

QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted Department of Commerce, National Telecommunications and Information Administration	2. Award Identification Number NT10BIX5570076	3. DUNS Number 829946784
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4. Recipient Organization Vermont Telecommunications Authority One National Life Drive, Montpelier, VT 05602-3377

5. Current Reporting Period End Date (MM/DD/YYYY) 03-31-2013	6. Is this the last Report of the Award Period? <input type="radio"/> Yes <input checked="" type="radio"/> No
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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 Erik Amalixsen Project Manager	7c. Telephone (area code, number and extension) 8028281795
	7d. Email Address eamalixsen@telecomvt.org

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 05-28-2013
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Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).

a. SFC has design surveyed, applied for attachments, and requested make-ready work on 99% of the poles required for the project. Pole owners continue make-ready work. SFC had obtained licenses for 87% of the estimated number of poles – up from 78% as of December 31. SFC’s right-of-way contractor continued to research easements, obtain landowner consents, secure rail crossing, river crossing and municipal highway work permits.

b. During 2013Q1, there were 84 route miles of fiber and 131 miles of strand placed, bringing the total to 461 and 532 miles respectively, out of a project total of 792 miles. The project is currently at 67% of its objective for the core fiber build portion. Outside plant construction has been constrained by make-ready work not-completed by pole owners, securing permits and awaiting NTIA approval for AAR #2 route modifications. NTIA approved AARs for route modifications on 3/19/2013 which allowed for adjusted routes to be released to construction.

c. SFC continued to work with CAI’s to refine service needs, and to enter service agreements. By March 31st, of the 382 funded locations 241 CAIs were under contract, and 12 were connected / ready to serve. The project is currently at 5% of its objective to serve committed CAIs. Construction of laterals and entrances to CAI’s continued with additional work released for construction as site surveys and design for each location have been completed.

d. During the quarter, IP router equipment configuration was tested and confirmed in a lab environment. Packet optical Phase 1 equipment was installed and turned up, and installation of Phase 2 began. SFC ordered and received an additional \$1.5M of electronic equipment during the quarter.

e. VTA and SFC staff continued to brief and consult NTIA staff each two weeks, and to prepare and submit required reports.

2. Please provide the percent complete for the following key milestones in your project. Write “0” in the Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2a.	Overall Project	65	Overall spending during the quartered totaled \$4.9 million, as compared to \$11.4 million projected in the previous PPR. A total of \$31.1 million has been spent to date. Most of the variance between actual spending to date and the baseline spending projection has been due to delays in outside construction in previous quarters. At the end of this reporting quarter 461 miles of fiber cable and an additional 71 miles of strand were in place.
2b.	Environmental Assessment	49	No expenses were incurred during the quarter for environmental assessment work. Environmental Assessment activities for the project are complete, except to the extent necessary for review and approval of route revisions, and as necessary for archeological site assessments required under the Programmatic Agreement. Archeological staff have been contracted and a process implemented for review of proposed construction in non-exempt areas.
2c.	Network Design	97	SFC has design surveyed and applied for attachments to 99% of the estimated number of poles encompassed by the project. As measured by expenditures, network design increased from 91% to 97% during the quarter as engineering firms continued to assist SFC with network design, route surveys and overall project management. The project has 133 (41%) of the sites in Stage 1&2 (Field Work), 46 sites (14%) Stage 3 (Site Drawings Complete), 121 sites (38%) in Stage 4 (Construction), and 21 sites (7%) in Stage 5 (OSP Complete) .
2d.	Rights of Way	0	N/A. Expenditures for rights of way are budgeted under Network Design, consistent with NTIA project accounting guidance. However, SFC’s right of way contractor continued during the quarter to identify parcels for which rights of way must be obtained, and where necessary contacted property owners to obtain easements or other consents.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
	2e. Construction Permits and Other Approvals	100	Expenses in this category are principally make-ready survey application fees. Expenditures are exceeding the amount originally estimated. As remaining design work winds down, an additional 250 poles were surveyed during the quarter. Through the quarter, surveys have been requested for 23,150 utility poles involved in the project; any remaining surveys are likely to be associated with minor design changes. Based on AAR changes, permits were submitted and obtained during the quarter for railroad crossings, interstate highway crossings, and for work along municipal and state roadways.
	2f. Site Preparation	70	Expenses in this category are principally for make-ready work by pole owners and third party attachees. Cumulative expenditures in this category increased from 61% to 70% of budget during the quarter, as compared to 73% projected in the previous PPR. Make-ready work has been authorized on roughly 98% of the poles encompassed by the project. Pole attachment licenses were issued during the quarter for 2,250 poles (10% of all poles), total obtained to date is 20,500 (87%) out of 23,160. The variance between indicators of spending and activity completion reflects both lower-than-budgeted unit costs for make-ready and slower-than-projected completion of make-ready by pole owners and other attachees, in part due to the several storm events in previous quarters.
	2g. Equipment Procurement	93	Packet optical equipment was installed and turned up during the quarter. IP router equipment configuration was tested and confirmed in a lab environment. SFC ordered and received \$1.5M of equipment during the quarter. Cumulative spending on equipment is 7% lower than the previous projection, primarily due to deferral of installations until outside plant is ready. Deferred installation will allow for maximum useful life of back-up battery power supplies, which have a finite life.
	2h. Network Build (all components - owned, leased, IRU, etc)	50	<p>Outside plant construction fell short of the 230 mile goal set for the quarter. Contractors placed approximately 84 route miles of cable and 131 miles of messenger strand, bringing the totals to 461 miles of fiber and 532 miles of strand. Winter weather conditions limited available work days during the quarter. Outside plant construction was constrained by make-ready work not being completed by pole owners, AAR approval delay for route modifications, and the securing of permits. Overall completion levels reflect the cumulative effects of Vermont utility crews being diverted to storm restoration work as a result of Hurricane Sandy, Tropical Storm Irene and a June 2012 severe wind event in southwestern New England. Utility owners deferred make-ready for the project while crews restored service, repaired damage and rebuilt destroyed utility plant.</p> <p>Construction work on 21 CAI drops is complete, with 121 of the 382 CAI locations being released to construction contractors. The rate at which locations are released to construction increased over the quarter.</p>
	2i. Equipment Deployment	63	The primary activity in this category is preparation of conditioned collocation space to house network equipment. As of the end of quarter, all collocation space has been fully prepared. Spending is likely to be under budget in this category.
	2j. Network Testing	40	Although no budgeted expenses fall within this reporting category, a baseline projection for Network Testing has been made to reflect anticipated fiber testing and network verification. Fiber delivered to vendors is tested before being released to construction contractors. Network testing will follow completion of network segments.
	2k. Other (please specify): 100%	100	Cumulative expenses in this category increased during the quarter from 95% to 100% of budget, reflecting on-going administrative and legal expenses.

3. To the extent not covered above, please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).

While progress was made during the quarter in obtaining pole attachment licenses, rights of way, permits and easements, incomplete make-ready continues to present gaps in network segments that can be constructed. Pole owners have continued to do make-ready work and issue pole licenses at a relatively steady pace. It is anticipated that pole owners will have released all remaining poles to SFC by mid-July.

Technical assistance with the make-ready from the BTOP project is not needed. SFC and pole owners continue to discuss, coordinate and prioritize make-ready work weekly. The VTA and SFC have limited ability to expedite completion of the make-ready work.

In addition, several factors, primarily beyond the control of the recipient and sub-recipient delayed the rate of progress assumed in the original baseline project plan with most events occurring and have been reported in prior quarters. This quarter, an AAR was reviewed by NTIA for 4½ months which delayed construction progress on revised routes and CAI's. SFC has made significant progress in spite of the prolonged AAR review.

4. Please report the following information regarding network build progress. Write "0" in the Total column and "N/A" in the Narrative column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	461	Contractors placed approximately 84 route miles of cable and 131 miles of messenger strand, bringing the totals to 461 miles of fiber and 532 miles of strand. The original baseline plan was to have 750 route miles deployed by the end of the quarter. The difference between actual and baseline deployment is principally the result of matters reported in previous PPRs regarding Overlap, PA and Tropical Storms. This quarter the additive delay was due to a prolonged AAR review.
New network miles leased	0	SFC is in negotiations for procurement of the fiber rights it intends to use along this 17 mile network segment.
Existing network miles upgraded	0	N/A
Existing network miles leased	155	A master service agreement and purchase order have been entered for an indefeasible right to use these dark fiber strands.
Number of miles of new fiber (aerial or underground)	461	Contractors placed approximately 84 route miles of cable and 131 miles of messenger strand, bringing the totals to 461 miles of fiber and 532 miles of strand. The original baseline plan was to have 750 route miles deployed by the end of the quarter. The difference between actual and baseline deployment is principally the result of matters reported in previous PPRs regarding Overlap, PA and Tropical Storms. This quarter the additive delay was due to a prolonged AAR review.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	9	The baseline plan includes a total of 16 interconnection points. The remaining points will be activated as construction is completed along related network segments.

For questions 5 and 6 please include information relating to agreements that you are negotiating or have entered into, or that your sub recipient, contractor or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

Indicators	
Number of signed agreements with broadband wholesalers or last mile providers	6
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	2
Average term of signed agreements (in quarters)	16

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers:

Cloud Alliance
 Educational Networks of America, Inc.
 Duncan Cable
 Southern Vermont Broadband Cooperative
 Vanu Coverage Co.
 WaveComm

5c. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your product (100 words or less). Wholesale services description:

GigE WAN Transport, and Direct Internet Access.

5d. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a sub recipient, contractor, and/or subcontractor, and describe with specificity the portion of your network this this third party operates (600 words or less).

Sovernet Fiber Corp., 5 Canal Street, Bellows Falls, VT 05101
 Subrecipient
 Sovernet will operate the Vermont FiberConnect network when completed.

6. Please provide the data according to the type of subscriber. Write "0" in the Total column and "N/A" in the Narrative column if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (300 words or less).

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	1	No variance from baseline plan.
	Providers with signed agreements receiving improved access	1	Baseline projection for this quarter was two. The number of broadband wholesalers and last mile providers served is lower than baseline due to overall make-ready and outside plant completion being less than projected in the original baseline plan. As network is completed, additional Last Mile Providers will be served.
	Providers with signed agreements receiving access to dark fiber	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	1	Speed tiers are customized to to need of individual need of broadband wholesaler or last mile provider, and can be as much as 100 Gbps.
Community Anchor Institutions (including Government institutions)	Total subscribers served	12	The level of CAI's served is lower than baseline due to overall make-ready and outside plant completion being less than projected in the original baseline plan. As network is completed, additional CAI's will be served.
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	12	The level of CAI's served is lower than baseline due to overall make-ready and outside plant completion being less than projected in the original baseline plan. As network is completed, additional CAI's will be served.
	Please identify the speed tiers that are available and the number or subscribers for each	0	Speed tiers are customized to individual customer need, and can be as much as 10 Gbps. CAI's currently using VFC services are utilizing GigE WAN and Direct Internet Access services.
Residential / Households	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Businesses	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A

7. Please describe any special offerings you may provide (600 words or less).

N/A

8a. Have your network management practices changed over the last quarter? Yes No

8b. If so, please describe the changes (300 words or less).

N/A

9. Community Anchor Institutions:

Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported for the most recent reporting quarter only (NOT cumulatively). Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (300 words or less).

Institution Name	Service Area (town or county)	Type of Anchor Institution (as defined in your baseline)	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
State of Vermont	Bennington, VT	Government	Yes	Upgraded connection to State of Vermont's wide area network
State of Vermont, VTRANS	Berlin, VT	Government	Yes	Upgraded connection to State of Vermont's wide area network
Brattleboro H.S.	Brattleboro, VT	K12	Yes	Much-increased speed of internet and school district WAN connectivity to support education curriculum and administration.
Dorset Village Public Library	Dorset, VT	Library	Yes	Improved internet connectivity speed to support access to on-line databases and public access to the Internet.
State of Vermont, VTRANS	Hartford, VT	Government	Yes	Upgraded connection to State of Vermont's wide area network
State of Vermont, DII	Montpelier, VT	Government	Yes	Upgraded connection to State of Vermont's wide area network
State of Vermont, Dept Public Safety	Montpelier, VT	Government	Yes	Upgraded connection to State of Vermont's wide area network and public safety communications network.
State of Vermont, Dept Public Safety	Royalton, VT	Public Safety	Yes	Upgraded connection to State of Vermont's wide area network and public safety communications network.
Baxter Memorial Library	Sharon, VT	Library	Yes	Improved internet connectivity speed to support access to on-line databases and public access to the Internet.
White River School	Hartford, VT	K12	Yes	Much-increased speed of internet and school district WAN connectivity to support education curriculum and administration.

Project Indicators (Next Quarter)

- 1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).**
- a. Sovernet Fiber Corp (SFC) will finish design survey for the remainder of the network, which consists primarily of drops and entrances to anchor institutions and points of interconnection.
 - b. SFC's right of way contractor will obtain remaining easements and property owner consents, secure rail crossing permits, miscellaneous remaining state land use permits, interstate highway crossing and municipal highway work permits.
 - c. By end of quarter, make-ready work will have been authorized for 10 of the remaining 13% of the roughly 23,500 poles required for the project, leaving 3% to complete the project. As the remaining pole licenses and other permits are obtained, routes will be released for construction.
 - d. 183 miles of aerial plant will be placed. By end of quarter, 644 miles of cable will be attached to poles or placed in conduit, leaving 148 miles to construct to complete the project.
 - e. DWDM nodes will be ordered, received and installed, and network segments will be lit as fiber construction is completed. IP routers will be installed during the quarter.
 - f. 118 CAI locations will be activated, bringing the total to 130. Facility designs will be completed within the quarter for all remaining CAI's, and those locations will be released to construction contractors as designs are finalized and location owner consents obtained.

2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Planned Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the next reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2a.	Overall Project	83	With approximately 13% of pole license requests still pending with pole owners at the start of the 2nd quarter, and permits needed for certain network segments, roughly 110 miles of outside plant have yet to be released to construction. Remaining routes will be released for construction as permits and pole attachment licenses allow. The volume of network miles and service locations released to construction will continue remaining pole attachment licenses and permits are obtained. 183 miles of aerial plant will be placed, leaving approximately 150 miles to place to complete the project. Electronics installation is on track for completion before outside plant construction. 30 CAI locations are scheduled be connected, with design and construction continuing on the remaining locations.
2b.	Environmental Assessment	49	Additional expenses may be incurred as necessary if required for NTIA review of possible route modifications, or for archeological site assessments. The extent of such work is not known at this time.
2c.	Network Design	100	Engineering firms will continue to assist SFC with network design, route surveys and overall project management. Route surveys for the entire project are substantially complete. Most design work during the quarter will focus on CAI and POI entrance facilities.
2d.	Rights of Way	0	N/A. Expenditures for rights of way are budgeted under Network Design, consistent with NTIA project accounting guidance. However, SFC's right of way contractor will continue during the quarter to identify parcels for which rights of way must be obtained, and where necessary contacted property owners to obtain easements or other consents.
2e.	Construction Permits and Other Approvals	100	Most remaining permits, including for railroad crossings, river crossings, interstate highway crossings, municipal and state roadway work permits, and land-use permits will be obtained during the quarter.
2f.	Site Preparation	77	SFC had requested make-ready for over 98% of poles as the start of the quarter, and obtained licenses on 87%. SFC anticipates pole owners will complete make-ready and issue pole attachment licenses for an additional 2,300 poles during the quarter, bringing the total to 22,800 poles (roughly 97% of those required for the project).
2g.	Equipment Procurement	100	DWDM nodes will be ordered, received and installed.

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2h.	Network Build (all components - owned, leased, IRU, etc.)	70	SFC estimates outside plant construction will be completed on 183 network miles, dependant on quantity of pole licenses issued by pole owners, make-ready is completion on contiguous runs, and receipt of permits. 150 miles will remain for completion of the project.
2i.	Equipment Deployment	100	The primary activity in this category is preparation of conditioned collocation space. All collocation space has been fully prepared.
2j.	Network Testing	45	Network testing will continue to follow completion of OSP construction.
2k.	Other (please specify): 100	100	Administration of the project is in-going.

3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).

The outside plant construction will continue to be limited by the quantity of pole licenses issued by pole owners, the extent to which make-ready is completed on contiguous runs, and receipt of permits.

At the current make-ready completion pace, it is anticipated that pole owners will have released all remaining poles to SFC by mid-July. Construction, splicing, optical testing, field inspection and verification for those network segments will be done following completion of the make-ready. Technical assistance with the make-ready from the BTOP project is not needed. SFC and pole owners continue to discuss, coordinate and prioritize make-ready work weekly, and the VTA and SFC have limited ability to expedite completion of the make-ready work.

The pace of CAI entrance facility design and construction has been limited by the necessity to coordinate site access with each property manager and obtain the property owner's consent to the design of entrance facilities and network termination equipment. CAI's are typically very supportive of the project and look forward to receiving services. Even so, access to each location typically involves multiple staff and working within the schedule constraints of the CAI. SFC and its contractors will continue to communicate with property owners in order to obtain timely access and facility design consents.

