	South Hudson area.	6
62	Cornerstone	M-M Road Users Assoc.	Lincoln	67	$96,958	$72,719	75%	Millet-Mallett Road area.	6
63	Cornerstone	none indicated	Old Town	161	$42,992	$25,795	60%	West Old Town area.	6
64	FairPoint NNE	Town of Georgetown	Georgetown	482	$355,000	$248,500	70%	The Georgetown Island Connection	6
65	Oxford Networks	none indicated	Hartford, West Paris, Bethel, Bryant Pond	148	$249,267	$124,633	50%		6
66	PCB	residents of T3-R9	Ceder Lake T3-R9	80	$28,880	$14,440	50%	Premium Choice Broadband	6
67	PCB	Town of Medford	Medford	60	$31,220	$15,610	50%	Premium Choice Broadband	6
68	PCB	Orneville Township	Orneville Township	90	$36,210	$18,105	50%	Premium Choice Broadband	6
69	Pioneer Broadband	Town of Blaine	Blaine-E Plantation RT	65	$38,350	$28,732	75%		6
70	Pioneer Broadband	Town of Blaine	Blaine-Robinsons RT	50	$35,432	$22,395	63%		6
71	Pioneer Broadband	Town of Blaine	Blaine-Route 1 RT	65	$17,366	$7,500	43%		6
72	Pioneer Broadband	Town of Bridgewater	Bridgewater Corner RT	80	$17,906	$6,100	34%		6
73	Pioneer Broadband	Town of Houlton	Houlton-Carpenter RT	50	$16,826	$8,826	52%		6
74	Pioneer Broadband	Town of Houlton	Houlton-Foxcroft Rd RT	65	$58,808	$47,676	81%		6
75	Pioneer Broadband	Town of Masardis	Masardis-RT	80	$17,906	$5,090	28%		6
76	Pioneer Broadband	City of Presque Isle	Presque Isle-McBurnie RT	65	$35,162	$24,110	69%		6
77	Porter, Town of	Time Warner Cable	Porter	109	$269,280	$242,030	90%		6
78	Washington County	Axiom Technologies	Brookton, Forest City	309	$197,974	$98,987	50%		6
79									
80	**Totals**			**33,532**	**$12,156,324**	**$5,982,005**	**49%**	**Number of Grants**	**76**

The ConnectME Authority Grant Award Projects Rounds 1 - 6

Current as of August 2011



Round 1

Grant ID	Project Title
6	Chebeague Island Broadband Internet Service Initiative
35	Maine Highlands
36	Mitton Mountain Zone Project
37	Monson Rural Broadband Porject
38	Mount Desert and Cranberry Islands
44	Somerville Broadband Infrastructure Project

Round 2

Grant ID	Project Title
31	Island Wide Wireless Project
41	Penobscot Broadband Wireless Access Project
48	Town of Steuben Infrastructure Project
50	Washington County Broadband Project
-	Central and Western Maine Broadband Initiative (Not mapped)

Round 3

Grant ID	Project Title
2	Arrowsic Broadband Buildout
7	ConnectME--Jefferson
11	Edgecomb Broadband Initiative
12	Franklin
13	Hammond Ridge
33	Jackman
43	Rockwood
46	South Rangeley

Round 4

Grant ID	Project Title
3	Baldwin Broadband Expansion Project
14	Houlton Area RT Project - Cameron's Market
15	Houlton Area RT Project - B Road 1 Cogan
16	Houlton Area RT Project - Ludlow3 Hemore
17	Houlton Area RT Project - Amity Rt1
18	Houlton Area RT Project - Ludlow2 MooseBrook
19	Houlton Area RT Project– Ludlow1 Mooers
20	Houlton Area RT Project– Burton Rd RT
21	Houlton Area RT Project– White Settlement Rd
22	Houlton Area RT Project– Williams Road
23	Houlton Area RT Project– Skedgell Road
24	Houlton Area RT Project– Lake Road / Deerfield
25	Houlton Area RT Project– B Road 2 Laskey
26	Houlton Area RT Project– Wilcox Road
27	Houlton Area RT Project– Drews Lake / N Shore
28	Houlton Area RT Project – Free Will Baptist
29	Houlton Area RT Project– Orient 1 Town Office
30	Houlton Area RT Project– Orient 2 Deering
42	Pitts road Lincoln Street Target Area
47	South & West Northport ConnectME Project
49	Waldoboro Wireless Broadband
-	No Subscriber Left Behind (Not Mapped)

Round 5

Grant ID	Project Title
1	Abbot Broadband Project
4	Oxford County Broadband Expansion
5	Oxford County Broadband Expansion--West
8	Baldwin Broadband Expansion Project--East
9	East Hancock
10	Ebeemee
32	Isle au Haut: Head Harbor Broadband
34	Long Pond
39	Notch Road Area Hiram Broadband Expansion Project
40	Orrington Broadband Services Expansion Build Out
45	South Hiram Broadband Expansion Project
51	Baldwin Broadband Expansion Project--West

Round 6

Grant ID	Project Title
52	Great Wass Island Broadband Project
53	Marion Township Broadband Project
54	Chebeague Island Broadband Internet Initiative
55	Bradford Road Rural Broadband Project
56	South Chester Rural Broadband Project
57	South Hudson Rural Broadband Project
58	Millett-Mallett Rural Broadband Project
59	West Old Town Rural Broadband Project
60	Georgetown, Maine Broadband Buildout
61	Broadband Expansion Oxford County / Hartford / West Paris / Bethel / Bryant Pond
62	Cedar Lake T3-R9 Project
63	Medford Project
64	Orneville Township Project
65	Project: Blaine - E Plantation RT
66	Project: Blaine - Robinsons RT
67	Project: Blaine Route 1 RT
68	Project: Bridgewater Corner RT
69	Project: Houlton - Carpenter RT
70	Project: Houlton - Foxcroft Rd RT
71	Project: Masardis RT
72	Project: Presque Isle - McBurnie RT
73	Porter Broadband Extension Grant Application
74	Brookton and Forest City Broadband Project

ConnectME Authority

SEWALL
JAMES W. SEWALL COMPANY / Since 1880