OMB CONTROL NUMBER: 0660-0037
EXPIRATION DATE: 6/30/2015

ANNUAL PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted	2. Award Identification Number	3. DUNS Number
Department of Commerce, National Telecommunications and Information Administration	NT10BIX5570076	829946784

4. Recipient Organization

Vermont Telecommunications Authority 100 State Street
Suite 342, Montpelier, VT 05602-3377

5. Current Reporting Period End Date (MM/DD/YYYY)	6. Is this the last Annual Report of the Award Period?
12-31-2014	(•) Yes ( ) No

7. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.

7a. Typed or Printed Name and Title of Certifying Official	7c. Telephone (area code, number and extension)
Chris Campbell	8028281799
	7d. Email Address
	ccampbell@telecomvt.org
7b. Signature of Certifying Official	**7e. Date Report Submitted (MM/DD/YYYY):**
Submitted Electronically	03-25-2015

OVERALL PROJECT PERFORMANCE INDICATORS

1. Please provide the following average cost figures for your project. Please review the instructions to determine how to calculate these figures. Write "0" in the second column and "N/A" in the third column if your project does not yet have this information. Depending on whether your project contains Middle Mile and/or Last Mile components, some metrics may not apply. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Cost Indicator	Average Cost / Speed	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Average cost per new mile (Middle Mile)	$34,000	The baseline estimate for average cost was $36,290. In general, make-ready costs were less than estimated, but were offset by high average costs for construction. [Sovernet's cost per mile for 828 miles averaged $34,800. VTA's cost per mile averaged $23,000 for 13 miles.]
Average cost per household passed (Last Mile)	0	N/A
Average cost per subscriber (Last Mile)	0	N/A
Maximum broadband speed advertised (Middle Mile)	10 Gbps	10 Gbps for transport service as indicated in the baseline plan.
Maximum broadband speed advertised (Last Mile)	0	N/A
Average broadband speed provided (Middle Mile)	92 Mbps	Average is calculated using the committed information rates for dedicated Internet access service and Ethernet transport. All DIA services offered are symmetrical. All Ethernet WAN products currently provided allow burstable (i. e., non-committed) transmission up to 1,000 Mbps, which matches the baseline plan.
Average broadband speed provided (Last Mile)	0	N/A

2. Please provide each facility name and type, the county where the facility is located, and census tract information for any facilities funded by your project during this annual reporting period. Report only facilities for which construction has been completed.

Facility Identifier / Name	Facility Type	County	Census Tracts
Each facility is listed in the APR Addendum	N/A	N/A	N/A

Add Facility Remove Facility

3. Please identify (1) the total number of interconnection, peering, and/or transit agreements entered into during this annual reporting period; (2) the total number of agreements of each type that you are currently negotiating; and (3) whether you have denied any request for interconnection and if so, why. If you have not entered into any agreements, please write "N/A."

Interconnection Agreements (600 words or less)

Wholesale service agreements have been entered with [redacted] during the reporting period (January through September 2014). Agreements were entered earlier in the award period with [redacted] No requests for interconnection have been denied.

Peering and Transit Agreements (600 words or less)

A peering agreement was entered during the reporting period (January through September 2014) with New Hampshire Optical Systems. Agreements were entered earlier in the award period with [redacted].

CAPACITY, UTILIZATION, AND CAPABILITY INDICATORS

4. Community Anchor Institutions: In the chart below, please provide information on the types of community anchor institutions capable of receiving service (i.e., anchor institutions connected to your network plus those passed by your network) as a result of BTOP funds.

Type of Community Anchor Institution	Total Number Within Service Area	Type of Community Anchor Institution	Total Number Within Service Area
Schools (K-12)	105	**Public Housing**	0
Libraries	44	**Other Institutions of Higher Education**	22
Medical and Healthcare Providers	31	**Other Community Support Organizations**	5
Public Safety Entities	29	**Other Government Facilities**	73
Community Colleges	7	**Total Community Anchor Institutions**	316

5. Please indicate the average increase in broadband speed provided to the community anchor institution customers as a result of your project, including a description of how this increase was calculated (600 words or less).

85 Mbps. We have incomplete data on the broadband speeds that were being purchased by CAI's prior to this project, but estimate the average was 7.5 Mbps. The average speed of service provided to CAI customers at the end of the award period was 92 Mbps (symmetrical, and committed rate). Burst rates provided with WAN transport services can be substantially higher. This average is computed using the committed rate of WAN transport service provided to each customer, or, for customers purchasing only Internet access service, the committed Internet connectivity bandwidth provided.

6. What retail services are being provided by this project? Please describe below. (600 words or less). As an attachment to this report, please provide pricing plans (in $ per month) associated with each retail service. Retail services description:

Retail services provided by subrecipient Sovernet Fiber Corp. include: symmetrical Internet access starting at 10 Mbps; point-to-point Ethernet transport and point-to-multipoint WAN services with committed information rates starting at 100 Mbps and burstable rates up to 10 Gbps; and combined transport and Internet packages.

Prices vary on a case-by-case basis, as market conditions warrant. Price descriptions are included in the file attached to this report called "VTA FiberConnect Rate Sheet.pdf."

7a. What network management policies (e.g., bandwidth limitations, traffic prioritization) are in place for the services provided by your project? 7b. Have you ever limited or blocked consumers from accessing any lawful content, service, service provider, or application, or prevented any consumers from attaching any legal device to the network? If so, please explain why (300 words or less)?

7a: SFC has a policy of not managing or limiting the content of communications traffic transiting the SFC's network, except to the extent necessary to maintain reliable service. SFC's network management practices do not involve preferential routing of traffic on the basis of content or provider. SFC utilizes neutral traffic routing, and will enable connections to other carriers and to the public Internet.

Access to the Essex County segment of the project is on a dark fiber basis, and therefore licensees are not subject network management policies.

8. If applicable, please provide the total number and the percentage of subscribers who have dropped the broadband service provided through this project (total number of households and/or businesses and the "churn rate") and the subscribers' reasons for discontinuing their service (600 words or less).

No subscribers of broadband service provided through this project have dropped the service.

9. Please provide the following information regarding the number of fiber strand-miles:

Total Number of Strand-miles	Total Number of Active Fiber Strand-miles Used by Recipient	Total Number of Leased Fiber Strand-miles	Total Number of Dark Fiber Strand-miles	Total Number of Strand-miles Being Built		
				Active	Leased	Dark
119,723	59,081	0	60,642	0	0	0

10. If you wholesale dark fiber, please list your wholesale customers and the number of fiber miles you currently are leasing to those customers:

Recipient VTA built 13 miles of fiber in Essex County. This segment, which connects to other dark fiber routes in the Northeast regionl of Vermont, is available to lease. The VTA expects this route be utilized in a planned fiber route between Boston and Montreal by a service provider, once the adjoining fiber routes are finished. Sub recipient Sovernet Fiber Corp. does not offer dark fiber.

11. Please provide the following information regarding the facility collocation capacity:

Total Facility (total square feet for all facilities)	Number of Square Feet Used by Recipient	Number of Square Feet Leased	Number of Square Feet Available
852	828	4	20

12. If you do not own collocation space, please describe how and where other network providers and/or customers interconnect with your network (600 words or less).

Sovernet is collocated in the incumbent telco central offices or POP's listed in the APR Addendum as "Facilities". Other service providers can interconnect with Sovernet's network by collocating in those facilities and interconnect with Sovernet's network by requesting permission from the owner of the facility for indirect cross-connects or direct cable connections between collocation bays. In addition, subject to availability, approximately 20 sq feet of collocation space at the Sovernet Burlington facility is available for carrier interconnection.

13. To the extent that you have made any subcontracts or sub grants, please provide the number of subcontracts or sub grants that have been made to socially and economically disadvantaged small business (SDB) concerns as defined by section 8(a) of the Small Business Act, 15 U.S.C. 647, as modified by NTIA's adoption of an alternative small business size standard for use in BTOP. Please also provide the names of these SDB entities (150 words or less).

No SDB was subcontracted or received a subgrant under the Award.

14. Please describe any best practices/lessons learned that can be shared with other similar BTOP projects (900 words or less).

Create opportunities for last-mile providers to interconnect with your network at multiple locations along a route if possible, not just a limited number of interconnection points. Fiber access points (FAPs) can be a useful tool for facilitating this access.

Serving cellular towers can be an important opportunities, but don't neglect emerging opportunities to serve small cells. This may require planning for serving many more locations along a route at a lower price point.

For Community Anchor Institutions, the focus should not be just on providing internet access to individual locations. There are important efficiencies to be gained by linking CAIs together in Wide Area Networks.

Create a simple database to track the status of Community Anchor Institutions and Points of Interconnection over a project. It will be useful, especially if there changes to the project.

Focus early on obtaining necessary easements and rights-of-way; they may be the long pole in the tent of a project.

15. Using the Excel spreadsheet template titled "Annual PPR CCI Addendum", please provide an updated list of Community Anchor Institutions (CAIs) that you have connected and plan to connect to your network.

16. Using the Excel spreadsheet template titled "Annual PPR CCI Addendum", please provide a list of community pairs that are receiving new or improved broadband service as a result of BTOP grant funds.

17. Please provide up-to-date network route maps in a single file, in a Google Earth compatible format (e.g., KMZ file).