

**MAINE PUBLIC UTILITIES
COMMISSION**

**OPTIONS FOR DECREASING THE COST
OF ENSURING THAT THERE ARE
ADEQUATE AND AFFORDABLE BASIC
TELEPHONE SERVICE OPTIONS
THROUGHOUT THE STATE**

**Presented to the
Joint Standing Committee on
Energy, Utilities and Technology**

January 7, 2015

TABLE OF CONTENTS

List of Acronyms and References	iv
A. INTRODUCTION	1
1. <u>2011-2013 Telecommunications Regulatory Reform</u>	1
2. <u>Public Law 2013, Chapter 600, "An Act to Clarify Telecommunications Regulation Reform"</u>	4
B. QUESTIONS IN SECTION 4 OF P.L. 2013, CH. 600, "AN ACT TO CLARIFY TELECOMMUNICATIONS REGULATION REFORM"	7
1. <u>What financial assistance is needed, if any, from the state universal service fund for the largest incumbent local exchange carrier in the State to continue to provide basic telephone service in its current service area?</u>	8
a. Costs	13
i. <i>Forward Looking Economic Cost (FLEC) Model</i>	13
ii. <i>Alternative Cost Allocation and Separation Methodologies</i>	15
b. Revenues	17
2. <u>What type of basic telephone service could the largest incumbent local exchange carrier in the State provide with limited or no financial assistance from the state universal service fund?</u>	23
3. <u>In what geographic areas is it not economical for the largest incumbent local exchange carrier to provide basic telephone service? Of those areas, which ones have no alternatives for basic service at comparable rates? In those areas that have no alternatives, what amount of financial assistance would the local incumbent exchange carrier need to provide basic telephone service?</u> .	24
a. Economic/Uneconomic Areas	24
b. Alternative Voice Service Providers	25
i. <i>Satellite-Enabled Voice Service</i>	32
ii. <i>Implications for MUSF Subsidy Program</i>	33

4.	<u>How might the characteristics of provider of last resort service be amended to allow for more competition in the types of service providers that are able to provide provider of last resort service? What are the implications of changing these characteristics with regard to reliability, safety, cost and ease of use of provider of last resort service and the availability and quality of broadband service throughout the State? What are the implications of limiting provider of last resort service to reliable access to emergency services?</u>	35
a.	How might the characteristics of provider of last resort service be amended to allow for more competition in the types of service providers that are able to provide provider of last resort service?	35
b.	What are the implications of changing these characteristics with regard to reliability, safety, cost and ease of use of provider of last resort service?	36
c.	What are the implications of changing these characteristics with regard to the availability and quality of broadband service throughout the State?	38
d.	What are the implications of limiting provider of last resort service to reliable access to emergency services?	38
5.	<u>If the obligation of providing provider of last resort service was not assigned to the incumbent local exchange carrier, how might the Commission assign the obligation? What are the obstacles, if any, to the Commission's reassigning the provider of last resort obligation to a service provider other than a local incumbent exchange carrier? Is there any action needed by the Legislature?</u>	40
a.	If the obligation of providing provider of last resort service was not assigned to the incumbent local exchange carrier, how might the Commission assign the obligation?	40
i.	<i>Reverse Auction or RFP</i>	40
ii.	<i>Direct-to-Consumer Subsidy</i>	41
b.	What are the obstacles, if any, to the Commission's reassigning the provider of last resort obligation to a service provider other than a local incumbent exchange carrier?	42
c.	Is there any action needed by the Legislature?	42
6.	<u>What are the implications of limiting financial assistance for provider of last resort service to areas of the State that have limited competition or availability of basic service providers?</u>	43

7.	<u>What is the broadband penetration of each incumbent local exchange carrier that does and each incumbent local exchange carrier that does not receive state universal service funds? At what tiers, as determined by the Federal Communications Commission, do incumbent local exchange carriers provide service throughout the State? Should providers of provider of last resort service that receive state universal service funds be required to increase the availability, quality or affordability of broadband in this State?</u>	45
a.	What is the broadband penetration of each incumbent local exchange carrier that does and each incumbent local exchange carrier that does not receive state universal service funds?	45
b.	At what tiers, as determined by the Federal Communications Commission, do incumbent local exchange carriers provide service throughout the State?	48
c.	Should providers of provider of last resort service that receive state universal service funds be required to increase the availability, quality or affordability of broadband in this State?	60
8.	<u>In what ways can the Commission and the Legislature coordinate any changes to provider of last resort service or to state universal service fund support with ongoing policy developments at the federal level resulting from cases before the Federal Communications Commission, including the call for rural broadband experiments, the Federal Communications Commission's Connect America Fund and changes to intercarrier compensation?</u>	61
9.	<u>Can the State ensure the provision of universal access to telecommunications service at just, reasonable and affordable rates consistent with the federal Telecommunications Act of 1996 without maintaining a regulated provider of last resort service? If so, what is a reasonable time frame for eliminating a regulated provider of last resort service?</u>	63
a.	Can the State ensure the provision of universal access to telecommunications service at just, reasonable and affordable rates consistent with the federal Telecommunications Act of 1996 without maintaining a regulated provider of last resort service?	63
b.	If so, what is a reasonable time frame for eliminating a regulated provider of last resort service?	69

List of Acronyms and References

2G:	Second Generation
3G:	Third Generation
4G:	Fourth Generation
ARMIS:	Automated Reporting Management Information System
BSCA:	Basic Service Calling Area
CAF:	Connect America Fund
C.F.R.:	Code of Federal Regulations
CLEC:	Competitive Local Exchange Carrier
CMP:	Central Maine Power
CPR:	Continuing Property Record
E-911:	Enhanced 911
ETC:	Eligible Telecommunications Carrier
FCC:	Federal Communications Commission
FLEC:	Forward-Looking Economic Cost
Gbps:	Gigabit per Second (One Billion Bits per Second)
GIS:	Geographic Information System
ILEC:	Incumbent Local Exchange Carrier
Kbps:	Kilobit per Second (One Thousand Bits per Second)
LTE:	Long-Term Evolution
Mbps:	Megabit per Second (One Million Bits per Second)
MPUC:	Maine Public Utilities Commission
M.R.S.:	Maine Revised Statutes
MUSF:	Maine Universal Service Fund
NTIA:	National Telecommunications and Information Administration
OPA:	Office of the Public Advocate
POLR:	Provider of Last Resort
RFP:	Request for Proposals
TAM:	Telecommunications Association of Maine
U.S.C.:	United States Code
USF:	Universal Service Fund
VoIP:	Voice over Internet Protocol
"Clarification Act"	P.L. 2013, ch. 600, "An Act to Clarify Telecommunications Regulation Reform"
"Commission"	Maine Public Utilities Commission
"FairPoint"	Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE

"MUSF Order"	<i>Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE; Request for Increase in Rates and for Maine Universal Service Fund Support for Provider of Last Resort Service, Docket No. 2013-00340, Order (Nov. 21, 2014)</i>
"MUSF Proceeding"	<i>Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE; Request for Increase in Rates and for Maine Universal Service Fund Support for Provider of Last Resort Service, Docket No. 2013-00340</i>
"Plan":	Plan to Reform Telecommunications Regulation
"Reform Act":	P.L. 2011, ch. 623, "An Act to Reform Telecommunications Regulation"
"Report"	Options for Decreasing the Cost of Ensuring that there are Adequate and Affordable Basic Telephone Service Options Throughout the State
"Resolve":	Resolves 2011, Ch. 69
"Stakeholder Report"	Stakeholder Proceedings Regarding Ratemaking and Maine Universal Service Support Mechanisms for Provider of Last Resort Telephone Service
"Texas PUC":	Public Utility Commission of Texas

A. Introduction

1. 2011-2013 Telecommunications Regulatory Reform

On June 9, 2011, the 125th Maine State Legislature, in its First Regular Session, enacted a Resolve to Direct the Public Utilities Commission to Develop a Plan to Reform Telecommunications Regulation (the "Plan"). Resolves 2011, ch. 69 (the "Resolve"). The Resolve directed the Maine Public Utilities Commission (the "MPUC" or the "Commission") to develop a comprehensive plan to reform the way telecommunications is regulated in the State of Maine. Under the terms of the Resolve, the Plan was to ensure that (1) the burdens of regulation be the minimum necessary to protect the public welfare; (2) to the greatest extent possible, the burdens of regulation fall equally on all providers of telecommunications service; and (3) the result of regulatory reform not result in any provider of telecommunications services being subject to a net increase in its existing regulatory burden.¹

In developing the Plan, the Legislature directed the Commission to consider, at a minimum (1) the extent of existing and anticipated competition in the telecommunications industry; (2) the characteristics of Provider of Last Resort ("POLR") service and any associated obligations or support mechanisms and whether or not POLR service should be subject to cost-of-service regulation; (3) the extent to which telecommunications providers should be allowed to "opt-in" or "opt-out" of regulation; (4) any potential implications of federal support mechanisms and federal preemption; (5) the need for robust telecommunications infrastructure in Maine; and (6) the status of Eligible Telecommunications Carriers ("ETCs"). The Legislature further directed the Commission to seek input from all parties who may be interested in the reform of telecommunications regulation in Maine. Additionally, as a part of the Plan the Commission was to include any draft legislation and describe any changes to Commission rules that the Commission believed would be necessary to implement the plan.

On December 30, 2011, the Commission submitted the Plan to the Legislature's Joint Standing Committee on Energy, Utilities, and Technology. The Plan was not the product of an adjudicatory proceeding in which evidence is formally introduced and arguments advanced by interested, adversarial parties. There was no direct testimony, cross-examination, or expert witnesses, although interested persons were invited to offer comments at three "industry sector" meetings held over the course of the summer of 2011, and in written comments in August, 2011, and again on November 15, 2011 following the issuance by the Commission of a draft of its Plan.

Nor was the process a "collaborative" one in which consensus was sought among various industry participants or segments. Instead, the Plan represented the Commission's response to the Resolve, as informed by its independent evaluation of

¹ The Commission's Plan did not address, and did not affect, any wholesale obligations telecommunications providers may have under either state or federal law.

the issues, the material submitted during the course of the Commission's inquiry, consistent with the factors expressed in the Resolve and the factual premises upon which it was based.

In broad outline, the Plan proposed to eliminate virtually all oversight by the Commission of retail services offered by telephone companies except with respect to a narrowly defined POLR service, designed as the minimum level of service that will permit a customer to engage in voice communication. The Commission proposed that the current incumbent telephone companies be designated as the initial providers of POLR service, and that such service must be offered at then-current prices by those carriers unless and until they can show the need for additional support or can show that, based on competitive conditions in a particular area, no POLR service is required. The Commission suggested that some, but not all, of the consumer protection rules that then applied to telephone service be applied to POLR service; but, for all other retail services, customers would no longer be able to make use of Commission resources in resolving disputes. The Plan also included proposed amendments to Maine law, as well as proposed new and amended Commission Rules.

On April 12, 2012, the 125th Maine Legislature, in its Second Regular Session, enacted P.L. 2011, ch. 623, "An Act to Reform Telecommunications Regulation" ("Reform Act") In the Reform Act, the Legislature undertook comprehensive reform of Maine's telecommunication laws, implementing many of the reforms proposed by the Commission in the Plan. Among the Reform Act's reforms were the creation of POLR service, the designation of POLR service providers, and the broad de-regulation of most other telecommunications services.

The Reform Act also directed the Commission to "review the provisions of the Maine Revised Statutes, Title 35-A and the Commission's implementing rules relating to or affecting telecommunications and shall determine what, if any, further changes to law are required to clarify or bring into effect the regulatory changes made by [the Reform] Act," and invited the Commission to "submit a bill to the First Regular Session of the 126th Legislature proposing any recommended changes to law to clarify, adjust or bring into effect the regulatory changes made by [the Reform] Act."

In addition, the Reform Act required the Commission to convene a stakeholder group to discuss a possible framework for establishing rates for POLR service, as well as a methodology for proving support to POLR service providers from the Maine Universal Service Fund ("MUSF").

The Commission gave broad notice of the stakeholder proceeding and conducted six stakeholder meetings between June and November, 2012. The wireless, voice over internet protocol ("VoIP"), cable voice, and traditional telephone industries, and the Office of the Public Advocate ("OPA") were represented. The participants were encouraged to file written proposals and comments to the proposals of other stakeholders prior to each meeting. These proposals and comments were the subject of in-depth discussion among the stakeholders, the Commissioners, and Commission

Staff. Between stakeholder meetings, the participants refined their proposals and comments. Several of the stakeholders requested, and were afforded, an opportunity to make extended presentations to the group at the meetings. There was, however, no consensus among the stakeholders regarding any methodology for setting POLR service rates or for determining the amount of MUSF support for POLR service providers going forward.²

Notwithstanding the lack of stakeholder consensus, on January 15, 2013, the Commission issued a report entitled "Stakeholder Proceedings Regarding Ratemaking and Maine Universal Service Support Mechanisms for Provider of Last Resort Telephone Service" ("Stakeholder Report"). In the Stakeholder Report, the Commission expressed its independent view that the best way to set POLR service rates would be to allow a carrier to petition for a POLR service rate increase supported by whatever evidence that the carrier believed would best demonstrate the amount of revenues it needed in order to provide POLR service. In such a filing, the carrier would be free to advance the methodology that it believed would be best suited to the case. The methodology selected by the POLR service provider would then be analyzed and tested against alternative means of rate setting during the course of an adjudicatory proceeding in which all interested parties would be entitled to participate.³

² The lack of consensus in the area of rate-setting and MUSF support for carriers assigned by law the responsibility of offering POLR service (the only form of telephone service that remains subject to economic regulation by the Commission) was not surprising given the differing economic interests and correspondingly disparate policy views held by the stakeholders regarding the proper role of a universal service funding mechanism in a competitive marketplace. These various views of the proper role of the MUSF lead to drastically differing positions regarding how much the size of the fund should be allowed to grow (if at all) in the event that a telephone carrier assigned POLR service obligations requests and obtains support payments in connection with its POLR service offerings.

³ As described in detail in Sections B(1) and (2) below, Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE ("FairPoint") made precisely such a filing in late 2013.

2. Public Law 2013, Chapter 600, "An Act to Clarify Telecommunications Regulation Reform"

On May 1, 2014, the 126th Maine Legislature, in its Second Regular Session, enacted P.L. 2013, ch. 600, "An Act to Clarify Telecommunications Regulation Reform" (the "Clarification Act"). The Clarification Act made several changes to existing Maine telecommunications law, including clarifying the definition of "intrastate gross operating revenue" for purposes of determining the assessment paid to the Commission by telecommunications providers, removing the requirement that providers of radio paging services pay into the MUSF, and delaying the ability of large telecommunications providers to receive disbursements from the MUSF.

In addition, the Legislature directed the Commission to submit a report to the Energy, Utilities, and Technology Committee addressing "options for decreasing the cost of ensuring that there are adequate and affordable basic telephone service options throughout the state" (the "Report"). *Clarification Act* § 4. In particular, the Legislature asked that the Commission consider the following nine questions:

1. What financial assistance is needed, if any, from the state universal service fund for the largest incumbent local exchange carrier in the State to continue to provide basic telephone service in its current service area?
2. What type of basic telephone service could the largest incumbent local exchange carrier in the State provide with limited or no financial assistance from the state universal service fund?
3. In what geographic areas is it not economical for the largest incumbent local exchange carrier to provide basic telephone service? Of those areas, which ones have no alternatives for basic service at comparable rates? In those areas that have no alternatives, what amount of financial assistance would the local incumbent exchange carrier need to provide basic telephone service?
4. How might the characteristics of provider of last resort service be amended to allow for more competition in the types of service providers that are able to provide provider of last resort service? What are the implications of changing these characteristics with regard to reliability, safety, cost and ease of use of provider of last resort service and the availability and quality of broadband service throughout the State? What are the implications of limiting provider of last resort service to reliable access to emergency services?
5. If the obligation of providing provider of last resort service was not assigned to the incumbent local exchange carrier, how might the commission assign the obligation? What are the obstacles, if any, to the commission's reassigning the provider of last resort obligation to a service

provider other than a local incumbent exchange carrier? Is there any action needed by the Legislature?

6. What are the implications of limiting financial assistance for provider of last resort service to areas of the State that have limited competition or availability of basic service providers?
7. What is the broadband penetration of each incumbent local exchange carrier that does and each incumbent local exchange carrier that does not receive state universal service funds? At what tiers, as determined by the Federal Communications Commission, do incumbent local exchange carriers provide service throughout the State? Should providers of provider of last resort service that receive state universal service funds be required to increase the availability, quality or affordability of broadband in this State?
8. In what ways can the commission and the Legislature coordinate any changes to provider of last resort service or to state universal service fund support with ongoing policy developments at the federal level resulting from cases before the Federal Communications Commission, including the call for rural broadband experiments, the Federal Communications Commission's Connect America Fund and changes to intercarrier compensation?
9. Can the State ensure the provision of universal access to telecommunications service at just, reasonable and affordable rates consistent with the federal Telecommunications Act of 1996 without maintaining a regulated provider of last resort service? If so, what is a reasonable time frame for eliminating a regulated provider of last resort service?

Id.

On July 9, 2014, the Commission provided notice of the Commission's investigation into the nine questions posed by the Legislature in the Clarification Act and solicited comments from all interested persons.⁴ Several parties filed preliminary comments regarding the nine questions.

Over the course of the next several months, the Commission held several case conferences with the parties, an informational session with a satellite telecommunications provider, and conducted discovery on the parties to the proceeding (as well as other entities) in order to obtain information that would be useful to the

⁴ All of the entities who were parties to the MUSF Proceeding (Commission Docket No. 2013-00340) were made parties to the proceeding.

preparation of this Report. The Commission also released two preliminary drafts of this Report and solicited comments from the parties on each draft.

In this Report, the Commission sets forth its responses to the questions posed by the Legislature, and its analysis of the issues raised by the Legislature in the Clarification Act.

B. QUESTIONS IN SECTION 4 OF P.L. 2013, CH. 600, "AN ACT TO CLARIFY TELECOMMUNICATIONS REGULATION REFORM"

It is the policy of the State that all residents should have access to basic telephone service at reasonable rates. POLR service, as presently defined, describes the attributes of that basic telephone service.

It is the Commission's view that the answer to the fundamental question raised by the Legislature – how to decrease the cost of ensuring that there are adequate and affordable basic telephone service options throughout the State – should not presume a system where subsidy payments must be used to support a single designated provider, operating in a particular region of the State, that is obligated by law to offer basic telephone service ubiquitously throughout its territory. It may, in fact, be as effective but less expensive, from a programmatic perspective, to provide MUSF support on a "point of purchase" basis, regardless of the carrier supplying the service. Such subsidy payments could be disbursed directly to consumers (perhaps in the form of a voucher) or, alternatively, paid directly to the carrier selected by the customer, in amounts that result in an out-of-pocket cost to the customer that meets a defined level of affordability. A means test could also be applied to limit subsidies to needy customers.

In effect, policy makers should consider the meaning of the term "universal service." In the Commission's view, "universal service" is best defined as the universal availability, in one form or another, of telephone service. With this understanding of universal service, the Commission believes that policymakers are likely to be able to reduce the amount of MUSF support necessary to ensure universal service, and depart from the view that universal service goals can only be fulfilled when particular providers are required to offer ubiquitous service.

1. What financial assistance is needed, if any, from the state universal service fund for the largest incumbent local exchange carrier in the State to continue to provide basic telephone service in its current service area?

FairPoint has not demonstrated a need for financial assistance from the state universal service fund in order to continue to provide basic telephone service in its current service territory.

The answer to this question is contained in the Commission's November 21, 2014 Order ("MUSF Order") in *Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE; Request for Increase in Rates and for Maine Universal Service Fund Support for Provider of Last Resort Service*, Docket No. 2013-00340 ("MUSF Proceeding"). The MUSF Proceeding was commenced following the filing by FairPoint, on October 30, 2013, of a petition by which it sought Commission approval of a \$2.00 per month increase in the rates that it charges for POLR service, and also an annual disbursement of support payments, through the MUSF, in the amount of \$62.8 million. In the MUSF Order, the Commission concluded that FairPoint, the largest incumbent local exchange carrier in the State, had not demonstrated a need for financial assistance from the MUSF in order for it to continue to offer basic telephone service, in the form of POLR service, in its current service territory.⁵

The Commission's rejection of FairPoint's request for MUSF support in the annual amount of \$62.8 million, and its determination that FairPoint had failed to demonstrate that it requires MUSF support in any particular amount, constitutes the essential legal finding arising out of the Commission's evaluation of the record evidence and arguments introduced in a litigated proceeding. The following paragraphs, transposed from Part IV(B) of the MUSF Order, set forth the Commission's evaluation of the record and the arguments of the parties pertinent to FairPoint's claim to an entitlement to MUSF support.

In the MUSF Proceeding, FairPoint claimed that it has a right to MUSF support because it is required by law to provide ubiquitous POLR service throughout its territory and has no alternative but to do so over its existing network. According FairPoint, the Company is entitled to receive, from sources under Maine jurisdiction and in particular from the MUSF, the difference between the Maine jurisdictional regulated revenues it receives from customers and the sum of its Maine jurisdictional regulated costs, as those revenues and costs are determined using the Federal Communications Commission's ("FCC's") rules specified in Parts 32, 36, and 64 of Title 47 of the Code of Federal Regulations ("C.F.R.").

⁵ Although the Commission was unanimous in rejecting FairPoint's claim, Commissioner Littell's analysis includes an additional rationale that supports the conclusion that FairPoint does not need MUSF support. As a majority of the Commissioners did not agree on this additional rationale, it is set forth in Commissioner Littell's separate concurring and dissenting opinion at the end of the MUSF Order.

As a basis for this claim, FairPoint pointed to Maine law, which clearly contemplates that MUSF disbursements should be available to support POLR service, and also to federal law, which according to FairPoint requires sufficient state financial support to preserve and/or enhance universal service. 35-A M.R.S. § 7104; 47 U.S.C. § 254. In addition, FairPoint suggested that its entitlement to MUSF support has a constitutional dimension by virtue of the "takings" clause of the Fifth Amendment. FairPoint's argument essentially runs as follows: 1) the POLR service requirement⁶ imposes a burden equivalent to the taking of property for public use; that under the Constitution it has a right to compensation for the use of its property; 2) Maine law establishes ratemaking by the Commission as the basic mechanism for the recovery of costs; (3) the Commission has treated the MUSF as a mechanism to fill the gap between the revenue requirement and rates in instances where it has determined that rates should be subsidized, to some degree, in furtherance of universal service goals; (4) the Commission must therefore allow MUSF disbursements to FairPoint at a level sufficient to cover the difference between what the Company can recover in intrastate regulated revenues and its intrastate regulated costs, as those revenues and costs are determined using the FCC's rules as specified Parts 32, 36 and 64.

The Commission found that the record developed in the case did not support a decision that FairPoint should receive MUSF support. Indeed, Chapter 288 of the Commission's Rules does not permit a non-rural carrier such as FairPoint to receive MUSF support. The Commission could consider removing that bar through a rulemaking proceeding to amend Chapter 288, but a moratorium on the disbursement of MUSF support to FairPoint, imposed by the Clarification Act will continue to bar the disbursement of MUSF support to FairPoint until sometime in the middle of 2015. However, these two legal bars to MUSF support, though persuasive, do not present the most significant reasons why the Commission found that FairPoint had failed to show that it possesses an entitlement to any particular amount of MUSF support.

First, to the extent that FairPoint relied on federal law, the Commission found that there is an important distinction between the requirement that states provide sufficient support to ensure universal service and FairPoint's assertion that the state must provide sufficient support to preserve FairPoint's network. Within the federal framework, states are free to develop their own approaches to provide for universal service, and what form that approach should take, and to whom and under what circumstances support should be provided, are among the questions presented squarely by the Legislature in the Clarification Act, and addressed in this Report, and which will presumably be considered by the new Legislature in 2015. This state flexibility applies whether the federal obligation relied upon is the general universal service obligation or the ETC requirements. 47 U.S.C. §§ 214(e), 254.

Maine law also affords considerable flexibility regarding how the Commission should attempt to achieve the state's universal service policy goals enunciated in 35-A

⁶ Alternative formulations of the "POLR requirement" include "the ETC service obligation" and, more generally, the "obligation to serve."

M.R.S. §7101. For instance, the statute that authorizes the Commission to create and implement a MUSF to support POLR service does not specify how funds collected for the MUSF should be used to accomplish the goals of the statute. Specifically, the statute states only that "[t]he Commission shall seek to ensure that *provider of last resort service* is available to consumers throughout all areas of the State at reasonably comparable rates." 35-A M.R.S. § 7104(2) (emphasis added). It does not require that the Commission ensure that such service is available from any particular provider. Moreover, even though the statute initially designated Maine's incumbent local exchange carriers ("ILECs") as POLR service providers within their service areas, the law also permits reassignment to another willing provider the POLR service obligation of the initial designee. 35-A M.R.S. §§ 7221(1), (2). The statute allows for the designation of an alternative carrier as the POLR service provider within a portion of the service territory of the initially designated provider. Further, the statute allows the Commission to modify the one technical attribute of POLR service that otherwise favors designation as POLR service providers traditional wireline carriers such as FairPoint – that POLR service remain uninterrupted during a power failure. *Id.*

Another difficulty that the Commission identified with respect to the logic upon which FairPoint rested its claim to an entitlement to MUSF support is that FairPoint cannot plausibly argue that all, or even very much, of its property is being "taken" for a public purpose. The Commission found that there was much evidence introduced in the case showing that FairPoint's single obligation – to provide POLR service – occupies only a small fraction of the overall revenue-producing capability of the Company's network, and that those facilities have increasingly been used to support FairPoint's sale of unregulated "special access" and broadband services. For example, as the OPA demonstrated, special access lines have increased from 156,532 lines in 2000 to 1,201,550 lines in 2012, yet during the same period switched lines (the type of line used to deliver POLR service) decreased from 749,853 to 306,190. Also, FairPoint's Intrastate ARMIS 43-01 return for "state jurisdictional" services is -38.9% while its interstate return is 73.16%.⁷ Presently, just 10.1% of FairPoint's customers choose to purchase POLR service, and the sale of that service constitutes only 3.5% of the Company's total intrastate revenues. Even after application of the \$2.00 per month POLR service rate increase that the Commission approved on May 28, 2014, POLR service sales would represent just 2.14% of the total revenues that FairPoint will receive from all of the services (intrastate and interstate) that it sells to Maine customers. The Commission found that the implicit assumption in FairPoint's position – that the entire FairPoint network is needed to fulfill a public purpose or, more precisely, the percentage of the network that is allocated to the intrastate regulated jurisdiction using Parts 36 and 64 of the FCC's rules is needed to fulfill a public purpose – is simply not supported by the record.

⁷ ARMIS stands for "Automated Reporting and Management Information System" and an ARMIS 43-01 return provides the results for a company of applying the FCC Part 64 and 36 allocations and separations rules to its FCC Part 32 books of account.

The Commission's conclusion was guided, in part, by the Supreme Court's seminal "takings clause" case, *Market Street Ry. Co. v. R.R. Comm'n of Cal.*, 324, U.S. 548 (1945). In *Market Street*, the Court was confronted with a regulated passenger trolley company serving San Francisco whose operations in 1945 were based upon an aging and obsolete technology. Here, the wireline POLR service offered by FairPoint is in the process of being eclipsed by more modern forms of telecommunication services. In *Market Street*, the question presented was whether the ratemaking decision of the regulatory commission to peg the railway's rate base at the present market value of the utility's physical plant was confiscatory because at the fares so established the railway was unable to achieve a positive return calculated upon the historical, "book" cost of its plant. Here, the question is whether the takings clause requires Maine to give public money to FairPoint so that the Company will be ensured a suitable investment return on the embedded cost of a network that is now being used mainly to deliver services more advanced and more costly than POLR service. The Market Street Court observed that in the typical "takings" case involving a utility, the challenged regulatory action was one which "curtailed earnings otherwise possible." The Court noted, however, that where the utility service at issue is one supplied by "a particularly ailing unit of a generally sick industry," a claim of confiscation is suspect. *Id.* at 554. In such circumstances:

The problem of reconciling the patrons' needs and the investors' rights in an enterprise that has passed its zenith of opportunity and usefulness, whose investment already is impaired by economic forces, and whose earning possibilities are already invaded by economic forces, and whose earnings possibilities are already invaded by competition . . . is quite a different problem.

Id. The Court rejected the railway's claim that the shortfall in earnings resulting from the commission's ratemaking decision violated the "takings" clause:

[I]t may be safely generalized that the due process clause never has been held by this Court to require a commission to fix rates on the present reproduction value of something no one would presently want to reproduce, or on the historical valuation of a property whose history and current financial statements showed the value no longer to exist, or on an investment after it has vanished, even if once prudently made, or to maintain the credit of a concern whose securities already are impaired. The due process clause has been applied to prevent government destruction of existing economic values. It has not and cannot be applied to insure values or restore values that have been lost by the operation of economic forces.

Id. at 567. Under the Court's decision, it does not matter if FairPoint's claimed revenue deficiency is the result of bad management or technological change – government is not obligated to save the utility from either.

The Commission observed that it is certainly true that FairPoint has a right, under 35-A M.R.S. § 301, to "just and reasonable rates" that will afford it an opportunity to earn a reasonable investment return on the property it uses to supply POLR service. Indeed, the Commission approved FairPoint's request for an increase in its POLR service rates. However, what Section 301 requires are just and reasonable "rates," not just and reasonable "compensation." And what *Market Street* instructs is that the Fifth Amendment does not require a governmental guarantee of additional revenues (or compensation), in the form of MUSF support, to ensure the same return on investment that FairPoint previously enjoyed before the economic forces of competition reduced its sales of and revenues from traditional local exchange telephone services. Moreover, while FairPoint may well be entitled to reasonable "compensation" for the incremental (or unavoidable) costs of satisfying its POLR service obligation, it entirely failed to demonstrate that there are any such incremental costs, let alone the amount of those costs.

FairPoint advocated for an award of MUSF support in an amount that would make up the difference between the revenues available to it in the market and the total cost of its network.⁸ However, under *Market Street*, the Constitution does not require such an award. The Commission found that the proper question under Maine's POLR/MUSF regime is "what level of MUSF support is adequate for the purpose of preserving universal service," or, more specifically, "what support does FairPoint need to continue to provide ubiquitously available POLR service?" The Commission's task, then, was to determine the amount of MUSF support that is necessary to ensure that, were it otherwise permitted to do so, FairPoint would not withdraw its current POLR service offering or cease offering it ubiquitously in its territory. In economic terms, the question is "how much would a profit-seeking business need to be paid to continue to offer basic service throughout Maine, assuming it had total pricing flexibility on all services except POLR service, and that with respect to POLR service it could raise its rates to a level that satisfies the FCC definition of reasonable comparability with urban rates?" This is, essentially, an "unavoidable costs" question.

⁸ FairPoint suggested that if Central Maine Power ("CMP") were to lose half of its customers, equally distributed across its service territory, because those customers elected to generate their own power "behind the meter," the results would be "devastating." *MUSF Proceeding, FairPoint Brief* at 13, *MUSF Proceeding, FairPoint Exceptions* at 27-28. The analogy is inapt because FairPoint's request for MUSF support here is equivalent to a claim by CMP to a right to collect money from customers of propane and wood pellets on the theory that those persons might someday decide to heat their homes with electricity.

a. Costs

On several occasions during the course of the MUSF Proceeding, FairPoint was asked to calculate the "unavoidable costs" of providing POLR service and in response it presented no credible evidence on the subject, indicating instead that the effort would be impractical. Indeed, at the very beginning of the case Commission Staff posed the following question: Which exchanges generate costs such that if FairPoint were to abandon service to the exchange completely (assuming the Company was permitted to no longer offer any service in that exchange) FairPoint would realize cost savings net of revenues? FairPoint's responses to this line of inquiry were equivocal. The Company contended that it has no specific plans to obtain relief from its POLR service obligations in any particular exchange.⁹

i. *Forward Looking Economic Cost (FLEC) Model*

The Company attempted to show that its Forward Looking Economic Cost ("FLEC") model could be used to identify avoidable general, administrative, operating and maintenance expenses on an exchange by exchange basis. To demonstrate how this might be accomplished, the Company presented the so-called "ABC Exchange," which, according to FairPoint, produces a \$2 million revenue deficiency because the costs of operating the exchange are \$2.5 million and the revenues generated by the sale of services to customers residing within the exchange's geographic boundaries are just \$537,000.¹⁰ FairPoint's "ABC Exchange" presentation was flawed, however, in part because it relies upon an apportionment of FairPoint's statewide average "actual operating costs" which uses as an allocator the forward looking investment figures of the hypothetical network assumed by the FLEC model, and not an amount derived from actual plant balances, let alone actual plant balances for the "ABC Exchange." As the OPA correctly observed:

The FLEC Model and the ABC exchange analysis are based on "forward looking" investments, which assume that actually existing facilities are not there, and that investments must be made to build the network from the ground up . . .

⁹ The Commission agreed that it is the ubiquity of the POLR service obligation, rather than the number of customers identified as "POLR customers", that is important in assessing the scope of the cost of the obligation. However, this does not remove the need to identify differences in "avoided cost" among geographic areas, because FairPoint can be expected to keep its network intact where it is subject to competition, and thus the "incremental" cost to FairPoint of fulfilling the obligation could vary significantly between areas where a POLR service provider has strong business reasons to remain ubiquitous and areas where it does not.

¹⁰ The "ABC exchange" is not a fictional representational exchange. It is an actual exchange that FairPoint labeled as the "ABC exchange" to protect the confidentiality of business information.

[A]ssumptions driving the forward-looking investments are inaccurate for Maine. But most of all this broad scale assumption ignores the value in-place of the existing network assets, their serviceability, and the fact that these network assets – the switching and outside plant – are essentially fully depreciated. A major item contributing to the purported \$2 million "deficiency" for ABC exchange is depreciation expense accrual on \$11.2 million of forward-looking investment that does not exist and will never be built by FairPoint.

MUSF Proceeding, OPA Brief at 110.

The Commission also agreed with the OPA that "FairPoint's forward-looking investment-based allocation of expenses does not take into account what the value of the actual activities performed in the ABC exchange actually [is], or what resources are actually used or needed in the ABC exchange," and that "FairPoint did not make any effort to determine whether particular expenses or rate base were used or relevant to the ABC exchange." *Id.* at 111. Likewise, the Commission agreed with the OPA that FairPoint's management would be unlikely to use the FLEC model to make real-life decisions of whether the costs associated with a particular exchange, net of associated revenues, are so low as to warrant abandonment of that exchange if the applicable regulatory regime allowed abandonment. A more likely, and prudent, "avoided costs" decision would be based upon an exchange-specific discounted cash flow analysis, but FairPoint presented no such analysis.

FairPoint maintained that its accounting records cannot provide disaggregated cost information at the exchange level – information that could conceivably, if it were available, support the claim that the revenues generated by any particular exchange do not cover its embedded costs. Whether the inability to supply such information reflects, as the OPA suggests, a failure by FairPoint to comply with the FCC's Part 32 accounting rules requiring the maintenance of "continuing property records" ("CPRs") that "reveal the description, location, date of placement, and essential details of construction, and the original cost of the property record units," and that this information should be recorded "in such manner that it can be readily spot-checked for proof of physical existence," we need not decide. *Id.* at 112-113 (*quoting* 47 C.F.R. § 32.2000(f)(2)(iii) and (f)(5)). The Commission found, however, that what is critical is that FairPoint's failure, or inability, to introduce into the record actual exchange-specific cost evidence rendered its "ABC Exchange" analysis fatally incomplete.

In short, the Commission was not provided information upon which it could determine the costs that FairPoint would be able to avoid ("avoidable costs") if it were free to exercise its business judgment and abandon facilities needed to offer POLR service. Put somewhat differently, and hypothetically for now, if an auction were held for the assignment of the POLR service obligation in FairPoint's service territory (or some portion of its territory), at what price point would FairPoint decide that the costs of

operating the network in that area exceed the bid price and, as a result, that it should simply walk away from the auction? The state of the record presented in this case did not enable the Commission to answer any of these questions and, as a result, the Commission possessed no rational basis for awarding any particular amount of MUSF support.

ii. *Alternative Cost Allocation and Separation Methodologies*

The OPA and the Staff's consultant, QSI each suggested that one way to get nearer to identifying the costs that FairPoint incurs on account of fulfilling its "POLR obligation to serve" is for the Commission to abandon the "ossified" cost allocation and separations methodology established in Parts 36 and 64 of the FCC's rules in favor of some alternative up-to-date approach that would more accurately correspond to the way in which FairPoint is actually using its existing network facilities to deliver the services demanded in today's modern telecommunications marketplace. In the view of the OPA and QSI, the joint and common loop plant that was formerly used primarily to provide intrastate and interstate telephone service (with costs allocated primarily between the two) is being used increasingly to supply unregulated broadband service and interstate special access service, and thus the existing allocation and separations rules overstate the costs of providing local telephone service such as POLR service.

The OPA proposed to correct the current distortion created by the FCC's allocation rules – a distortion that results in the assignment of 75% of the cost of FairPoint's local loops to the intrastate jurisdiction – by allocating additional loop costs to a category the OPA called "intrastate unregulated." Under the OPA's plan, 50% of the costs of FairPoint loops used for both voice and broadband services would be allocated to the intrastate regulated jurisdiction, 25% would be allocated to the interstate jurisdiction, and 25% would be considered "intrastate unregulated."

Among the various scenarios analyzed by QSI was a proposal that seeks to allocate costs in a way which takes into account both the bandwidth capacity of the loop, and the relative use to which FairPoint actually puts the loop. *MUSF Proceeding, Bench Analysis* at 13. This proposal was presented as having some measure of theoretical appeal in that it reflects an attempt to update the underlying engineering principles that provide the fundamental basis for establishing cost allocation formulas in the first instance. Under this scheme, "bandwidth capacity and deployment" is viewed as the modern day equivalent of the "minutes of use" upon which the Part 36 and 64 allocation rules were first established by the FCC.

The Commission rejected the notion that a novel (and likely preempted) attempt at reforming the cost allocation rules, along the lines suggested by the OPA and QSI, would in any manner be helpful in establishing an appropriate level of MUSF support.¹¹

¹¹ Commissioner Littell, writing separately, would have found that the QSI "Scenario 2" analysis, introduced through the Commission Staff's Bench Analysis, established that the incremental portion of the joint and common costs of supplying voice service over a

The principles of cost allocation are intended to allocate costs among various types of *services*. The underlying principle animating the development of the allocation and separations rules in the first instance was to ensure that a monopoly (or near monopoly) provider had an opportunity to earn a reasonable return on its total investment through the sale of jurisdictionally distinct telephone services that happened to use the same joint and common plant. The allocation formulas were used to determine what set of a monopolist's captive ratepayers should be assessed the recovery obligation for any given set of costs.

network used predominately to transport data and broadband services are relatively insignificant, and thus provides another substantial, factual basis for finding that FairPoint is not entitled to MUSF support in any particular amount. Commissioner Littell also declined to credit FairPoint's preemption argument given the novel nature of FairPoint's request for a very significant state subsidy.

b. Revenues

The Commission observed that even if it did adopt the notion that FairPoint is entitled to recover through the MUSF the difference between the cost of its network and available revenues through the sale of services to its own customers – and, as observed above, this is not the proper question under either the "takings clause" or, ultimately, the Commission's interpretation of Maine's statutory scheme – the record, again, did not support any particular level of MUSF funding. To make that calculation, the Commission would require, but was not presented with, persuasive evidence not only of the cost of FairPoint's network but also of the level of all available revenues that are obtainable by FairPoint.¹² The reason for the absence of a suitable record on the revenue side of the equation is as much structural as it is related to the particulars of the evidence submitted by the parties. Any attempt to determine with sufficient confidence and precision the level of revenues available to FairPoint from its non-POLR services is doomed by the inevitable imprecision of estimates of market opportunities and the inherent incentive for FairPoint, under its "residual revenue requirements" construct, to keep prices low in order to enhance market share while recovering that foregone revenue through the MUSF.

The difficulty, of course, is that the bulk of the telephone industry operates in a competitive marketplace, where companies are free to offer services, or not, at prices as they see fit. If a player in that competitive marketplace, such as FairPoint, has one remaining regulatory obligation – POLR service – the traditional approach to establishing a revenue requirement, and setting rates accordingly, breaks down because there are simply too many variables with unknown values. For instance, on the revenue side, how can a regulator ever realistically know whether a company is, in fact, maximizing its revenue on its non-regulated lines of business, especially when a support program creates an incentive to lower its prices for those services?

FairPoint's expert witness, Mr. Meredith, submitted testimony suggesting that FairPoint has little, if any, ability to raise additional revenues by raising the prices that it charges for unregulated services due to pricing discipline imposed by competitors in the Company's major markets. However, Mr. Meredith's conclusions were based on informal observations of the advertised prices of FairPoint's wireline and wireless competitors, and industry trends reflected in the FCC's Local Competition Report. FairPoint also produced a handful of surveys of its competitors' advertised prices and also an October 26, 2010 report prepared by Altman Vilandrie & Company entitled "FairPoint Estimated Market Size and Share Assessment." The Altman Vilandrie report, which also presents a survey of competitor prices, is largely an assessment of the growth (and contraction) forecasts for various segments of the telecommunications

¹² The revenue maximization requirement is set forth in Section 3(C)(4) of Chapter 288 of the Commission's Rules by requiring that a rural ILEC seeking MUSF support first demonstrate that it has established "rates for optional calling features and other services that provide the greatest possible contribution to its revenue requirement."

market, a description of FairPoint's relative shares in those markets, and the likelihood that FairPoint will meet various market share and revenue goals.

FairPoint did not demonstrate that it was taking concrete steps to develop and implement, even on a trial basis, strategies designed to maximize revenues associated with non-regulated service in Maine. No FairPoint marketing executive, or marketing expert, testified as a witness in the case, and it did not appear that, in the nearly fourteen months since the Company filed notice of its intent submit its POLR Funding Request that FairPoint had conducted marketing trials in an attempt to test whether, within select portions of its territory in Maine, it has the ability to increase revenues by either raising prices on selected non-regulated services or developing geographically unique service packages. Certainly, such evidence could have been more valuable, and perhaps persuasive, than the conclusory statements offered by FairPoint to the effect that "the competitive landscape constrains pricing flexibility."

Moreover, FairPoint did not present data or analysis regarding the effect of certain price increases that it did implement in August 2013 on customer retention or the migration of customers to different FairPoint service packages. Such information and analysis might have provided tangible evidence bearing on the extent to which FairPoint has engaged in the most robust revenue maximization efforts, as compared to FairPoint's vague references at the hearings to the work of its "retention team."

In its rebuttal case, FairPoint announced it had decided to increase prices for certain unregulated service during the remainder of 2014, and it supplied projections of the likely revenue effects of these increases. The Examiners' Report suggested that the timing of FairPoint's announcement was suspect, and was merely an attempt to satisfy an element of proof at the last minute, in the context of litigation. Regardless of whether this was the case, the announcement of non-POLR service price increases anticipated in 2014, together with the fact that FairPoint did raise prices during 2013, undermined Mr. Meredith's direct testimony that FairPoint is generally unable to materially increase revenues through selective increases in the prices its charges to its own customers for non-regulated services.

The following exchange between Chairman Welch and Mr. Skrivan of FairPoint illustrates the problems confronted in attempting to apply a residual revenue requirement approach to setting MUSF support levels in the absence of concrete evidence that FairPoint has maximized revenues from the sale of non-POLR services to its own customers:

Chairman Welch: . . . were there marketing studies relating to particular services of which you're aware?

Mr. Skrivan: There – to my knowledge, there aren't any studies that have – you know, that have statistical evidence with respect to what happens when we raise or increase or decrease prices.

Chairman Welch: . . . How is the Commission to determine whether the increases that have been proposed are the ones that would produce the highest number at the end of the lower right-hand part of that chart as opposed to some different increase that might produce a higher number?

Mr. Skrivan: I don't have a definitive answer But I don't know that we – we can find studies that show us in the state of Maine exactly what's going to happen. So informed judgment is – is what the Commission will need to use to – to look at how much revenue should be imputed to the revenue deficiency associated with non-POLR services.

Chairman Welch: But is there anything in the record or anything you brought forward to help inform the Commission's judgment other than testimony that says this is your marketing department's informed judgment?

Mr. Skrivan: I – don't have – I don't have any – I don't have an answer to that

MUSF Proceeding, June 10, 2014 Tr. at 189-192.

Dr. Ankum of QSI, one of the Staff's expert witnesses, summarized well the difficulties presented by the issue of revenue maximization, both in terms of the state of the record and the unwieldiness of any attempt at proof:

If you were to go back and see how much time has been spent on the cost side as opposed to the revenue side, I would think that you'd say that probably 90 percent of the conversation here has been about the cost side because we have a model, we know those numbers, we can bicker about that, we love to talk about that. But really what we're dealing with is really revenue end costs, and we have spoken very little about the revenue side.

Now what you're raising now is the revenue side, right? Like when we're pushing dollars away or toward something, how do we know that these dollars can actually be recouped in the marketplace. Now, the marketplace, of course, is this nebulous, uncertain thing that all of us are very uncomfortable with because if we were comfortable with it, we wouldn't be regulators, right? So it's a guessing game.

Now, what we have heard from the company, both during the technical conference and during the hearing here is that they take input from the oracles of Delphi, right? It's the marketing department. And that's not meant pejoratively because those people probably are very good at what they do. However, we have very little insight into that. Like we have models that detail all their costs. We don't have much information about what goes into the machinations of the marketing department. Do we know what revenue recovery burden FairPoint can assume through non voice services? We don't really know, and the Commission won't know at the end of this proceeding. And even I would venture to say, if we had looked deeper into it, it still would be a guessing game because FairPoint itself doesn't really know, of course.

MUSF Proceeding, June 12, 2014 Tr. at 26-27.

Dr. Ankum suggested that, in light of the absence of price-elasticity data or other information demonstrating the revenue maximizing prices for non-POLR services, the Commission could adopt an "iterative process" to discover the correct amount of MUSF support to award to FairPoint. Under Dr. Ankum's scheme – one that FairPoint quite aptly described as a "squeal test" – the Commission would authorize a test amount of MUSF support, observe how FairPoint reacts, and then recalibrate accordingly. If the support level is "too high," the company would get "cushy" and might not push non-POLR service rates as high as it might, or would fail to innovate. If set too low, the company might run into "difficulties." The Commission did not believe that such an experiment would be particularly informative or, for that matter, fair. The Commission found that a more attractive and possibly effective approach to harness the observable behavior of economic actors to establish the "proper" level of MUSF support would be to conduct an auction. Evaluation of the merits of an auction approach, however, did not in the Commission's view advance consideration of the specific POLR Funding Request that was before the Commission in the litigated case.

Another "revenue side" question not adequately resolved in the record was whether FairPoint could recover its asserted revenue shortfall simply by raising the local service component of the price charged all of its access line customers by \$13.00 to roughly \$30.00 per month, as suggested by AT&T.¹³ A price-elasticity of demand study is the method typically employed by economists to determine how price increases will impact total revenues, both in direction (positively or negatively) and in projected amount. No such study was prepared by FairPoint, and thus the Commission did not know whether the Company could earn all or a substantial part of the MUSF revenue it

¹³ More precisely, AT&T suggested that a \$13.00 per month increase in access line charges should be imputed to FairPoint, with the Company free to decide whether, where, and when to implement such an increase. *MUSF Proceeding, AT&T Exceptions* at 4-5.

sought by raising the prices for non-POLR service that includes a local exchange service component. It is also possible that, in light of the myriad technologies and service bundles from which most customers are able to choose to satisfy their demand for telecommunications, the price elasticity of basic wireline local exchange service cannot be measured accurately. Again, the absence of a suitable record in this regard may have been as much structural as it was related to the particulars of the evidence submitted (or not) by the parties.

Adoption of a residual revenue requirement methodology for establishing MUSF support would, in the Commission's view, create the perverse incentive whereby FairPoint would be encouraged to underprice its intrastate services in an attempt to gain, or preserve, market share because the MUSF would fill the gap in revenues resulting from the low prices charged to the Company's own customers. Indeed, the extensive argument in the case regarding whether the FCC's Part 36 and 64 cost allocation rules continue to accurately capture the relationship of costs to Maine jurisdictional revenues reflect, at least, the fact that a company with a POLR service obligation has an incentive to attempt to shift accounting costs into categories relevant to POLR service and away from categories associated with competitive offerings because such costs, under a residual revenue requirements construct, will be recovered through the MUSF. The incentive to attempt to manipulate accounting costs and the incentive to underprice competitive offerings to gain market share against a MUSF revenue backstop are related, and the result over time will undermine competition as the regulated POLR service provider is able to recover from its competitors (through their contributions to the MUSF) a portion of what would otherwise be competitive losses related to price or the characteristics of particular service offerings. Such a scheme, the Commission found, would not further State policy goals in an efficient or effective manner.

Even though the Commission rejected a residual revenue requirements approach to determining the amount of MUSF that should be disbursed to FairPoint, it did, nevertheless, conduct a traditional revenue requirements analysis – in part so as to make such an analysis available to the Legislature in future policy discussions. The Commission's discussion of the traditional revenue requirements analysis is set forth in the MUSF Order. In summary, the analysis suggests that if FairPoint were operating as a monopoly provider of telephone service and all of its intrastate services were subject to rate regulation by the Commission it would likely be entitled to raise its intrastate telephone rates by an amount that would result in an additional \$47.7 million dollars in revenues.¹⁴ It should also be noted that under existing Commission rules, rural ILECs are entitled to MUSF support in amounts that are calculated using the sort of "residual revenue requirements" analysis advocated by FairPoint. However, the rules guiding MUSF support for rural ILECs were developed, and have been applied, for the limited

¹⁴ Commissioner Littell, writing in dissent, would have found that under a revenue requirements analysis, FairPoint would not presently be "under-earning" and thus would not be entitled to a rate increase, were this case a rate case, which all Commissioners agree it is not.

purpose of addressing two policy changes that had particular revenue impacts for those carriers: (1) a change in state law intended to lower intrastate long distance charges; and (2) an expansion of the Basic Service Calling Area ("BSCA") for certain carriers. In light of this history, therefore, there is no particular reason why a "residual revenue requirement" methodology needs to continue with respect to setting MUSF support amounts for rural ILECs.

As noted above, the Legislature has never established a maximum budget for the MUSF program, and to guide the Commission in any subsequent requests by FairPoint for MUSF support, it may wish to do so. In addition, MUSF support is presently disbursed to rural ILECs pursuant to a "residual revenue requirements" methodology. If the Legislature were inclined to set monetary limits on the size, or potential growth, of the MUSF, and/or to adopt as generally applicable to all POLR service providers seeking MUSF subsidies the analysis and general principles set forth in the Commission's MUSF Order, it might consider adopting legislation that expressly prohibits the use of a residual revenue requirements methodology for evaluating such carrier requests.

2. What type of basic telephone service could the largest incumbent local exchange carrier in the State provide with limited or no financial assistance from the state universal service fund?

The record in the MUSF Proceeding does not demonstrate that FairPoint is unable to provide the same local exchange service that it now provides (denominated as POLR service), and has always provided, without assistance from the state universal service fund.

In the MUSF Order, the Commission concluded that, based on the record established in that case, FairPoint, the largest incumbent local exchange carrier in the State, did not demonstrate a need for financial assistance from the MUSF in order for it to continue to offer basic telephone service, in the form of POLR service, in its current service territory. During the MUSF Proceeding, the Commission did approve, without opposition from the parties, a \$2.00 per month rate increase for POLR service sought by FairPoint. These revenues, in contrast to the MUSF support that FairPoint sought, are earned entirely through the sale of service to the Company's own customers. In addition, on October 31, 2014, FairPoint filed a proposed revision to its POLR service tariff that, if approved, would increase POLR service rates by an additional \$2.30 per month, to \$18.99, for residential customers, and by \$2.25 per month, to \$36.53 for business customers.

The statutory definition of POLR service, as set forth in 35-A M.R.S. § 7201(7), describes, essentially, the type of switched, local exchange telephone service that FairPoint and its predecessors have been offering in Maine for nearly a century without any MUSF subsidies. Consequently, the import of the Commission's finding in the MUSF Proceeding, with respect to this question, is that, based on the record in the MUSF Proceeding, FairPoint is able to provide the same local exchange service that it now provides (denominated as POLR service), and has always provided, without financial assistance from the MUSF.

POLR service, as currently defined, constitutes the most basic form of service offered by FairPoint. Given the embedded infrastructure and the type of technology that FairPoint currently uses to supply POLR service, it is unlikely that FairPoint could appreciably reduce its costs of service by providing some "lesser" form of service, such as a service that provided access only to E-911. With technological improvements, it is possible that FairPoint could in the future deliver basic voice service over its broadband network without the use of traditional circuit-switched technology. It is not possible for the Commission at this time to evaluate the extent to which a transition to such technologies in the delivery of local voice service would affect the costs to FairPoint of providing POLR service.

3. In what geographic areas is it not economical for the largest incumbent local exchange carrier to provide basic telephone service? Of those areas, which ones have no alternatives for basic service at comparable rates? In those areas that have no alternatives, what amount of financial assistance would the local incumbent exchange carrier need to provide basic telephone service?

The Commission is unable to identify any geographic area for which it would be in FairPoint's economic interest to abandon service.

- a. Economic/Uneconomic Areas

The most direct way to determine whether a geographic area is not "economical" for FairPoint to provide basic telephone service would be to actually relieve the Company of its obligation to provide ubiquitous service in that area and then observe whether it elects to abandon service in that area. As a rational economic actor, FairPoint would be expected to abandon service in those areas where "avoidable costs" exceed revenues. To the extent that the incremental costs of providing basic telephone service over the same facilities used to provide other services is minimal, the economic, cost-benefit decision for FairPoint would likely be whether to completely abandon all retail service offerings in a particular area. Existing law does not, however, permit the Commission to conduct such an experiment for the purpose of evaluating avoidable costs.

Instead, in the course of the litigation of the MUSF Proceeding, the Commission and the parties attempted to identify, through the collection of area-specific (disaggregated) cost data, the locations where FairPoint's avoidable costs exceed revenues. Unfortunately FairPoint was unable to supply such information. Instead, the Company presented its FLEC model which it claimed demonstrated that several of its exchanges operate at a net loss. The FLEC model evidence is, for several reasons, unpersuasive, not least because it assumes the construction of a new network that no carrier would, in fact, choose to build. The FLEC model is intended to demonstrate costs to the company to rebuild its network in each discrete telephone exchange, but it "recreates" a telephone and data network as would have been built in the 20th Century, and does not take into account existing assets such as telephone poles, central offices, and remote terminals that enable both voice and data communications. This type of "greenfield" (*i.e.*, all new infrastructure in a hypothetical undeveloped area) model design ultimately ignores "brownfield" (*i.e.*, an area with existing infrastructure) assets, such as telephone poles.

In addition, FairPoint's FLEC model does not incorporate actual exchange-specific cost information, such as continuing property records, upon which a reasonably accurate "avoided cost" analysis could be conducted. Based on the state of the evidence presented in the MUSF Proceeding, therefore, the Commission was, and is, unable to identify any geographic area for which it would be in FairPoint's economic interest to abandon service.

b. Alternative Voice Service Providers

Even though the evidentiary record in the MUSF Proceeding did not support a conclusion that there are areas within FairPoint's service territory where "avoidable" costs exceed revenues, it is entirely possible that such areas do, in fact, exist. If there are such areas, and if policy-makers were to consider revisions to the existing statute that would more readily permit the abandonment by FairPoint of service to those areas, it would be important to know whether there exist within those areas other carriers capable of offering basic telephone service without the use of FairPoint's local loop facilities.

Potential alternative suppliers of local telephone service could include cable companies, wireless carriers, and satellite VoIP carriers. The question of whether any particular type of service is a suitable substitute for FairPoint's traditional circuit-switched, wireline service itself raises policy issues, and those issues are addressed in Section B(4) below.

The maps on the following pages identify locations within FairPoint's service territory where cable providers and cellular wireless providers, individually and collectively, do not offer service. This analysis suggests that, based on the information available to the Commission, 5,908 addresses located within FairPoint's service territory in Maine cannot be served by either wireless or cable voice providers. Each of these locations could, however, be served by a satellite VoIP carrier, which is available ubiquitously throughout FairPoint's service territory.

The source of the data presented in the maps on pages 27-29 is information collected by the National Telecommunications and Information Administration ("NTIA") and the Commission's Emergency Communications Service Bureau.¹⁵ The NTIA data collection effort captures the broadband footprint of Maine's POLR service providers, mobile wireless carriers, cable providers, competitive local exchange providers ("CLECs"), and satellite broadband providers. Broadband service availability is a reasonable proxy for voice service availability because cable voice service is available wherever cable broadband is available from the same provider, and, likewise, wherever wireless broadband service is available, wireless voice service is available from the same provider. In fact, the use of broadband availability as a proxy for voice availability is likely conservative in the case of wireless service because there are certainly areas

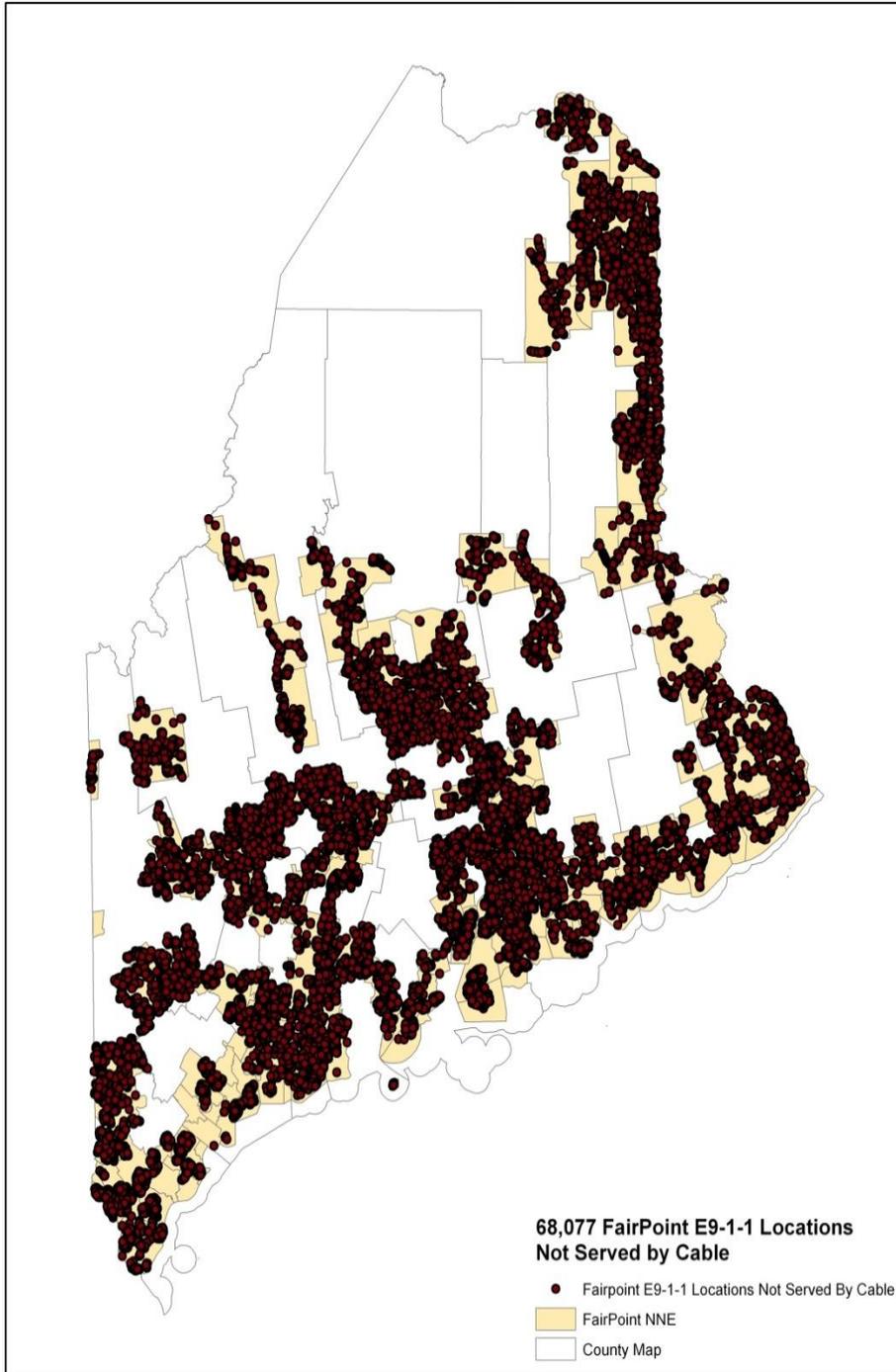
¹⁵ E-911 locations are derived from work compiled by the Commission's Emergency Communications Service Bureau using a data set available at <http://www.maine.gov/megis/catalog/>. The National Broadband Map data of broadband coverage, adopted as a proxy for voice service area coverage, is available at <http://www.broadbandmap.gov/data-download>.

within the cellular footprints of wireless carriers that do not presently support broadband.¹⁶

The data supplied by the wireless carriers does not contain measures of the "quality" of the wireless signal throughout their respective coverage areas. Indeed, as Sprint observes, the coverage information supplied to the NTIA represents "high-level estimates when using devices outdoors under optimal conditions," and "[e]stimating wireless coverage and signal strength is not an exact science." Further, "there are gaps in coverage within Sprint's estimated coverage areas that, along with other factors both within and beyond Sprint's control (network problems, software, signal strength, wireless device characteristics, structures, buildings, weather, geography, topography, etc.), will result in dropped and blocked connections or otherwise impact the quality of services." For that reason, the maps developed using this data should be viewed as approximate, and to some extent overstated, indications of the degree of wireless service coverage.

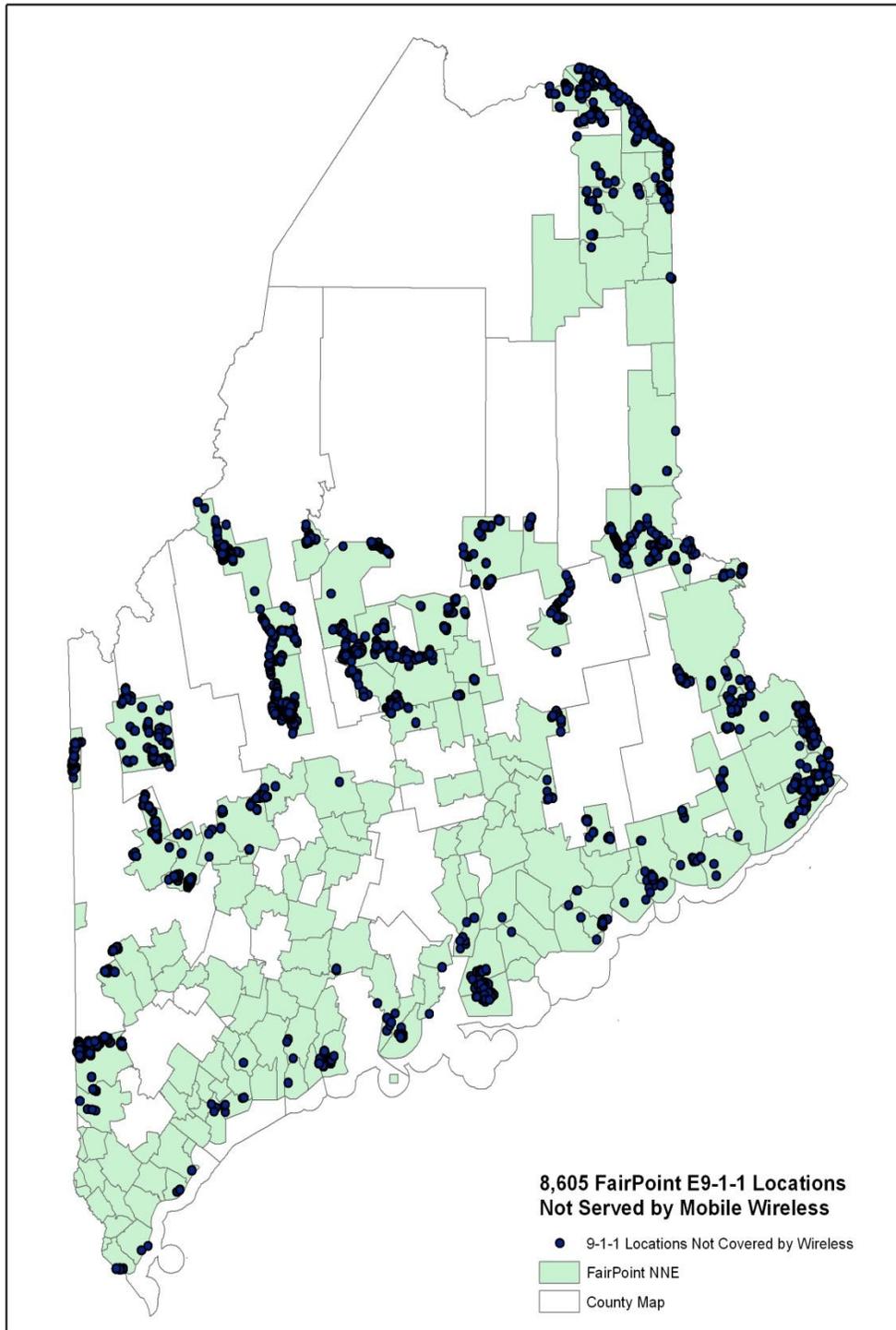
¹⁶ In general, mobile wireless carriers use the same facilities to simultaneously offer voice, 2G broadband, 3G broadband, and 4G LTE broadband. However, the NTIA broadband map data captures only broadband coverage at 3G or higher. Thus, to the extent that the carrier offers only 2G broadband service within portions of its territory, those areas are not captured in the NTIA data and, thus, the map understates the extent of voice coverage offered by that carrier in those areas.

E9-1-1 Locations Not Served by Cable in FairPoint NNE



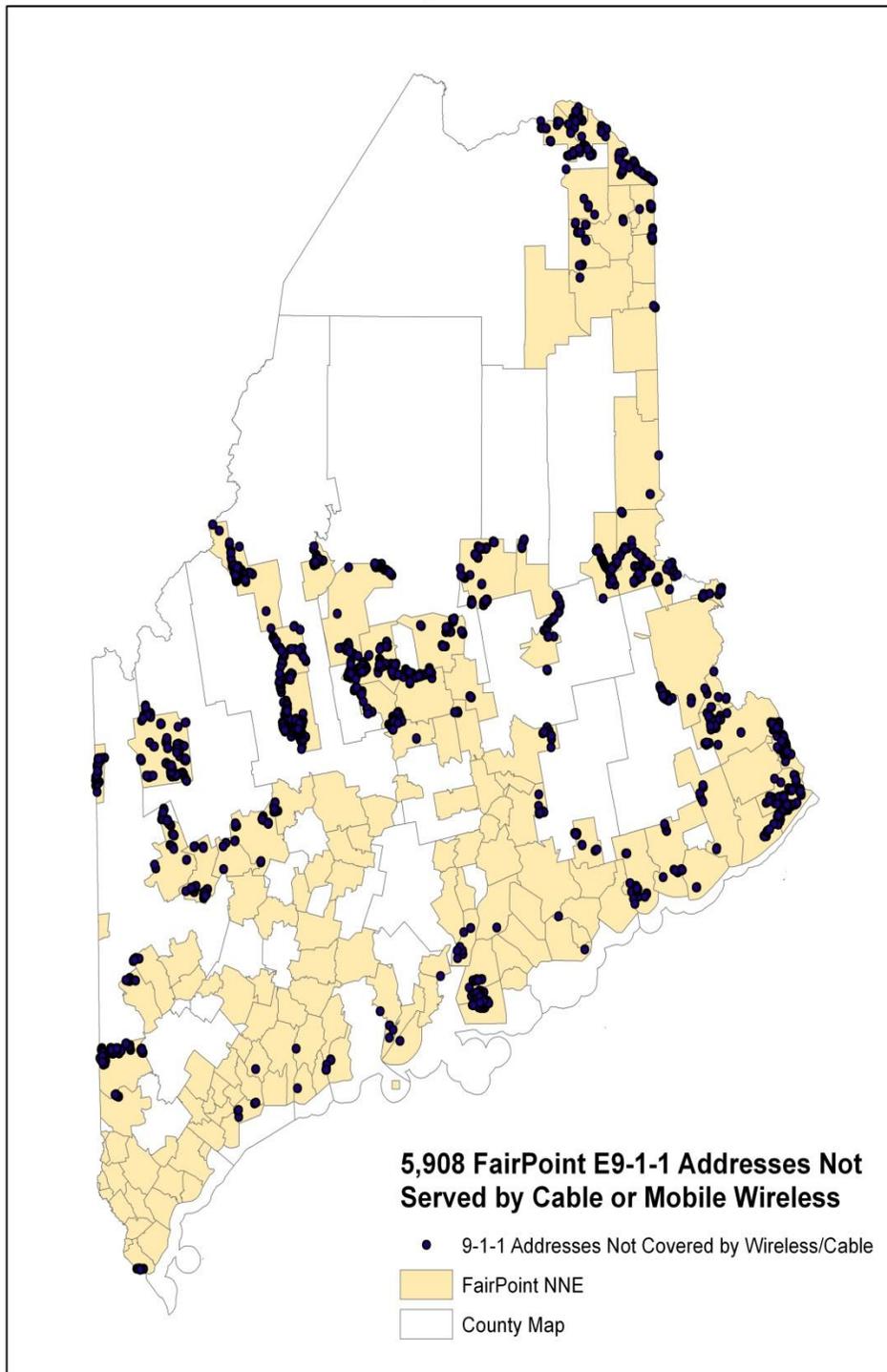
Author: MJohnson, MPUC November 12, 2014

E9-1-1 Locations Not Served by Wireless in FairPoint NNE



Author: MJohnson, MPUC December 2, 2014

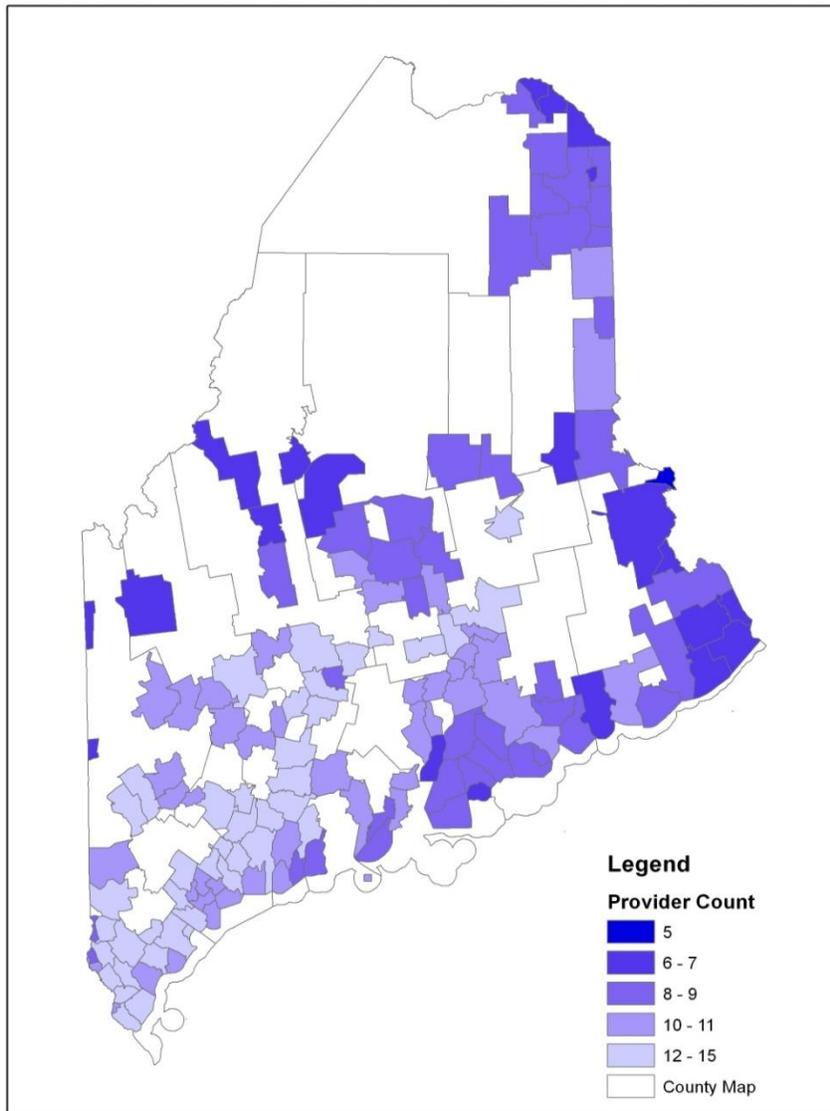
E9-1-1 Addresses Not Served by Wireless or Cable in FairPoint NNE



Author: MJohnson, MPUC October 30, 2014

The following map depicts the number of voice providers offering service in FairPoint's service territory. The geographic areas are "exchange boundaries." Some competitive wireline carriers, including cable companies, have not built facilities in the entirety of their service territories and, to the extent that they have not, do not offer ubiquitous service throughout the individual FairPoint exchanges depicted in the map. Other providers depend on the local loop facilities from FairPoint, which they purchase or lease on a wholesale basis, so that they can offer service to their end-user customers. Consequently, not every customer within any particular shaded area of the map will have access to the full panoply of alternative providers offering service in that area.

All Wireless and Wireline Providers in FairPoint NNE's Service Area



Author: MJohnson, MPUC, December 2, 2014

The Commission is not aware of any carrier that prices its voice service depending on the customer's location. Pricing for voice service among various carriers is not directly comparable due to the variety of services and bundled packages (combinations of voice, data, and video) available from the carriers. However, prices generally are between \$17.00 to \$40.00 for voice service depending on the particular plan or bundle. FairPoint's POLR service rate for basic local service is currently \$16.69 per month,¹⁷ and with the addition of the federal end-user common line charge and access recovery fee, the cost to consumers for POLR service totals \$23.60 per month, plus state-imposed fees and taxes. Mobile wireless providers offer calling plans starting at approximately \$30 per month for unlimited calling features, and stand-alone voice service from a cable provider typically costs about \$40 per month.¹⁸ Satellite VoIP service is available ubiquitously, but currently must be purchased in a package that includes broadband service; packages cost between \$80 and \$120 per month (\$50-\$90 per month for internet service and \$30 per month for VoIP service).

The price at which alternative voice services can be said to be "comparable" to one another is, ultimately, a question of policy. As shown above, the rate FairPoint charges for POLR service – the most basic form of local telephone service – is lower than the more feature-rich alternative offerings from the cable, wireless, or satellite companies. Further, the Commission determined in the MUSF Proceeding that FairPoint had failed to demonstrate that it requires MUSF support in order to offer POLR service at the approved rate. In its January 15, 2013, report to the Legislature, prepared in response to a resolve of the 125th Legislature, the Commission suggested that a POLR service rate falling within the range of \$25 and \$35 per month might be viewed as "comparable," and "affordable," thereby satisfying the Maine's universal service policy as set forth in 35-A M.R.S. §§ 7101 and 7104. Such a rate would likely also fall below two standard deviations from the average national urban rate – the benchmark of rural/urban rate comparability employed by the FCC (prior to the reorientation towards broadband support of the federal universal service program) to determine whether high cost voice support disbursed to a particular carrier is sufficient under the federal universal service program as set forth in 47 U.S.C. § 254.

¹⁷ FairPoint has recently requested Commission approval for an increase in the POLR service rate to \$18.99 per month. The Commission's decision on FairPoint's request is pending as of the date of this Report.

¹⁸ Non-POLR service providers often bundle their services and "discount" the voice portion within the bundle. Non-bundled, or "stand-alone" services are typically more expensive than the "cost" for that same service if purchased as part of a bundle.

i. *Satellite-Enabled Voice Service*

As noted above, voice service offered through the use of satellites, along with cellular wireless and cable VoIP service, might be considered an alternative to traditional wireline telephone service. To explore the capabilities of satellite voice service, and to obtain information regarding whether such service might present a viable alternative to traditional wireline service in those locations where there do not exist cable facilities and where cellular coverage is wanting, the Commission held an informational and demonstration session on November 14, 2014, conducted by a Senior Director of Sales for Hughes Network Systems ("Hughes"), Daniel Reno. Hughes offers a fixed satellite broadband service marketed as HughesNet. The target customers are those persons residing in rural areas that do not otherwise have access to high-speed broadband. With the purchase or lease of a proprietary satellite dish antenna, modem and analog telephone adapter, and the selection of one of several data plans, customers are able to obtain broadband service at download speeds of up to 15 Mbps and at an upload speed of 2 Mbps, and also VoIP telephone service. The VoIP "packets" receive priority over all other data traffic on the network, and although the various monthly plans do have maximum data allowances, voice calls do not count towards that allowance. Like cellular wireless and cable VoIP services, the HughesNet VoIP service is fully integrated with the E-911 system. Also, as is the case with cable VoIP services, the required modem must have a source of backup power in the case of a general electrical power outage.

The installation of the HughesNet satellite dish is similar to that required by customers of the common satellite television products, DirectTV and DishNetwork, although the size of the dish is somewhat larger in order to improve the quality of the signal and, in the case of telephone service, to minimize the latency issues associated with the distance that the signal must travel to and from the geosynchronous satellite. As with the television services, the dish must be oriented so it has an unobstructed line of sight to open sky at the requisite elevation angle. Signal quality can be adversely affected by heavy storms and unusually dense cloud cover.

The price of HughesNet VoIP telephone service, which includes unlimited long-distance calling and the same calling features typical of cable VoIP service, is \$30 per month. The least expensive broadband plan, to which customers must also subscribe in order to be able to purchase the VoIP service, is \$50 per month.

ii. *Implications for MUSF Subsidy Program*

There are certain implications of the availability of alternative forms of basic local service within FairPoint's service territory, as reflected in the data which form the basis of the foregoing maps, to the consideration by policymakers regarding the appropriate size of the MUSF program and the means by which support subsidies might be distributed in the future. For the purpose of illustration, the following assumptions might be evaluated:¹⁹

- Assume that there are 6,000 customers within FairPoint's service territory who do not have access to either cable VoIP or cellular wireless service as an alternative to FairPoint's POLR service;²⁰
- Assume that \$30 per month represents a reasonable price to expect customers to pay for basic telephone service;²¹
- Assume that the ubiquitously available fixed satellite service offered by HughesNet (which includes not only unlimited VoIP telephone service but also various levels of broadband usage) presents a viable alternative to FairPoint's POLR service;
- Assume that the monthly cost of Hughes Net service is \$80 per month;²² and

¹⁹ The Commission offers this assumption-driven analysis so as to identify the "order of magnitude" of what might be accomplished under an alternative approach to MUSF support and to approximate a budget for such an approach. The assumptions described are illustrative, although they are based upon information received by the Commission in the course of preparing this Report.

²⁰ This is the number of customers within FairPoint's service territory that the data available to the Commission, and reflected in the foregoing maps, suggests are unable to obtain cable VoIP or wireless cellular coverage, rounded up to the nearest thousand.

²¹ The price of \$30 per month is the midpoint of the \$25-\$35 range that under the "two standard deviation from the national urban average" paradigm considered by the FCC to be "reasonably comparable" for universal service purposes.

²² This is the current monthly advertised retail price for the most basic service package offered by HughesNet, and includes unlimited VoIP service and long distance in addition to 10 GB of broadband usage. Use of the \$80 per month figure in this scenario further assumes that the State is either unable, or not inclined, to negotiate a bulk discount with HughesNet as part of a program to subsidize the HughesNet service for some class of customers residing in FairPoint's territory for whom cable VoIP or wireless cellular service is unavailable.

Based on these assumptions, it would cost roughly \$3.6 million per year to provide subsidy vouchers to each of the 6,000 persons residing in FairPoint's territory who are unable to obtain cable VoIP or wireless cellular service so that they may purchase HughesNet service at an out-of-pocket cost of \$30.00 per month.²³ Obviously, this figure is sensitive to the foregoing assumptions, most particularly the number of customers without cable or wireless cellular alternatives as well as the assumed policy determination that satellite-enabled VoIP service is a viable alternative to basic wireline telephone service.

In addition, this illustrative analysis suggests that a direct-to-consumer subsidy mechanism merits serious consideration. It is possible that such an approach would, for example, represent the least-cost method of leveraging some given amount of MUSF support for the purpose of ensuring the availability of basic local telephone service in areas where, if given the option, FairPoint might choose to no longer provide service. As is described in Section B(3)(b)(i) above, an auction or RFP process in which subsidies are paid directly to providers presents another possible approach to securing alternative basic service for customers presently dependent on FairPoint. Regardless of the particular policies embedded in the assumptions of the illustrative scenario described in this subsection, the Commission believes the illustration provides a useful perspective on the order of magnitude, in terms of number of customers and amount of support, of the need for intrastate universal service subsidy in Maine.

²³ If a financial "means" test were applied as a prerequisite to a customer's eligibility for a direct MUSF subsidy, the total yearly MUSF expenditures would, of course, be less than the hypothetical \$3.6 million amount.

4. How might the characteristics of provider of last resort service be amended to allow for more competition in the types of service providers that are able to provide provider of last resort service? What are the implications of changing these characteristics with regard to reliability, safety, cost and ease of use of provider of last resort service and the availability and quality of broadband service throughout the State? What are the implications of limiting provider of last resort service to reliable access to emergency services?
 - a. How might the characteristics of provider of last resort service be amended to allow for more competition in the types of service providers that are able to provide provider of last resort service?

Elimination of the requirement that voice service remain uninterrupted during a power outage would tend to make it more likely that a carrier that uses technologies other than those used to deliver traditional wireline service could, if it desired, "compete" to become the designated POLR service provider in a particular geographic area.

Title 35-A M.R.S. § 7201(7) describes the statutorily mandated characteristics of POLR service. Those characteristics are: (1) a flat-rate service; (2) voice grade access to the public switched telephone network; (3) local usage within the basic service calling areas of incumbent local exchange carriers as of January 1, 2012; (4) dual-tone multi-frequency signaling or its functional equivalent; (5) single-party service or its functional equivalent; (6) access to emergency services; (7) access to operator services; (8) access to interexchange service; (9) access to directory assistance; (10) toll limitation for qualifying low-income customers; and (11) the capacity to maintain uninterrupted voice service during a power failure, either through the incorporation into the network or network interface devices of suitable battery backup or through electric current.

The first 10 of these requisite characteristics, or their functional equivalent, were taken, nearly verbatim, from the Commission's 2011 "Plan to Reform Telecommunications Regulation", which, in turn, were derived from the, now-superseded, federal requirements for ETCs. Each of these characteristics, or their functional equivalent, is readily satisfied by traditional wireline, cellular wireless, cable VoIP, and satellite VoIP carriers, and thus have no implications on competition among carriers.²⁴

The one unique characteristic of traditional wireline service is that the copper line over which the voice signal travels is itself powered by a source of electricity separate from the power line over which customers receive electricity service. Consequently, the

²⁴ HughesNet Voice (satellite VoIP) does not currently support or provide traditional directory assistance. However, HughesNet requires that its voice service be bundled with its internet service where customers can access the functional equivalent of directory assistance from any number of sources.

loss of electricity service during a power outage does not, by itself, interrupt traditional wireline telephone service. Customers of traditional wireline carriers therefore need not secure an alternative source of backup power during an outage. Of course, in order for a customer to benefit from this particular attribute of traditional wireline service, a non-cordless telephone must be installed directly into the telephone jack in the premises.

For a customer to be able to use his cellphone, the phone must be charged, regardless of whether or not there is a power outage. Likewise, during a power outage, there must be an alternative source of electricity (battery or generator) to power the network interface devices (modems and routers) necessary for the transmission of broadband signals at a customer premises. The extent to which such services remain "uninterrupted" during a power outage depends on the adequacy of the alternative source of electricity available to the customer. Backup batteries are an available feature of most modern network interface devices supplied by cable VoIP providers, and generally deliver 8 hours of functionality during a power outage.

Traditional wireline service plainly has an advantage in terms of the ability to remain uninterrupted during a power outage. Consequently, elimination of this attribute as a requirement of POLR service would tend to make it more likely that a carrier using any alternative technology could, if it desired, "compete" to become the designated POLR service provider in a particular geographic area.

- b. What are the implications of changing these characteristics with regard to reliability, safety, cost and ease of use of provider of last resort service?

Although elimination of the requirement that voice service remain uninterrupted during a power outage may have some public safety implications, consumers have become increasingly accustomed to using communications technologies that require periodic recharging of battery power.

The first ten numerated characteristics of POLR service are features of every voice service offered in the state, and as such their elimination would have no effect on the competitive marketplace; voice service providers will almost certainly continue to offer service with the first ten POLR service attributes regardless of any legislative mandate. For the same reasons, continuing these requirements would have little or no impact on the ability of wireless or cable providers to offer "qualifying" services.²⁵ Characteristic No. 11 (the capacity to maintain uninterrupted voice service during a power failure, either through the incorporation into the network or network interface devices of suitable battery backup or through electric current), however, is not a

²⁵ Attribute No. 10, toll limitation for qualifying low-income customers, is not a specific "feature" of voice service offered by all providers. Cable, VoIP, and wireless companies, however, typically offer calling plans that charge a flat rate for local and long-distance calling which accomplishes the same purpose as the toll-limitation requirement.

ubiquitous feature of voice service in Maine, and its elimination does have some public safety implications, particularly with respect to the ability of Maine citizens to contact emergency services and first responders during power outages.

When the traditional copper-based, circuit-switched wireline telephone network was developed as a "common battery" service, one of the inherent characteristics of that network was a low-voltage electric current that ran along the copper telephone wires. This low-voltage current provided the power necessary to operate the equipment in customers' homes (powering the telephone, enabling the phone to ring, etc.). This power source was in some respects independent of the commercial electric service to customers' homes in that the electric current for telephone service and the electricity used to power the customers' homes did not travel down the same lines. In many cases if an interruption in electric service occurred (due to a blown transformer, for example), telephone service would continue uninterrupted. To further ensure independent survivability of the network during large-scale commercial outages, or outages to the telephone companies' switching stations, telephone companies installed back-up power generation capability or battery back-up at those facilities. These attributes continue to characterize the copper-based wireline telephone network. It is important to observe, however, that the incorporation of low-voltage electric current into the copper-based network does not assure uninterrupted telephone service during a power outage, particularly when such an outage is due to a storm in which both power and telephone lines have been severed or become detached from utility poles. Moreover, telephone customers who rely exclusively on powered, cordless handsets will be unable to make or receive calls during a power outage even if the copper-based wireline network is otherwise functioning.

Newer broadband and voice service technologies do not always have the same survivability attributes. However, based on information in other Commission proceedings²⁶ and information provided to the Commission at a recent informational presentation by Comcast, it appears that most fiber-optic and cable-based broadband and VoIP infrastructure currently has survivability built into the network infrastructure, and customer premise equipment is available with battery backup capability of approximately eight hours. Most cellular telephone towers and facilities have back-up power generation and/or battery back-up, and the cellular network will continue to operate during a power outage. The service an individual customer or household receives, however, is of course limited to the battery life remaining in the handset at the time the outage occurs and the customer's access to an alternative source of electricity to recharge the battery once it is exhausted.

²⁶ *E.g., Union River Telephone Company, Application for Approval of Issue of Securities*, Docket No. 2008-00009, Stipulation (Apr. 25, 2008).

- c. What are the implications of changing these characteristics with regard to the availability and quality of broadband service throughout the State?

Elimination of the requirement that POLR service providers have the capacity to maintain uninterrupted voice service during a power failure, either through the incorporation into the network or network interface devices of suitable battery backup or through electric current, would not likely affect broadband availability or quality.

Elimination of the requirement that POLR service providers have the capacity to maintain uninterrupted voice service during a power failure, either through the incorporation into the network or network interface devices of suitable battery backup or through electric current would likely have little if any effect on the on the availability and quality of broadband throughout the State. As envisioned by the statute, POLR service represents the most basic form of local telephone service. Investment in modern broadband networks, however, depends on the revenues and costs associated with providing higher-value data services, not stand-alone voice service. Indeed, as the dramatic growth in recent years of the use of VoIP services by broadband subscribers demonstrates, voice has for many consumers become merely an IP-enabled application not unlike e-mail and instant messaging.

- d. What are the implications of limiting provider of last resort service to reliable access to emergency services?

The Commission is unable to identify any policy objective, economic or otherwise, that would be advanced by limiting provider of last resort service to reliable access to emergency services.

Access to emergency services is currently an attribute of POLR service; indeed, to the Commission's knowledge, all voice service providers in Maine offer access to the E-911 system. In a technical sense, it would not appear to be infeasible for a voice service provider to provide an E-911-only service. Indeed federal regulations require wireless carriers to transmit 911 calls regardless of whether the handset used is "in service" with any carrier.²⁷ 47 C.F.R. § 20.18(b). As mentioned in Section B(2) above, however, given the embedded infrastructure and the types of technology that FairPoint uses to supply POLR service and that other carriers use to deliver voice service, it is unlikely that any carrier could appreciably reduce its costs of service by providing some "lesser" form of service, such as a service that provided access only to E-911. Further, in light of the steady loss of telephone service customers experienced by ILECs in

²⁷ The requirement for wireless carriers to accommodate users who are in an emergency situation and only have an out-of-service device with which to contact 911 does not mean that such a "service" currently exists in the marketplace; wireless carriers do not, to the Commission's knowledge, market or promote this requirement as an alternative voice service product.

recent years, such a service, offered at a rate lower than the ILECs' existing POLR service, might further reduce the total revenues that those companies earn from their telephone offerings.

5. If the obligation of providing provider of last resort service was not assigned to the incumbent local exchange carrier, how might the Commission assign the obligation? What are the obstacles, if any, to the Commission's reassigning the provider of last resort obligation to a service provider other than a local incumbent exchange carrier? Is there any action needed by the Legislature?
 - a. If the obligation of providing provider of last resort service was not assigned to the incumbent local exchange carrier, how might the Commission assign the obligation?

The POLR service obligation could be assigned through a "reverse auction" process or by a request for proposals. Alternatively, POLR service could be obtained through a direct-to consumer subsidy.

- i. *Reverse Auction or RFP*

One means of assigning the POLR service obligation would be to conduct either a "request for proposals" ("RFP") process or a reverse auction. The RFP or auction would set out the attributes that comprise POLR service and would seek out carriers willing to provide the defined POLR service. The RFP or auction could also include a maximum POLR service rate and describe minimum service quality standards to which the prospective POLR service provider would be expected to adhere.

In responding to an RFP, bidders would put forward a sealed bid consisting of the amount of support they would require to provide POLR service in the area or areas for which a POLR service provider is sought. The bid would be the carrier's "best and final offer." With the POLR service requirements being fixed, the Commission would award the POLR service "contract" to the bidder that submits the lowest cost bid (*i.e.*, the lowest requested support amount).

The selection of the geographic boundaries of the area to be served by an alternative POLR service provider would be an important consideration in establishing the criteria for any auction or RFP. Current service areas, such as wire centers or exchange areas, because they are easily identified and comport with the historical design of the wireline network, may be the most technically and economically feasible POLR service areas for the RFP or auction process. On the other hand, smaller defined areas, such as census blocks, might be more attractive to alternative bidders in light of both the technology they may choose to deploy and the contours of their existing territories. Care would need to be taken to ensure that such an approach does not create isolated areas that no carrier would bid to serve.

In such an auction, the Commission could hold several rounds of open bidding, receiving, presumably, increasingly lower support amount bids until the lowest amount was reached (*i.e.*, no further bids are received) The recent sale of the lighthouses in

Maine by the federal General Services Administration is one example of how the process could be conducted.²⁸

Another alternative would be for the ILEC to propose the amount of support it would seek in order to maintain the POLR service obligation, while maintaining the price benchmark set by the Commission. Other potential providers would then be asked to "bid" against the ILEC request, and the lowest cost bidder (the ILEC or another provider) would be awarded the POLR service obligation and the MUSF support amount. Implicit in any such process is that the designated POLR service provider would be required to strictly adhere to whatever standards are established for POLR service and provide the service to any customer who requested it within the designated area.

ii. *Direct-to-Consumer Subsidy*

As discussed in more detail in Section B(3)(b)(ii) above, another approach to subsidizing POLR service is a direct-to-consumer subsidy program. Under such a program, the State, presumably through the MUSF, would provide a direct financial subsidy to consumers who live at locations without access to competitive telephone service (or without access to telephone service whatsoever). Such a subsidy could be used to make up the difference between a pre-determined "reasonable rate" for basic telephone service – perhaps set by rule – and the actual price the consumer pays for "alternative" telephone service (e.g., fixed or mobile satellite phone). The actual payment of the subsidy could be via a voucher provided by consumers to their chosen provider, or directly to the provider itself on behalf of the consumer.

Consumers could provide annual "self-certifications" that they cannot receive basic telephone service for the set "reasonable" price, and the Commission could require that such certifications be submitted annually in order to qualify for the voucher. The certifications would also provide the Commission with valuable information regarding where consumers can – and cannot – receive affordable basic telephone service. Conceivably, the aggregation of this information could allow the Commission to identify specific areas where subsidy could be provided to a carrier to build-out facilities in those areas (e.g., a subsidy is provided to a wireless provider to enable the provider to build a cell tower that would serve a previously unserved area). Those subsidies could be allotted using the RFP or reverse auction process described above.

²⁸ One example is available at:

<http://gsaauctions.gov/gsaauctions/aucdsclnk?sl=BOSTN11401500>. The lighthouse auctions were traditional auctions in the sense that the bids increased in price, whereas the Commission's "reverse auction" would consist of bidders competing to place the "lowest" bid.

- b. What are the obstacles, if any, to the Commission's reassigning the provider of last resort obligation to a service provider other than a local incumbent exchange carrier?

The primary obstacle to the reassignment of the POLR service obligation is the possibility that no alternative provider would be willing to undertake the obligation regardless of the availability of some amount of MUSF support.

The primary economic obstacle to POLR service obligation reassignment is the possibility that no potential, alternative provider would be willing to undertake that obligation. Despite efforts to design an auction or request for proposals process so as to attract, through the award of MUSF support, potential alternative providers capable of delivering ubiquitous POLR service (however defined) throughout a particular service territory (however defined), it is conceivable that none would bid for the designation. Secondly, it is possible that the required attributes of POLR service could preclude an alternative provider from being eligible to become the designated POLR service provider for a given geographic area, as discussed in Section 4, above.

- c. Is there any action needed by the Legislature?

Modifications to the statutory attributes of POLR service, and to the requirement that regulated POLR service must be offered ubiquitously throughout the State, might enhance the ability of the Commission to reassign the POLR service obligation.

The Legislature may wish to modify or clarify the required attributes of POLR service, particularly with respect to the requirement of uninterrupted service during power outages, so that alternative technologies could be utilized in the provision of POLR service. In addition, as discussed above, it may wish to authorize the reassignment of the POLR service obligation along geographic boundaries that differ than those served by the ILECs. In this regard, the Legislature might also develop criteria that would guide a determination by the Commission that it is no longer necessary that there be any designated POLR service provider in a particular geographic area. See Section B(9) below. It might also consider whether the Commission should be permitted to reassign the POLR service provider without the current provider requesting to be relieved of its obligations, at least where the current provider has not been designated as the POLR service provider through an agreement reached following an auction or request for proposals process. These statutory changes, combined with express authorization for the Commission to seek alternative POLR service providers through an auction or request for proposals process, could enhance the ability of the Commission to reassign the POLR service obligation. Such legislation might also incorporate the sort of administrative flexibility currently afforded to the Commission in connection with its selection of "Standard Offer" service in the electricity sector.

6. What are the implications of limiting financial assistance for provider of last resort service to areas of the State that have limited competition or availability of basic service providers?

Limiting MUSF support to areas with limited basic service competition or availability would reduce the size of the MUSF and the amount of money that needs to be collected from voice service customers to fund the MUSF.

If POLR service providers were only permitted to receive MUSF support in connection with the portions of their service territory where there exists limited competition for basic telephone service, this would tend to reduce the overall potential size of the MUSF.²⁹ To implement such a change so that an amount of area-specific MUSF could be awarded, carriers would need to be able to produce area-specific cost and revenue data. We note that in the recently concluded MUSF Proceeding in which FairPoint sought MUSF support, the Company was unable to produce such evidence.

Further, concurrent with the limitation of MUSF support to locations without sufficient competition in the basic telephone market, the Legislature might wish to consider a mechanism in which the obligation of POLR service providers to offer POLR service ubiquitously in the "competitive" areas of their service territories would be lifted, on the theory that the existence of a sufficient number of alternative carriers in those areas fulfills the state's universal service goals of ensuring comparable, affordable basic telephone service throughout the State. In addition, a potential benefit of identifying discrete geographic areas where MUSF support is available might be the facilitation of a viable requisition or auction mechanism for assigning MUSF support. If successful, such a scheme could encourage investment by carriers that do not currently serve the area, at a cost to the MUSF that might be lower than the amount otherwise assigned to the incumbent rural POLR service provider. However, in the absence of a mandated POLR service provider, telephone service in non-POLR service areas would cease to be regulated by the Commission. Instead, the telecommunications market (rather than regulators) would determine the availability, price, and service quality for POLR service (or any other type of service) in the areas where sufficient competition or availability is found to exist, and the POLR service obligation is eliminated.

²⁹ There is no statutory limit to the monetary size of the MUSF, the amount of money that carriers are required to contribute to the fund (a fee that is typically "passed through" from customers in the form of a surcharge), or the total amount that may be disbursed to rural incumbent local exchange carriers through the MUSF. Pursuant to the Commission's rules, only rural carriers are eligible to receive MUSF support. FairPoint is not currently eligible to receive MUSF support. Moreover, the amount of MUSF support that a given carrier receives is calculated as the difference between the revenue requirement of the carrier and the revenues that the carrier earns through the sale of its telephone services at an "imputed" benchmark rate. As a consequence, the size of the MUSF is, by rule, as large as it "needs to be" in order to satisfy the "revenue deficiency," of the rural carriers that have demonstrated that they require such support.

Finally, an alternative to making MUSF support available to POLR service providers in areas which lack sufficient competition might be to provide subsidies directly to consumers to help to defray the costs to them of purchasing alternative (and likely more expensive) services that are available to satisfy their need for basic telephone service. For example, the satellite VoIP service, HughesNet Voice, provides unlimited telephone usage, but must be purchased together with a satellite broadband service. The minimum "all-in" monthly price for HughesNet Voice is approximately \$80. It may well be less expensive to subsidize the purchase of satellite VoIP or other similar services for individual customers who satisfy some defined level of financial hardship, than to provide a company-specific MUSF subsidy to a carrier willing to offer ubiquitously a form of basic telephone service that customers are increasingly finding does not satisfy their modern communications needs.

7. What is the broadband penetration of each incumbent local exchange carrier that does and each incumbent local exchange carrier that does not receive state universal service funds? At what tiers, as determined by the Federal Communications Commission, do incumbent local exchange carriers provide service throughout the State? Should providers of provider of last resort service that receive state universal service funds be required to increase the availability, quality or affordability of broadband in this State?
 - a. What is the broadband penetration of each incumbent local exchange carrier that does and each incumbent local exchange carrier that does not receive state universal service funds?

Carriers report data to different bodies that show differing views of the overall broadband picture. For example, as illustrated by the chart on page 46, the ILECs combined provide approximately 40% of their customers with broadband service, which represents approximately 24% of the households located within ILEC service areas.³⁰ These numbers reflect one view of broadband penetration: the approximate "take rate" for ILEC broadband within their service territories.³¹ The Commission's numbers are aggregated from a report filed by carriers with the FCC.³²

³⁰ There are some households in Maine that are located in very remote areas outside of the service area for any ILEC.

³¹ These numbers are an approximation because they do not necessarily reflect ILEC customers who take only broadband service (*i.e.*, no voice service) from the ILEC.

³² The Commission is prohibited from disclosing disaggregated (*i.e.*, carrier-specific) Form 477 data publicly. The Commission requested that the carriers provide such data directly to the Commission, and also requested that the carriers allow the Commission to publicly disclose the information.

Broadband Speed	Total Connections*	Percent of Access Lines Served**	Percent of Occupied Housing Units in Overall Service Area***
Greater than 200 kbps and less than 768 kbps	2,529	0.73%	0.43%
Greater than or equal to 768 kbps and less than 1.5 mbps	13,357	3.86%	2.25%
Greater than or equal to 1.5 mbps and less than 3 mbps	20,160	5.83%	3.39%
Greater than or equal to 3 mbps and less than 6 mbps	72,469	20.96%	12.20%
Greater than or equal to 6 mbps and less than 10 mbps	23,700	6.85%	3.99%
Greater than or equal to 10 mbps and less than 25 mbps	6,243	1.81%	1.05%
Greater than or equal to 25 mbps and less than 100 mbps	1,291	0.37%	0.22%
Greater than or equal to 100 mbps	6	0.00%	0.00%
Totals	139,755	40.42%	23.53%

* Total Connections are the total number of broadband connections ILECs reported to the FCC for broadband service in a Census Tract.

** Percent of Voice Access Lines Served is based on the total number of ILEC access lines (345,780) reported to the Commission by the ILECs in its 2013 Annual Report.

*** Percent of Occupied Housing Units Passed in Overall Service Area is based on 593,932 occupied housing units located within the boundaries of all the ILEC exchanges. Housing units are defined by the Census Bureau and can be described as occupied or unoccupied. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall.

Alternatively, broadband penetration can be measured as the availability of broadband service within a given service territory, regardless of whether the service is actually purchased by customers. By that measure, as reflected in the chart below, ILEC-provided broadband is available to approximately 81% of the households in the ILECs' service territories.³³

ILEC	Occupied Housing Units in Broadband Coverage Area*	Occupied Housing Units (2010 Census Data)	Percent of Occupied Households Eligible for Broadband	Receives MUSF
China Telephone	2,400	3,805	63.07%	Yes
Northland Telephone Co.	12,318	17,811	69.16%	No
Community Service Telephone Co.	7,834	10,545	74.29%	No
Sidney Telephone Co.	1,113	1,891	58.86%	Yes
Maine Telephone Co.	6,517	8,180	79.67%	Yes
Standish Telephone Co.	5,833	7,293	79.98%	Yes
FairPoint NNE	396,002	470,060	84.24%	No
UniTel Co.	3,200	5,002	63.97%	Yes
Union River	738	1,331	55.45%	Yes
Cobboosecontee Tel & Tel Co.	941	1,560	60.32%	Yes
Hampden Telephone Co.	2,222	3,989	55.70%	Yes
Hartland & St. Albans Telephone Co.	2,348	3,822	61.43%	Yes
Island Telephone Co.	212	250	84.80%	Yes
Somerset Telephone Co.	4,973	9,395	52.93%	Yes
Warren Telephone Co.	1,222	2,162	56.52%	Yes
West Penobscot Telephone Co.	1,366	2,880	47.43%	Yes
Coastal Telephone Group (Lincolnville and Tidewater)	9,942	10,302	96.51%	No (LV) Yes (TW)
Mid-Maine Communications	4,548	7,621	59.68%	Yes
Pine Tree Tel & Tel Co.	5,545	6,528	84.94%	No
Saco River Tel. & Tel Co.	8,248	8,689	94.92%	No
Oxford Networks (Oxford and Oxford West Tel.)	6,216	10,816	57.47%	No
Totals	483,738	593,932	81.45%	

*Housing units are defined by the Census Bureau and can be described as occupied or unoccupied. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall.

³³ In contrast to the aggregated data in the "take rate" chart above, the data in the "availability" chart below is derived from publicly accessible sources. NTIA public data set, available at <http://www.broadband.gov/data-download>.

- b. At what tiers, as determined by the Federal Communications Commission, do incumbent local exchange carriers provide service throughout the State?

The FCC's broadband speed tiers are as follows:

Tier 1 - Less than or equal to 200 Kbps

Tier 2 - Greater than 200 Kbps, less than 768 Kbps

Tier 3 - Greater than or equal to 768 kbps, less than 1.5 Mbps

Tier 4 - Greater than or equal to 1.5 Mbps, less than 3 Mbps

Tier 5 - Greater than or equal to 3 Mbps, less than 6 Mbps

Tier 6 - Greater than or equal to 6 Mbps, less than 10 Mbps

Tier 7 - Greater than or equal to 10 Mbps, less than 25 Mbps

Tier 8 - Greater than or equal to 25 Mbps, less than 50 Mbps

Tier 9 - Greater than or equal to 50 Mbps, less than 100 Mbps

Tier 10 – Greater than or equal to 100 Mbps, less than 1 Gbps

Tier 11 – Greater than or equal to 1 Gbps

Only three carriers directly provided the Commission with a breakdown of the customers served at the various FCC speed tiers: UniTel, Lincolnville Networks, and Tidewater Telecom.

UNITEL

Tier	Speed Tier Description	Broadband Customers	Percent of Broadband Customers	Percent of Total Customers
2	Greater than 200 Kbps, less than 768 Kbps			
3	Greater than or equal to 768 kbps, less than 1.5 Mbps			
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	4	0.2%	0.1%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	379	17.9%	10.7%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	1717	81.3%	48.7%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	12	0.6%	0.3%
8	Greater than or equal to 25 Mbps, less than 50 Mbps			
	Totals	2112	100.00%	59.9%

LINCOLNVILLE NETWORKS

Tier	Speed Tier Description	Broadband Customers	Percent of Broadband Customers
2	Greater than 200 Kbps, less than 768 Kbps	1	>0.1%
3	Greater than or equal to 768 kbps, less than 1.5 Mbps		
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	97	5.8%
5	Greater than or equal to 3 Mbps, less than 6 Mbps		
6	Greater than or equal to 6 Mbps, less than 10 Mbps	71	4.3%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	925	55.4%
8	Greater than or equal to 25 Mbps, less than 50 Mbps		
9	Greater than or equal to 50 Mbps, less than 100 Mbps	576	34.5%
	Totals	1670	100.00%

TIDEWATER TELECOM

Tier	Speed Tier Description	Broadband Customers	Percent of Broadband Customers
2	Greater than 200 Kbps, less than 768 Kbps	11	>0.1%
3	Greater than or equal to 768 kbps, less than 1.5 Mbps		
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	540	5.5%
5	Greater than or equal to 3 Mbps, less than 6 Mbps		
6	Greater than or equal to 6 Mbps, less than 10 Mbps	733	7.4%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	6449	65.4%
8	Greater than or equal to 25 Mbps, less than 50 Mbps		
9	Greater than or equal to 50 Mbps, less than 100 Mbps	2126	21.6%
	Totals	9859	100.00%

The Commission was able to obtain, from publicly available non-company sources, detailed speed tier information for Cobboosecontee Tel. & Tel., Hampden Telephone, Hartland & St. Albans Telephone, Island Telephone, Somerset Telephone, Warren Telephone, and West Penobscot Telephone.³⁴

COBBOSSECONTEE TEL. & TEL.

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	239	25.40%	15.32%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	556	59.09%	35.64%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	88	9.35%	5.64%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	44	4.68%	2.82%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	14	1.49%	0.90%
	Totals	941	100.00%	60.32%

³⁴ Information obtained from the NTIA public data set, available at <http://www.broadband.gov/data-download>.

HAMPDEN TELEPHONE

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	61	2.75%	1.53%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	318	14.31%	7.97%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	1117	50.27%	28.00%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	315	14.18%	7.90%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	407	18.32%	10.20%
8	Greater than or equal to 25 Mbps, less than 50 Mbps	4	0.18%	0.10%
	Totals	2222	100.00%	55.70%

HARTLAND & ST. ALBANS TELEPHONE

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	873	37.18%	22.84%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	508	21.64%	13.29%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	605	25.77%	15.83%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	31	1.32%	0.81%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	298	12.69%	7.80%
8	Greater than or equal to 25 Mbps, less than 50 Mbps	33	1.41%	0.86%
	Totals	2348	100.00%	61.43%

ISLAND TELEPHONE

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	26	12.26%	10.40%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	66	31.13%	26.40%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	118	55.66%	47.20%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	2	0.94%	0.80%
	Totals	212	100.00%	84.80%

SOMERSET TELEPHONE

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	662	13.31%	7.05%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	1097	22.06%	11.68%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	1640	32.98%	17.46%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	309	6.21%	3.29%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	1210	24.33%	12.88%
8	Greater than or equal to 25 Mbps, less than 50 Mbps	55	1.11%	0.59%
	Totals	4973	100.00%	52.93%

WARREN TELEPHONE

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	166	13.58%	7.68%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	129	10.56%	5.97%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	600	49.10%	27.75%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	44	3.60%	2.04%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	283	23.16%	13.09%
	Totals	1222	100.00%	56.52%

WEST PENOBSCOT TELEPHONE

Tier	Speed Tier Description	Occupied Housing Units in Broadband Coverage Area	Percentage Covered by Speed Tier Available	Percent of Occupied Housing Units Passed in Overall Service Area
3	Greater than or equal to 768 kbps, less than 1.5 Mbps	354	25.92%	12.29%
4	Greater than or equal to 1.5 Mbps, less than 3 Mbps	327	23.94%	11.35%
5	Greater than or equal to 3 Mbps, less than 6 Mbps	340	24.89%	11.81%
6	Greater than or equal to 6 Mbps, less than 10 Mbps	47	3.44%	1.63%
7	Greater than or equal to 10 Mbps, less than 25 Mbps	298	21.82%	10.35%
	Totals	1366	100.00%	47.43%

The Commission was not able to obtain detailed speed tier information for the remaining ILECs. Consequently, we only report the maximum advertised speed for each ILEC.³⁵ The maximum advertised speed should not be read to indicate actual availability or performance.

ILEC	MAXIMUM ADVERTISED SPEED
China Telephone	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Northland Telephone	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Community Service Telephone	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Sidney Telephone	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Maine Telephone	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Standish Telephone	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
FairPoint-NNE	Tier 7: Greater than or equal to 10Mbps; less than 25 Mbps
Union River	Tier 7: Greater than or equal to 10Mbps; less than 25 Mbps
Mid-Maine Communications	Tier 5: Greater than or equal to 3Mbps; less than 6 Mbps
Pine Tree Tel. & Tel.	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Saco River Tel. & Tel.	Tier 6: Greater than or equal to 6 Mbps; less than 10 Mbps
Oxford Telephone	Tier 5: Greater than or equal to 3Mbps; less than 6 Mbps
Oxford West Telephone	Tier 5: Greater than or equal to 3Mbps; less than 6 Mbps

³⁵ Information obtained from the NTIA public data set, available at <http://www.broadband.gov/data-download>.

- c. Should providers of provider of last resort service that receive state universal service funds be required to increase the availability, quality or affordability of broadband in this State?

MUSF support for POLR service should not be linked to broadband policy.

The term "POLR service" is intended to describe the most basic level of telephone service that should be available to any customer in Maine who wants it, at an affordable price. As defined in Maine statute, POLR service consists of the minimal set of features that are essential for any customer connected to the telecommunications network. A policy of advancing the availability of broadband service in Maine through the disbursement of funds collected from telecommunications customers raises a set of economic and legal issues that are entirely different in kind, complexity, and sheer financial magnitude than those that are implicated by the State's policy goal of universal *basic voice* service. Moreover, it is not entirely clear to the Commission that the particular carriers that are, or might be, assigned the POLR service obligation are those that are best suited, in terms of both the types of technologies that they employ to provide POLR service and the business model under which they operate, to receive and efficiently use public support for the purpose of expanding broadband availability, quality, or affordability in Maine. In the Commission's view – a view that is based in large part on the considerable pitfalls experienced in connection with previous attempts to establish and enforce broadband build-out requirements imposed in connection with FairPoint's acquisition of the network assets of Verizon – it would be counterproductive to attempt to create a direct linkage, through disbursements made through the MUSF, between the policy of ensuring universal voice service and the policy of encouraging improved broadband in Maine. Further, such an approach echoes the "regulated monopoly" approach taken in the pre-competition era, and ignores the technological advances, and expansion in both speed and service area, which have occurred since the monopoly paradigm was abandoned. We see little value in trying to apply this archaic model to broadband.

However, if the Legislature wishes to contemplate major subsidies to providers (subsidies in the range of FairPoint's recent POLR service funding request), the best approach, in the Commission's view, would be a subsidy designed to support broadband buildout. Such telecommunications provider subsidies should not be linked or dependent on the provision of POLR service. Broadband expansion is, in and of itself, an important policy objective; trying to cobble that expansion on to the existing, and aging, copper telephone infrastructure is likely not the best course when the telephone infrastructure itself is being replaced by carriers. Rather, a forward looking state policy should recognize that basic telephone service will be provided over telecommunications networks designed to deliver broadband infrastructure.

8. In what ways can the Commission and the Legislature coordinate any changes to provider of last resort service or to state universal service fund support with ongoing policy developments at the federal level resulting from cases before the Federal Communications Commission, including the call for rural broadband experiments, the Federal Communications Commission's Connect America Fund and changes to intercarrier compensation?

At this time, it is likely that the most fruitful opportunity for the Commission and the Legislature to coordinate efforts in connection with opportunities for federal funding of broadband expansion through the FCC is to establish a clearing house of relevant data, analysis, and advice that could assist smaller alternative providers, and also perhaps municipalities, in their efforts to secure such funding.

The Commission has experience advocating before the FCC in order to maximize the benefits of federal action to ratepayers in the State of Maine. This advocacy takes the form of participation in FCC dockets, and in the federal/state regulatory joint board process pursuant to 47 U.S.C. §§ 410(c) and 254.

Nonetheless, the primary responsibility for universal service lies with the FCC.³⁶ The FCC is responsible for providing sufficient support to ensure rates and services in rural areas are comparable with those in urban areas; however states may, and often do, provide support in addition to the federal support.³⁷ The Commission has actively participated in cases before the FCC regarding the sufficiency of federal support,

³⁶ The FCC is, however, increasingly relying on states to share some of the universal service burdens. See, e.g., *In The Matter Of Connect America Fund*, WC Docket No. 10-90, FCC 11-161, Report and Order and Further Notice of Proposed Rulemaking, ¶ 737 (Rel. November 18, 2011) ("To the extent additional subsidies are necessary, such subsidies will come from the Connect America Fund, and/or state universal service funds."); *In the Matter of Connect America Fund*, WC Docket No. 10-90, FCC 14-98, Report and Order and Further Notice of Proposed Rulemaking, ¶ 97, 74 (Rel. July 14, 2014) ("The Commission recognized in the USF/ICC Transformation Order that universal service is a shared Federal and state responsibility, and that it is critical to our reforms' success that states remain key partners even as these programs evolve and traditional roles shift. . . . We remain committed to working with our state and other governmental partners to advance our mutually shared goals of preserving voice service and extending broadband-capable infrastructure to consumers across the nation.").

³⁷ In 2013, Maine ILECs received, in total, approximately \$25 million in federal high cost USF support, of which approximately \$20 million was paid for through the federal USF contributions of Maine telecommunications consumers. *2014 Universal Service Monitoring Report of the FCC*, Table 1.9. Maine disburses MUSF support in the amount of \$7.4 million per year to Maine ILECs, all of which is contributed by Maine consumers.

including advocating alongside other similarly situated states for outcomes that would not put Maine in a relatively disadvantaged position.

With regard to broadband specifically, the FCC is currently in the process of phasing out support for traditional voice service and is redirecting that support to expand broadband service in unserved areas through its Connect America Fund ("CAF"). As legacy universal service funds supporting voice service are repurposed to provide broadband service, there may develop increasing pressure on states to establish state support mechanisms to help preserve universal voice service. Consistent with its recent MUSF Order, the Commission's view is that moneys from state universal service funds such as the MUSF should not be disbursed to an ILEC in the absence of some credible showing that the ILEC has undertaken serious efforts to maximize revenues from services offered to its own customers, revenues that might be reasonably sought through the federal USF, and that the ILEC has attempted to reduce costs.

There is little opportunity for the State to participate in the operation of the FCC's CAF program, as the award of CAF support is entirely a federal function. Likewise, the decision of whether to accept an award of CAF support, and to commit to the capital expenditures required under that program, falls squarely within the discretion of the ILECs to whom such support is offered. That decision invariably involves a business analysis of the likely returns on such investment. It is, of course, possible for Maine to establish a separate "broadband" funding program that could be used to provide subsidies in addition to those offered by the FCC in the hopes that this would create a financial incentive for a carrier to accept CAF support that it would otherwise choose to decline. However, such an approach might undermine the opportunity of alternative broadband providers in Maine to "bid" for CAF support through the auction that the FCC intends to hold for the disbursement of CAF dollars that ILECs might choose to forgo. It may well be that successful bidders in such an auction would be more innovative, and would use more modern technologies, than would an ILEC in accomplishing the broadband build-out that the federal program is intended to achieve. Therefore, at this time, the Commission does not advocate the creation of a separate, state "broadband" funding program for the purpose of supplementing funds available through the CAF program.

There are other ways, however, that the Commission or, alternatively, the ConnectME Authority, could provide informational and advisory assistance to alternative carriers, and perhaps municipalities, in obtaining federal broadband funding. To the extent that smaller carriers do not have the expertise to conduct analyses to support their applications or bids for CAF funding, or for any further expansion of the FCC's so-called CAF "experiment" program, the State might be in a position to assist in those efforts.

9. Can the State ensure the provision of universal access to telecommunications service at just, reasonable and affordable rates consistent with the federal Telecommunications Act of 1996 without maintaining a regulated provider of last resort service? If so, what is a reasonable time frame for eliminating a regulated provider of last resort service?
 - a. Can the State ensure the provision of universal access to telecommunications service at just, reasonable and affordable rates consistent with the federal Telecommunications Act of 1996 without maintaining a regulated provider of last resort service?

A phased approach to reducing the areas for which there needs to be a regulated POLR service provider might enable the State to accomplish its universal voice service goals while simultaneously withdrawing from the regulation of POLR service providers.

It is not possible to predict whether, in the absence of state regulation requiring that certain carriers offer basic local exchange service within the entirety of their service territories, the unregulated market would supply universal access to basic telecommunications service at rates now considered just, reasonable, and affordable. It is possible, however, to observe that in the recent MUSF Proceeding, FairPoint was unable to identify any particular portion of its service territory that it would abandon if it were no longer required to offer ubiquitous POLR service. Likewise, it is a fact that, with the exception of FairPoint, none of Maine's designated POLR service providers have sought Commission approval for an increase in their basic local service rates within the past ten years. Further, increased competition in the telecommunications services market, and the appearance of new forms of telecommunications services, suggest that the continuation of a regulated provider of last resort service may no longer be necessary to ensure that all citizens have access to some form of basic telecommunications service. Certainly, the growth of competition and the increase in alternative forms of telecommunications services have in recent years both undermined the effectiveness of, and to a large degree supplanted, the methods that economic regulators such as the MPUC have traditionally used to advance the policy of universal service.

Historically, the rates charged for telephone service in Maine were substantially cross-subsidized. Rates in urban areas subsidized rates in rural areas. Business rates subsidized residential rates. Long distance rates between large cities subsidized long distance rates between small towns. In addition, the joint and common costs of equipment used to provide a variety of services were allocated among services so that sales of discretionary services, such as long distance, calling features, and even telephones (when telephone equipment was a phone company monopoly) subsidized basic telephone rates. Due to these subsidies, the rates for basic local exchange service in any given geographic location have never been tied to the actual, location specific cost of providing basic local exchange service in that location. These largely

implicit subsidies were intended to keep basic local service rates low so that as many people as possible could afford to connect to the telephone network. The Commission was able to advance this policy of universal service through its authority to determine, in a rate case, the "revenue requirement" for each carrier.

The revenue requirement was based on the company's total investments needed to provide all its services, its depreciation expenses and its return (*i.e.*, profit). Even though the total revenues from all services covered total company costs, the price for each particular service did not necessarily have a connection with either the economic or accounting cost of providing that service. Because the majority of costs for telephone service are "joint and common" among many services, the allocation of those costs to any given service depended as much on political and social welfare concerns as on economic principles. In part through the allocation of these costs, rates for urban exchange service, long distance service and access charges were set at levels often far above their direct costs.

In Maine, as in most states, the Commission has historically set rural exchange rates at either the same level or, pursuant to a public policy of "value of service pricing," at levels lower than the local rates charged in urban areas. Likewise, intrastate long distance rates for calls between rural towns of a particular distance apart were set at the same level as the rates charged for intrastate long distance calls between larger cities separated by a similar distance, even though the cost of providing that service was greater for the rural routes. This practice is known as rate averaging, and it is, at present, a basic policy used by the Commission when it establishes intrastate rates.

Prior to the introduction of competition in the telecommunications industry, there existed a so-called "regulatory bargain." Pursuant to this bargain, the State granted to the telephone carriers a monopoly franchise in a particular service territory. In exchange for this exclusive franchise, the carriers were expected to provide service to all customers residing in the territory. Today, these carriers are known as the ILECs. For its part, the State, through the Commission, set rates at levels which would allow each ILEC the opportunity (but not a guarantee) to receive revenues that would cover all of its prudently incurred costs and also to earn a reasonable return on its investment in plant and equipment. Schedules of rates for various services were filed with the Commission as tariffs. Any customer within the ILEC's territory could purchase service pursuant to the terms, conditions, and rates set forth in the tariff. As noted above, the rate schedules were designed not only to cover the ILEC's revenue requirement, but also to advance policies such as rate averaging and implicit subsidization.

The introduction of competition, first in the long distance market and then in the local exchange market, has gradually eroded the underpinnings of the historical "regulatory bargain." The exclusivity of the "monopoly" franchises has been eliminated. Competitors, particularly those with considerable network facilities of their own, are able to select precisely where they will provide service. Such competitors generally favor lower-cost, more densely populated areas and are able to set their rates accordingly. The lower-cost areas for a competitor tend also to be the lower-cost areas for the ILEC.

Through aggressive pricing, made possible in part by the fact that competitors are not obligated to serve in high-cost areas, competitors take customers from the ILEC whose rate structure is based on rate averaging principles. This phenomenon is commonly known as "cream skimming" or "cherry picking." As the ILEC loses its most "profitable" lines to competitors, the opportunity for cross-subsidization and rate averaging by the ILEC diminishes. This situation began in Maine more than ten years ago and, along with the technological advancements that have made alternative means of communication (notably, wireless service) popular among consumers, is at least partly responsible for Maine's largest ILEC –FairPoint – losing a substantial number of customers (over half in urban areas) to competitors.

Regardless of whether regulation continues to be necessary in order to ensure that the market delivers "universal service," both Maine and federal law provide express statutory "assurances" of universal access to telecommunications services. Under 35-A M.R.S. § 7221(1), each of Maine's ILECs is designated as the POLR service provider required to offer basic exchange service throughout its service territory. Upon the petition of an ILEC, the Commission may reassign the POLR service obligation to another willing carrier. 35-A M.R.S. § 7221(2).

Under federal law, each of Maine's ILECs is also a "common carrier" engaged in interstate communication by wire, and a "telecommunications carrier," and thus has a duty "to furnish such communication service upon reasonable request therefor" and to "establish physical connections with other carriers." 47 U.S.C. § 201(a). Federal law prohibits such a carrier from discontinuing, reducing, or impairing service to any community or part of a community without prior FCC certification that such discontinuance would not adversely affect the "public convenience and necessity." 47 U.S.C. § 214(a).

Because they have been offering interstate telecommunications services – namely, exchange access services – in Maine, each of Maine's ILECs must continue to provide those services upon reasonable request until it receives authority from the FCC to discontinue those services. Under Section 214(a) of the Communications Act, the FCC may authorize the discontinuance of a common carrier offering if it finds "that neither the present nor future public convenience and necessity will be adversely affected thereby." Further, upon receipt of any request for discontinuance authority, the FCC must give notice to the public as well as cause notice to be given to the affected state's governor and the U.S. Secretary of Defense. 47 U.S.C. § 214(b). See *also* 47 C.F.R. § 63.71(a) and (b). In the case of services in which the applicant is a "dominant" carrier (FairPoint, for instance, is considered "dominant" in the provision of interstate exchange access services in the territories in Maine where it is the ILEC), the FCC will authorize the proposed service discontinuance "unless it is shown that customers would be unable to receive service or a reasonable substitute from another carrier or that the public convenience and necessity [would be] otherwise adversely affected." 47 C.F.R. § 63.71(a)(5)(ii).

The FCC has considerable discretion in ruling on discontinuance applications under Section 214. *FCC v. RCA Commc'ns, Inc.*, 346 U.S 86 (1953). The Commission will balance the interests of the carrier and the affected user community, typically considering: (1) the financial impact of requiring the carrier to continue to provide the service; (2) the need for the service generally; (3) the need for the particular facilities in question; (4) the existence, availability, and adequacy of alternatives, including the amount of prior notice given by the carrier allowing customers to seek out alternative providers; and (5) the likelihood of increased charges for alternative services, although this factor may be outweighed by other considerations.³⁸ A discontinuance application under Section 214 of the Communications Act will be automatically granted on the 60th day after of FCC Public Notice of the filing unless the agency notifies the applicant that the grant will not be automatic. 47 C.F.R. § 63.71(c). The FCC has removed applications from this streamlined treatment when it had cause for concern that customers would be unable to receive service from a substitute provider, or the public convenience and necessity otherwise would be adversely affected. See, e.g., *Applications of Verizon New Jersey Inc. and Verizon New York Inc. To Discontinue Telecommunications Services Will Not Be Automatically Granted*, 28 FCC Rcd 12252 (Wireline Competition Bur. 2013).

In addition, Maine's ILECs have each been designated to receive, as an ETC, federal universal service support for interconnected voice telecommunications services. 47 U.S.C. § 214(e). As ETCs, Maine's ILECs are required to continue to provide voice services throughout their service areas. Federal law does provide a mechanism for an ETC to petition the MPUC to relinquish its designation for a given area, and, presumably, the concomitant federal universal service obligation, provided that there is more than one ETC offering service in the area in question, and that the MPUC is able to ensure that the remaining ETC or ETCs will be able to service all customers formerly served by the relinquishing carrier. Arguably, Section 214(e) of the federal statute does not create an independent service obligation of telecommunications carriers designated as ETCs, but merely governs their designation for federal universal service purposes,

³⁸ See, e.g., *In the Matter of Section 63.71 Application of Verizon Long Distance LLC for Authority to Discontinue Domestic Telecommunications Services*, WC Docket No. 10-116, DA 10-1236, Order ¶ 6 (rel. June 30, 2010) (granting discontinuance authority where substitutes to Verizon SmartTouch service were found to exist and consumers would not suffer unreasonable hardship); *In the Matter of Section 63.71 Application of MCI Communications Services Inc. d/b/a Verizon Business Services for Authority to Discontinue Domestic Telecommunications Services*, WC Docket No. 08-14, DA 08-586, Order ¶¶ 10-11 (rel. Mar. 17, 2008) (granting discontinuance authority where notice given by carrier was sufficient for customers to find alternative to MCI telex service); *In the Matter of Section 63.71 Application of KMC Telecom V, Inc. and KMC Telecom of Virginia, Inc. for Authority to Discontinue Domestic Telecommunications Services*, WC Docket No. 05-309, DA 05-3334, Order (rel. Dec. 28, 2005) (granting discontinuance authority where carrier lacked sufficient funding to maintain services in 39 states, and notice given by carrier was sufficient for customers to find alternative to local access services).

and the terms under which that designation may be relinquished. On the other hand, a plausible argument can be made that Section 214(e) does create an independent federal obligation on the part of ETCs to offer ubiquitous exchange service in their service territories.

It is tempting to avoid altogether the fundamental economic question of whether regulation continues to be necessary in order to assure universal service, and instead to view Maine's state POLR service obligation as merely duplicative of the federal ETC, "common carrier," and "telecommunications carrier" obligations. Under this view of the overlap between state and federal law, one might therefore argue that Maine could safely repeal the POLR service provisions of Title 35-A against a backdrop of federal law in which the ILECs would remain obligated to provide exchange service ubiquitously throughout their service territories. This is not, however, to say that Maine could, or even should, rely entirely on the federal government and walk away from providing state support for universal service, particularly with regard to smaller, rural carriers. While the legalistic reality of federal support existing independently of state support may well pertain in the short term, it is not entirely clear that federal statutory guarantees of universal service would, over the longer term, prove a suitable substitute for state regulation in the event that it turns out that a regulatory approach to universal service is desirable.

First, it is the state POLR service statute, and not federal law, that authorizes the Commission to establish local service rates, and to enforce minimum service quality standards for POLR service. Although the FCC does establish the amount of federal USF support received by ETCs, it does not have the authority to set local exchange rates. Further, involvement, if any, by the FCC in seeking to rectify deficiencies in service quality experienced in a particular territory has been, historically, quite minimal.

Second, it is possible that Maine's ILECs could seek relief from federal statutory requirements by petitioning the FCC for what is known as regulatory forbearance. Such a petition must be acted upon by the FCC within one year (plus an additional 90 days if the FCC deems necessary to complete its review), otherwise it will be deemed granted by operation of law. The FCC must grant the requested forbearance if it determines that: (1) enforcement of the provision is not necessary to ensure that the carrier's charges, practices, classifications or regulations are just and reasonable, and not unjustly or unreasonably discriminatory; (2) enforcement of the provision is not necessary for the protection of consumers; and (3) forbearance would be consistent with the public interest (the Commission must weigh, as part of this analysis, whether forbearance would promote competitive market conditions). The FCC may grant or deny forbearance in whole or in part. Generally, a state may not continue to apply or enforce any provision of the Communications Act from which the FCC decides to forbear.

Third, although the State would have an opportunity to file comments with the FCC in connection with any request by a Maine ILEC to discontinue providing exchange access service in its service territory (or a portion of its territory), advocacy by Maine in

opposition to any such request would tend to be undermined to the extent that the State had previously repealed its statutory requirement that ILECs provide ubiquitous local exchange service, in the form of POLR service, throughout their territories.

Federal law should not, therefore, be viewed as an impenetrable backstop that will perpetually insure universal telecommunications service. Instead, policymakers should consider whether it remains necessary to regulate POLR service in order to assure universal service. In the Commission's view, the state of the marketplace suggests that a phased approach to elimination of the POLR service requirement would be the most prudent course of action. In the first phase of such an approach, the Legislature could authorize the Commission to eliminate the POLR service obligation in those areas where consumers have several competitive alternatives; the state's most populous urban areas would be an obvious starting point. The Commission could monitor the progress of the phase out of POLR service, and gradually eliminate the obligation in those areas where sufficient competition can be shown to exist.

For example, the legislature of the state of Texas has adopted a comprehensive, and complex, statutory approach to deregulating local exchange service (including the phasing out regulated POLR service) and phasing out the State's high cost universal service fund. The Public Utility Commission of Texas ("Texas PUC") has implemented this program through the adoption of rules and several proceedings over the course of the past six years. The Texas statute and regulatory rules are, in many respects, not pertinent to deregulatory policy in Maine, not least because Maine has already deregulated all telephone service with the sole exception of POLR service. For instance, under the Texas scheme, certain ILECs can "opt in" to a certain level of continued price regulation of a variety of local services, including but not limited to POLR service. Tex. Util. Code Ann. § 65.053 (2013). In Maine, by contrast, there is simply no regulation of non-POLR service.

Nonetheless, there are several principles embodied in the Texas approach that may be useful as Maine considers whether, and how, it might remove or modify the POLR service obligation. For instance, an ILEC may petition the Texas PUC to deregulate the market in which the carrier operates, and the Commission may not continue regulation of that market if (1) the population of the area included in the market is at least 100,000; and (2) there are at least two unaffiliated competitors of the ILEC operating in all or part of that market which provide voice service. *Id.* § 65.052(b). A company is a "competitor" of the ILEC regardless of the technology it employs to deliver voice service. *Id.* § 65.052(b)(2)(B). The statute expressly provides that a carrier that uses VoIP technology, satellite technology, or wireless technology shall be considered a competitor for the purpose of determining whether a market should be deregulated. *Id.* Where a market is deregulated, the petitioning carrier is no longer required to provide POLR service. *Id.* § 65.102(a)(1). In addition, the Texas PUC has implemented a progressive phase down of state high-cost universal service. First, universal service support is not available for any wire center that has a population in excess of 30,000 persons. 16 Tex. Admin. Code § 26.403(e)(5)(A) (2012). Second, USF support is available to regulated carriers only upon a showing that it needs such support in order

to provide basic local service in a particular wire center within a regulated market. *Id.* § 26.403(e)(5)(B). Finally, the "base" amount of USF awarded is automatically decreased by 25% per year during the transition period. *Id.* § 26.403(e)(3).

- b. If so, what is a reasonable time frame for eliminating a regulated provider of last resort service?

A phased approach to eliminating regulated POLR service, concurrent with reductions in MUSF support, might be accomplished over a period of several years.

Should the Legislature adopt a phased approach to the elimination of POLR service in which the Commission would evaluate the competitiveness of particular geographic areas upon petitions by POLR service providers, the process would depend on the number and frequency of such petitions, and might require an implementation period, perhaps over several years. The current POLR service providers believe that they could "wind down" the provision of POLR service in short order, likely in less than 90 days. Consumers, however, would likely require more time to transition away from POLR service. Requiring POLR service providers to continue to provide POLR service to existing customers within a "deregulated" area for a specified period of time, perhaps six-months, before changing the price or attributes of the service could facilitate the transition. In addition, several carriers have indicated to the Commission that, even in the absence of a mandate, they would likely continue to provide a POLR service equivalent product, at least to their existing POLR service customers.