



Vermont Telecommunications Authority

TO: House Committee on Commerce and Economic Development
House Committee on Corrections and Institutions
Senate Committee on Economic Development, Housing and General Affairs
Senate Committee on Finance
Joint Fiscal Committee
Secretary of the Administration
Secretary of the Agency of Commerce and Community Development (Challenge Lead)
Chief, Vermont Connect

FROM: Vermont Telecommunications Authority

DATE: October 1, 2011

RE: Quarterly Report per Section 49(i) of the FY2012 Capital Bill

Per Section 49(i) of the FY2012 Capital Bill starting on October 1, 2011 the Vermont Telecommunication Authority (VTA) is to submit a report on investments made or grants awarded that are in furtherance of the goals stated in 30 V.S.A. § 8060(b) using the telecommunications measures established pursuant to No. 146 of the Acts of the 2009 Adj. Sess. (2010) (an act relating to implementation of challenges for change) to track the progress made in attaining those goals through such investments and grants. The progress report provided below reflects the outcomes and measures applied under Outcome 2, Measures 2, of the Economic Development Challenge (see Challenges for Change, Quarterly Progress Report, p. 97-98, July 2011) to projects funded under Section 49 and location-specific information on the progress of deployment of telecommunications technology that does not require the utilization of towers:

(i) Percentage of residences and businesses with broadband access, using the current Vermont definition of broadband

(ii) Percentage of cellular coverage on major roads

(iii) Percentage of cellular coverage on minor roads

(iv) Percent of State where public safety radios work

Measure 2(i): Progress made in attaining broadband telecommunications goals.

Summary: Statutorily-required Public Comment Period in Progress.

The standard used to measure broadband coverage is currently identified as areas with at least 768kbps download and 200kbps upload speeds, and includes cable, DSL, fiber optic and wireless broadband (fixed and mobile). Satellite-based coverage is not included.

The goal is to estimate the change in statewide broadband availability at the address-level (Measure 2(i)). To estimate the availability of broadband at the address level the Vermont Broadband Mapping Initiative¹ utilizes broadband coverage maps to estimate the percentage of buildings with coverage based on E911 addresses. The coverage areas are drawn from data provided by broadband providers as of December 31, 2010 and the accuracy and/or margin of error is not known. From these maps it is estimated that 94.6% of Vermont buildings fall within areas identified as having broadband coverage. Updated coverage estimates as of June 30, 2011 are expected to become available later in the fourth quarter of 2011.

Prior to awarding grants to expand broadband service and prior to the construction or installation of VTA-owned fiber optic facilities, Section 49 of the Fiscal Year 2012 Capital Bill requires the VTA to issue a Request for Public Comment. The VTA has identified both a proposed schedule, parameters for a broadband grant program and a potential set of multiple-use fiber optic facilities to be constructed using state capital appropriations. With this information the VTA has issued a Request for Public Comments (see www.telecomvt.org/broadbandcomments2011). Responses to this request are due October 6, 2011. In coordination with the Agency of Administration, the VTA has identified a schedule for issuing a request for broadband grant funding.² The VTA has also issued a Request for Quotations (RFQ) for engineering and design services associated with its proposed fiber optic projects, with responses due October 11, 2011.

¹ The Vermont Broadband Mapping Initiative is a collaborative effort of the Vermont Center for Geographic Information (VCGI), the Vermont Department of Public Service (DPS), the UVM Center for Rural Studies and the Vermont Telecommunications Authority (VTA), funded by a grant from the U.S. Dept. of Commerce.

² Working with the Agency of Administration, the VTA proposed that the process of identifying and addressing unserved areas of the state should include the following steps:

1. The Agency of Administration has engaged a contractor to identify unserved areas in Vermont, based on Broadband Mapping Initiative (BMI) data reflecting service as of 12/31/2010, the most recent data available. These will be used to form a new set of broadband Target Communities, to be published in early October 2011.
2. The VTA issued a Request for Proposals for Cellular Service in unserved Target Corridors on September 7, 2011. The VTA will seek to identify Target Communities that can be addressed at the same time as cellular Target Corridors.
3. The VTA will seek to identify those Target Communities where last-mile broadband service can be expanded through VTA-developed fiber optic facilities serving multiple purposes, as proposed for comment in this Request.
4. By January 13, 2012, the Agency of Administration is expected to revise the Target Communities based on new BMI data reflecting broadband service as of

Measure 2(ii) and 2(iii): Progress made in attaining mobile telecommunications goals.

Summary: Statutorily-required Public Comment Period Completed.

Statutorily-required Competitive Solicitation in Progress.

Based on 2010 drive-test data collected through the Vermont Broadband Mapping Initiative, the VTA has estimated that 87% of major roads and 76% of minor roads have mobile telecommunications coverage ("roads" are defined as roads that are part of the federal aid highway system, not city streets or residential neighborhoods). Coverage of both major air interfaces for cellular phones, GSM (used by AT&T and T-Mobile) and CDMA (used by Verizon Wireless, Sprint, and US Cellular) was examined. The reported numbers reflect the coverage for GSM phones, which was more extensive (the CDMA estimate is 55% of major roads and 44% of minor roads). It should be noted that these relatively high coverage percentages do not reflect low coverage or gaps in coverage that can result in dropped calls or inadequate signal transmission.

As part of its duties under 3 V.S.A. § 2222b (b) (1), the Agency of Administration is developing an inventory of locations at which mobile telecommunications and broadband services are not available within the state. The VTA understands that, as part of that initiative, the Agency is pursuing a set of information requests to cellular operators in Vermont, from which it anticipates reporting updated aggregated data on cellular coverage. The new coverage data is scheduled to be available sometime in January, 2012. Based on this schedule, the VTA plans to issue a First Quarter, 2012 report that will reflect the change in cellular coverage utilizing the data that becomes available at that time.

Section 49 of the Fiscal Year 2012 Capital Bill requires a competitive solicitation, as well as a Request for Public Comment to enlist the cell-phone user experience of Vermont residents. The Request for Public Comment has been completed and results posted on the VTA's web site (see Request for Proposals (RFP) on the topic of Providing Cellular Service in Unserved Vermont Communities for grants and direct investments in cellular infrastructure, with the responses of service providers and other related infrastructure providers due next week (October 6, 2012)). These steps lay the ground work for grants or direct investment in cellular infrastructure or

6/30/2011 and will distinguish between areas with service at speeds of 768K download/200K upload, and those with service at speeds with 3M download/1M upload or better.

5. By January 15, 2012, FairPoint is expected to designate the Target Communities which will be the beneficiaries of its proposed new regulatory commitments to expand broadband service.
6. By end of January 2012, the VTA intends to issue a Request for Proposal for broadband service providers which seek additional funding from the VTA, including grants, for remaining unserved areas that do not anticipate broadband coverage from other funded projects.

equipment. The VTA anticipates selecting projects to fund using FY 2012 Capital Bill appropriations following receipt of responses to this RFP.

Additional information under Section 49(i): Deployment of telecommunications technology that does not require utilization of towers, including location-specific information.

Summary: Progress reported in evaluating non-tower-based infrastructure providers.

In March 2011, the VTA issued a Request for Information (RFI) on the subject of Small-Scale Rural Wireless Infrastructure Development. Based in part on responses to this RFI, the VTA issued a RFP on the topic of Providing Cellular Service in Unserved Vermont Communities, in which the VTA seeks proposals for grants or direct investment in cellular infrastructure to expand cellular service in Vermont using its FY2012 capital appropriation. The RFP requested proposals from alternative infrastructure providers, which could include a number of forms of non-tower-based cellular infrastructure. The response deadline for this RFP is October 6, 2011. In the last quarter of 2011, the VTA anticipates selecting one or more respondents with whom it would negotiate a contract for expansion of cellular infrastructure, based on the responses to this RFP, which may include non-tower-based infrastructure.

Measure 2(iv): Percentage of State where public safety radios work.

Summary: Co-development and co-location opportunities being pursued as available.

While VTA is not charged with expanding service territories for public service radios, there has been significant collaboration with the Department of Public Safety in the utilization of State lands at proposed communication facility sites. At lands owned or controlled by the Agency of Natural Resources on Okemo Mountain, in Mount Holly, utilizing the area and access routes developed by Okemo Mountain Resort, the VTA has negotiated a license agreement that will provide for consolidation of equipment on a tower that may be constructed in the future by the Department of Public Safety for public safety radio transmission. In addition, the licensee, in its construction of a facility, is required to accommodate municipal public safety users such as first responders. The collocation of users and consolidation of equipment not only provides for efficient use of State lands but expands public safety radio coverage and reserves the opportunity of the Department of Public Safety for future safety radio deployment. The license, which has been negotiated but not yet signed, is expected to be delivered for approval and signature of the designee of the Secretary of Administration in accordance with 30 VSA §227e in early October, 2011.