

**QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS**

General Information		
<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b>  Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b>  NT10BIX5570039	<b>3. DUNS Number</b>  825181949
<b>4. Recipient Organization</b>  OpenCape Corporation 3225 Main Street, Barnstable, MA 02630-1105		
<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  03-31-2013	<b>6. Is this the last Report of the Award Period?</b>  <input type="radio"/> Yes <input checked="" type="radio"/> No	
<b>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.</b>		
<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Daniel R Vortherms	<b>7c. Telephone (area code, number and extension)</b>  508-524-5905 X	
	<b>7d. Email Address</b>  dvortherms@opencape.com	
<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  06-05-2013	

**Project Indicators (This Quarter)**

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

For this reporting period, OpenCape is reporting a decrease in Administrative and Legal Expenses, Matching Funds in the Infrastructure Budget Execution Details when compared to that reported in the previous quarter. The amount reported in the previous quarter was in error due to a spreadsheet error in calculating in-kind match donated hours. The numbers reported in this quarterly report are the corrected amounts.

During this quarter, OpenCape completed construction of an additional 78 route miles of fiber, bringing the total to 300 route miles constructed. All utility company make-ready, a significant delaying factor over the entire life of the project, was completed this quarter, about a month earlier than had been expected. An additional 10.4 route miles are under construction. Only 0.6 miles of the entire project has not been released for construction due to a final lease agreement for conduit access. This lease remains under negotiation with the rights owner.

A major snow storm occurred throughout the network service area in February 2013. Utility poles were downed in 3 areas of the network, with damage to only one location on the network. That damage was easily and quickly repaired. Had we been operational at the time, the damage would not have caused any service outages due to the design of the network.

OpenCape concluded the agreement for the last of the 11 fiber regeneration/DWDM sites. DWDM equipment is installed at all of these sites, is powered up in 6 of the 11 sites to begin testing, tuning, and calibration processes on the electronic equipment. Further coordination is underway for powering equipment in the remaining sites per the Verizon tariffed product process.

The plan for crossing the Taunton River was fully completed during the quarter. Fiber connections were 100% completed in the south coast section of the network.

The OpenCape extension request through September 30, 2013 was approved by the Program and Grants Offices. AARs for additional laterals and amended microwave sites were both approved.

Leases/licenses for 12 of 15 microwave sites are in hand. The remaining leases/licenses are under negotiation. Work continued with each of the local jurisdictions for these 15 sites through planning boards, town meetings, and construction plan reviews. Building permit for 1 site is in hand. FCC license filings continued, with 10 licenses received to date.

All major construction and equipment installation was completed for the Collocation Data Center. Electric switchboard equipment from Siemens was received and installed. Equipment racks, UPS, and cooling equipment were all installed. Equipment commissioning was delayed while waiting for a power upgrade to the building from NStar that has been in the works since February 2012. The upgrade plan was delayed due to right of way issues for NStar that required new survey work. Through coordination with Barnstable County, the plan was approved and the NStar upgrade work should begin early second quarter 2013 with a 4-6 week completion time frame.

**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	83	OpenCape lags its Baseline Projection and federal expenditure pace for several reasons: 1) OpenCape pursued its grant with a construction contractor as a partner, but had to initiate a new RFP process six months into its grant; 2) the process of obtaining a Finding of No Significant Impact was far more lengthy than anticipated; 3) the process of negotiating the many legal contracts associated with the project has taken longer than anticipated; 4) Commonwealth of Massachusetts procurement laws have caused delays in obtaining underlying rights or leases from county and municipal entities; 5) the process of negotiating Master Agreements with utility pole and conduit owners took far longer than anticipated; 6) the capacity of utility companies to perform make ready assessment and make ready work is limited and insufficient using conventional processes; 7) pole survey and make ready work was negatively impacted by a Verizon strike and Hurricane Irene in August, and an unusual October 2011 Noreaster snow event; 8) the crossing of major waterways under difficult circumstances, lengthy processes, and high cost has required innovative and time consuming alternative strategy development; 9) Verizon New England reported in Q3 2011

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			that it had erred in conduit availability and reduced by several thousand feet the amount available for lease, requiring adjustments by OpenCape; 10) an insufficient response to an RFP for the design, build, and operation of the collocation data center resulted in the need to issue a separate RFQ for the design; 11) the need to implement an alternative pole placement in the NStar territory, to negotiate that placement, and perform a make ready reassessment was a major hurdle to beginning construction, but was unavoidable; 12) continued make ready delays from NStar including the impact of Hurricane Sandy in November 2012.; 13) late delivery of electrical switching equipment for the regional data center from Siemens, 14) power upgrade from NStar for the collocation data center that is not yet scheduled by NStar
2b.	Environmental Assessment	100	Completed
2c.	Network Design	98	The design of the microwave, transport, and municipal RAN networks are complete and final fiber strand maps and patch panel assignments are complete. Final as-builts are in preparation.
2d.	Rights of Way	96	All rights of way are complete. Additional late billing of make-ready for the rights of way are still being received.
2e.	Construction Permits and Other Approvals	95	All building and fiber network permits are in hand. Permits for installation of antennas for the microwave network are in progress. Building permit for 1 site has been received. When sufficient site permits are in hand to support crew mobilization, construction will begin.
2f.	Site Preparation	0	N/A
2g.	Equipment Procurement	93	All fiber, switching, routing, and DWDM equipment has been delivered. Installation is proceeding with Verizon as the barrier to completion. Ordering of frequency specific components of the microwave system lags until final FCC licenses are approved. All equipment associated with the collocation data center has been received with final hookup, turn up, and test is dependent upon NStar power upgrade.
2h.	Network Build (all components - owned, leased, IRU, etc)	81	300 of 311 route miles of new fiber have been installed. 78 new route miles were added this quarter. All but 0.6 of the remaining route miles were under construction or released for construction.
2i.	Equipment Deployment	50	Deployment of equipment was underway in all 11 regeneration facilities. DWDM equipment was installed in all sites, with 5 sites powered up in readiness for testing, tuning, and calibration of equipment. Deployment of microwave equipment has not yet begun.
2j.	Network Testing	35	Post-construction testing began during this quarter. Initial OTDR testing was used to begin validation of the fiber installation, performance of the fiber, and match of the installation to design signal loss budgets.
2k.	Other (please specify):	95	Additional contract work was required that has necessitated continued work through the first quarter.

**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).**

Though now complete, the NStar make ready work was a significant factor in getting network construction completed. NStar continues to be a pacing factor for completion of the Collocation Data Center due to the required power upgrade. Recasting schedules from both Stateside Construction and IBM had cost increase implications to the project that continue to be worked. Even with a projected schedule from NStar, past performance against schedule commitments leads one to be doubtful of their ability to perform on schedule.

The snow storm of February 2013 was a significant weather event for the area. Though as noted above, direct impact to the OpenCape network was minimal. However, regional power outages affected virtually the entire Cape area and extended several days after the storm in most areas. The storm was of sufficient significance to trigger activation of the regional sheltering plan by Barnstable County emergency planning officials. The time lost due to the storm, snow removal time, and extended power outages further delayed construction and added to the priority NStar work load.

Post construction OTDR results have uncovered fiber that was damaged during construction. The fiber has been spliced or replaced

at no additional costs to the program and had minor impacts to the overall schedule. These types of issues may continue to be uncovered as testing progresses.

The long standing issue with the Massachusetts Department of Transportation was resolved favorably through assistance from the local State legislative delegation. Final agreements are in preparation to document the final resolution such that operations on the network should not be held up.

**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	300	Below goals of PIP. See Sections 2a and 3 above. Progress continued for completion of the fiber component of the network during the second quarter of 2013. Completion of construction will be followed by a 5-8 week calibration, tuning, and acceptance test period.
New network miles leased	0	N/A
Existing network miles upgraded	0	N/A
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	300	Below goals in PIP. See Sections 2a and 3 above.
Number of new wireless links	0	Below goals in PIP. Unique processes in each of the 15 jurisdictions remained a challenge to negotiate, though efforts are well underway with the first building permit in hand.
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	37	5 backbone and 32 CAI interconnection points established. Make ready delays and Verizon tariffed procedures impacted progress. All remaining backbone interconnection points are awaiting Verizon action to power DWDM equipment.

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	0
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	0
Average term of signed agreements (in quarters)	0

**5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers:**  
None at this time.

**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:**

No services yet being offered.

**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 third party operates (600 words or less).**

OpenCape awarded a contract to CapeNet LLC to design, build, and operate the OpenCape network. CapeNet LLC is a joint venture

of Telecom Global Inc. and CapeNet Partners, Inc. CapeNet LLC is a contractor. The primary contact for CapeNet LLC is Alan Davis 1900 West Park Drive, Suite 280, Westborough, MA 01581, 508-983-1475.

OpenCape has licensed CapeNet LLC to operate and maintain the entire network including all microwave components, and to sell both lit and dark services on a portion of the fiber exclusive of the OpenCape reserve.

The project does not include any sub recipients.

**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	0	No signed agreements in place. OpenCape and its design, build and operate contractor are engaging last mile providers in order to develop potential last mile solutions. Several companies are interested in offering services.
	Providers with signed agreements receiving improved access	0	No signed agreements in place. OpenCape and its design, build and operate contractor are engaging last mile providers in order to develop potential last mile solutions. Several companies are interested in offering services.
	Providers with signed agreements receiving access to dark fiber	0	No signed agreements for dark fiber lease have been signed with wholesale or last mile providers. OpenCape and its design, build and operate contractor are conducting outreach to encourage wholesalers and last mile provider leases.
	Please identify the speed tiers that are available and the number of subscribers for each	0	No speed tiers are as yet available as no wholesale or last mile provider agreements are yet in place. Network equipment is being configured such that a full breadth of speeds from 10 Mbps to 1000 Mbps Ethernet, 2.5 Gbps wavelengths of light, and dark fiber will be available.
Community Anchor Institutions (including Government institutions)	Total subscribers served	31	No CAI subscribers are yet served. Though physical connections are complete for 31 CAIs, they await completion of the rest of the network before service will begin.
	Subscribers receiving new access	0	No CAI subscribers are yet served. Though physical connections are complete for 31 CAIs, they await completion of the rest of the network before service will begin.
	Subscribers receiving improved access	31	No CAI subscribers are yet served. Though physical connections are complete for 31 CAIs, they await completion of the rest of the network before service will begin.
	Please identify the speed tiers that are available and the number of subscribers for each	0	No service is yet available. All non-state CAIs will initially be connected to the network with a 1 Gbps Ethernet connection with a shared 1 Gbps ethernet service offering. The full range of services defined above will be available if an individual CAI requires such service. State entities will be connected to fibers allocated to the state as part of the agreement for the matching grant. Discussions are underway with the state to facilitate provisioning of that service offering.
Residential / Households	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
Businesses	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

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

The network operator is required to offer services in excess of the Municipal Regional Area Network at discounted rates for non-profit and government entities.

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

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

**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 BTOF 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 BTOF-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 BTOF-funded infrastructure
Whelden Memorial Library	West Barnstable MA	Library	No	Connected, service not yet offered.
Massasoit Community College	Brockton MA	Higher Education	No	Connected, service not yet offered.
Massachusetts Maritime Academy	Buzzards Bay MA	Higher Education	No	Connected, service not yet offered.
Town of Bourne	Bourne MA	Municipal Government	No	Connected, service not yet offered.
Cotuit Public Library	Cotuit MA	Library	No	Connected, service not yet offered.
Falmouth Library	Falmouth MA	Library	No	Connected, service not yet offered.
Town of Falmouth, Fire Department	Falmouth MA	Municipal Government	No	Connected, service not yet offered.
Town of Orleans	Orleans MA	Municipal Government	No	Connected, service not yet offered.
Nauset Regional Middle School	Orleans MA	K12 / Evacuation Shelter	No	Connected, service not yet offered.
Town of Provincetown	Provincetown MA	Municipal Government	No	Connected, service not yet offered.
Provincetown Public Library	Provincetown MA	Library	No	Connected, service not yet offered.
Truro Public Safety Building	Truro MA	Municipal Government	No	Connected, service not yet offered.

**Project Indicators (Next Quarter)**

**1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).**

During the next quarter, completion of the fiber construction, testing, and acceptance is anticipated to be completed. Initial customers will be connected to the network. The collocation data center will have been tested and accepted for service. Four microwave links

will have been completed. Additional product offerings from the network operator will also have been launched.

**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	98	OpenCape will remain behind its original baseline for reasons described in Sections 2a and 3 above. The network will progress to near completion during this quarter, however.
2b.	Environmental Assessment	100	Complete
2c.	Network Design	100	Complete
2d.	Rights of Way	96	All final permits and licenses for the microwave network will have been completed. Rights of way for the additional laterals effectively added new work to this category.
2e.	Construction Permits and Other Approvals	100	Construction permits for microwave sites will be in place. These have been delayed by having to work through unique requirements of the 15 individual jurisdictions where the sites are located.
2f.	Site Preparation	0	N/A
2g.	Equipment Procurement	98	Purchase of equipment for the additional laterals will be substantially completed.
2h.	Network Build (all components - owned, leased, IRU, etc.)	95	The initial fiber build will be completed during this period, with the additional laterals representing an increase in work scope that will continue to be worked through this period.
2i.	Equipment Deployment	90	The delay in microwave system permitting will delay final equipment deployments.
2j.	Network Testing	80	Network testing can only be accomplished following network completion. As such, it will lag the original schedule for the same reasons that the overall project lags.
2k.	Other (please specify): Misc contract work	95	Additional contract work requirements will continue to be adjudicated as required to support the project.

**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 approval of additional laterals added make-ready work for some of these laterals. The schedule will once again be dependent upon utility company work schedules, over which OpenCape has no control and minimal influence. This comes at a time when NStar is conducting major upgrades of the power feed into the entire Cape and Islands area. Prioritization of their work flows will be a major focus and a major challenge.



**Infrastructure Budget Execution Details**

**Activity Based Expenditures (Infrastructure)**

1. Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter.

Budget for Entire Project				Actuals from Project Inception through End of Current Reporting Period			Anticipated Actuals from Project Inception through End of Next Reporting Period		
Cost Classification	Total Cost (plan)	Matching Funds (plan)	Federal Funds (plan)	Total Cost	Matching Funds	Federal Funds	Total Costs	Matching Funds	Federal Funds
a. Administrative and legal expenses	\$2,228,962	\$616,188	\$1,612,773	\$1,912,709	\$616,189	\$1,296,520	\$2,070,334	\$616,189	\$1,454,145
b. Land, structures, right-of-ways, appraisals, etc.	\$750,000	\$750,000	\$0	\$750,000	\$750,000	\$0	\$750,000	\$750,000	\$0
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
e. Other architectural and engineering fees	\$1,887,204	\$565,662	\$1,321,542	\$1,719,103	\$580,870	\$1,138,233	\$1,917,618	\$596,077	\$1,321,541
f. Project inspection fees	\$1,066,100	\$165,000	\$901,100	\$342,954	\$9,954	\$333,000	\$911,054	\$59,954	\$851,100
g. Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$88,483	\$86,000	\$2,483	\$88,835	\$86,005	\$2,830	\$88,835	\$86,005	\$2,830
i. Construction	\$22,939,955	\$3,906,449	\$19,033,506	\$18,646,565	\$3,129,040	\$15,517,525	\$22,682,955	\$3,906,449	\$18,776,506
j. Equipment	\$11,200,689	\$2,000,000	\$9,200,689	\$10,052,640	\$1,627,093	\$8,425,547	\$11,114,288	\$1,912,999	\$9,201,289
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>l. SUBTOTAL (add a through k)</b>	\$40,161,393	\$8,089,299	\$32,072,093	\$33,512,806	\$6,799,151	\$26,713,655	\$39,535,084	\$7,927,673	\$31,607,411
m. Contingencies									
<b>n. TOTALS (sum of l and m)</b>	\$40,161,393	\$8,089,299	\$32,072,093	\$33,512,806	\$6,799,151	\$26,713,655	\$39,535,084	\$7,927,673	\$31,607,411

2. Program Income: Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period.

a. Application Budget Program Income: \$5,000,000	b. Program Income to Date: \$3,877,897
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