

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Deployment of Nationwide Broadband Data to)	WC Docket No. 07-38
Evaluate Reasonable and Timely Deployment of)	
Advanced Services to All Americans,)	
Improvement of Wireless Broadband)	
Subscribership Data, and Development of)	
Data on Interconnected Voice over Internet)	
(VoIP) Subscribership)	

**JOINT COMMENTS OF THE MASSACHUSETTS DEPARTMENT OF
TELECOMMUNICATIONS AND CABLE AND THE MASSACHUSETTS
GEOGRAPHIC INFORMATION SYSTEM**

I. INTRODUCTION

The Massachusetts Department of Telecommunications and Cable¹ (“MDTC”) and the Massachusetts Geographic Information System (“MassGIS”)² (“Massachusetts Joint Commenters”) hereby submit these brief joint reply comments in response to certain Comments on broadband availability mapping filed on July 17, 2008, pursuant to the Report and Order Further Notice of Proposed Rulemaking, released by the Federal Communications Commission

¹ Formerly, the Massachusetts Department of Telecommunications and Energy. The MDTC regulates cable and telecommunications providers within the Commonwealth.

² MassGIS is the Commonwealth's Office of Geographic and Environmental Information, within the Massachusetts Executive Office of Energy and Environmental Affairs. It is the official state agency assigned to the collection, storage, and dissemination of geographic data. In addition, it coordinates GIS activity within the Commonwealth and sets standards for geographic data to ensure universal compatibility.

(“FCC”) on June 12, 2008 in the above-referenced docket.³ In these reply comments, the Massachusetts Joint Commenters specifically respond to certain Comments addressing the FCC’s tentative conclusion “that the Commission should collect information that providers use to respond to prospective customers to determine on an address-by-address basis whether service is available,” and its question “on what standardized formats could be used to collect the information.” Broadband Data Order and Further NPRM at ¶ 35.

States such as Massachusetts that are funding their own programs to close broadband coverage gaps need access to accurate and detailed data on the location of those gaps, in order to ensure accountability in the targeting of public funds.⁴ Therefore, the Massachusetts Joint Commenters support the comments of parties that argue that the FCC should collect, and states should get direct access to, address-related information in order to promote broadband availability at the state level.

With respect to the format in which the data should be collected, we argue that standardized Geographic Information System (“GIS”) coverage maps in digital format are best. Alternatively, the Commission could require broadband providers to make this information

³ In the Matter of Deployment of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership, WC Docket 07-38, Report and Order and Further Notice of Proposed Rulemaking, FCC 07-17 (rel. June 12, 2008) (“Broadband Data Order and Further NPRM”).

⁴ In Massachusetts, legislation is expected to be signed by Governor Deval Patrick which will create a new broadband institute to work with public and private entities to bring broadband to unserved and underserved areas of the state, by investing up to \$40 million

available through geocoded subscriber lists, either as a range of addresses or as individual addresses, as set forth in more detail below.

II. DISCUSSION

The Massachusetts Joint Commenters generally agree with comments that support the tentative conclusion. See e.g., Joint Comments of the Maine Public Utilities Commission and Connect Maine Authority (filed July 16, 2008). We agree with commenters that argue that such data should be publicly available and states should be given direct access to it, in order to support planning and design of state initiatives to promote broadband availability, including deciding how to spend public funds to fill broadband gaps, and ensuring accountability to taxpayers and the public. See Id. at 2-3. In general, except as noted below, aggregate data should be sufficient from an accountability standpoint, but only if the aggregation is performed in such a way that states can actually validate it.

In response to the comments concerning the appropriate standardized formats for collecting this data, the Massachusetts Joint Commenters believe that the following two-tier approach would work best. The ideal approach would be for broadband providers to submit standard GIS coverage maps in digital format⁵ of their infrastructure that supports broadband service and/or of the geographic service areas within each state where broadband services are available. Use of a digital format will ensure that each state's data can be easily parsed and

in bond funds in long-lived assets, such as towers and fiber.

⁵ By digital format, we mean in "shapefile" or geodatabase format, which are the recognized industry standards. See Joint Comments of Maine Public Utilities Commission and Connect Maine Authority at 4.

sorted. This approach would be extremely useful to public agencies for planning purposes, by allowing them to view and display service availability at any level of census geography, or any other reporting unit (e.g., legislative district, political subdivision, etc.).

However, we recognize that not all operators have standard coverage maps in digital format. The experience of the MDTC in collecting strand maps from cable providers has shown that providers that acquired older legacy systems often do not have such maps for the legacy service territories. See Massachusetts General Laws Chapter 166A, Section 4, and FCC Form 100 at pg. 6 (Nov. 2004) (requiring cable providers to submit strand maps as part of the franchise applications they file with the issuing authority and the MDTC). Consequently, it could be time-consuming for providers to have to create them. Nevertheless, for those broadband providers that do have standard coverage maps readily available, the Massachusetts Joint Commenters believe that this format offers the greatest advantages to state and federal policymakers.

When digital coverage maps are not practical, or should the FCC determine that this approach is not appropriate, the Massachusetts Joint Commenters alternatively support a subscriber list approach in which each data record indicates a range of addresses where service availability exists (e.g., 100-400 Main Street). The providers would not be significantly burdened by producing this data from the internal databases which they use to support service dispatch and billing. This methodology would only require a simple parsing and sorting algorithm to generate the high and low ends of the range from individual records. Providing the address information in range form would greatly reduce the data volumes that states would have

to work with and would aggregate the information to mask the actual detail on uptake levels, thus avoiding confidentiality issues.⁶ This approach could be further refined by geocoding such ranges, allowing states to analyze what areas are served as well as any other alternatives.

We believe a range of addresses is more practical than another alternative the FCC may consider, namely individual addresses. While a list of individual subscriber addresses with codes indicating the associated level of service for each address has certain benefits, it also has drawbacks. Regarding the benefits, by geocoding individual subscriber addresses, states could determine the level of uptake as well as the extent of service availability, by making a comparison with figures on total population (e.g., census blocks). However, the drawbacks are that it raises serious privacy and confidentiality issues. The privacy of individual customer records would be threatened, and the information on uptake could be regarded as particularly sensitive from a competitive standpoint. In addition, providing complete customer listings would impose a significant processing burden on state agencies and data users in general, who would have to geocode very large lists of addresses in order to support an analysis of what areas are served and to what extent. See Comments of the California Public Utilities Commission at 15. Therefore, this approach, while a potential alternative to using a “range of addresses” format, on balance is less practical.

⁶ If the FCC concludes that submission of data would be considered proprietary, then we would propose that the data be provided to states on a confidential basis. Although this approach would deny advocacy groups and the general public access to very valuable information, state agencies would at least be able to aggregate the information and release it at a suitable level of detail.

III. CONCLUSION

The Massachusetts Joint Commenters support the comments of parties that argue that the FCC should collect, and states should get direct access to, address-related information in order to promote broadband availability at the state level and to provide accountability for use of public funds in state-funded deployment efforts. With respect to the format in which the data should be collected, we argue that standardized coverage GIS maps in digital format are best, but alternatively the Commission could require broadband providers to make this information available through geocoded subscriber lists, either as a range of addresses or as individual addresses.

Respectfully submitted,

_____/s/
Sharon E. Gillett, Commissioner
Massachusetts Department of Telecommunications
and Cable

_____/s/
Christian Jacqz, Director
Massachusetts Geographic Information System