

RECIPIENT NAME:OpenCape Corporation

AWARD NUMBER: NT10BIX5570039

DATE: 07/30/2013

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 6/30/2015

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 NT10BIX5570039	3. DUNS Number 825181949
4. Recipient Organization OpenCape Corporation 3225 Main Street, Barnstable, MA 02630-1105		
5. Current Reporting Period End Date (MM/DD/YYYY) 06-30-2013	6. Is this the last Report of the Award Period? <input type="radio"/> Yes <input checked="" type="radio"/> 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 Daniel R Vortherms	7c. Telephone (area code, number and extension) 508-524-5905 X	
	7d. Email Address dvortherms@opencape.com	
7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 07-30-2013	

Project Indicators (This Quarter)

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

During this quarter, OpenCape completed an additional 10 route miles of fiber, bringing the total completed route miles to 310 miles. The remaining miles are all under construction and consist of the final 0.6 miles of backbone fiber and 0.4 miles of lateral connections. Following completion of as-build drawings of the build, a final route mile calculation will be completed to validate the results of the construction effort.

All DWDM sites have been completed, with fiber lit for testing across all backbone segments. DWDM and carrier Ethernet equipment was installed at all sites. Testing was completed on 4 of the 10 segments in the network. Initial focus was placed on completing testing and lighting up one bundle of fiber to begin service to a federal customer on Otis Air National Guard Base on Cape Cod. That service began this quarter. Additional cross connects to upstream Internet providers are being pursued to connect the network to the Internet. Testing of the remaining network segments will continue into the next quarter.

Leases/licenses for 13 of 15 microwave sites are in hand. The remaining sites are under negotiation. Work continued with each of the local jurisdictions for all sites through planning boards, town meetings, and construction plan reviews. Building permits are in hand for 3 sites and construction work will commence next quarter. Focus on the initial 3 sites will support a planned maintenance schedule of one tank owner that would otherwise interfere with equipment placement.

The power upgrade required for the regional collocation data center was completed at the very end of the quarter. The power upgrade allowed commissioning of the new electrical switchboard equipment. Completion of generator, data center UPS and cooling systems is scheduled for early next quarter.

Engineering work began on the additional 34 laterals approved as part of the project. One of the connections was completed and make-ready work will be the pacing item for completion of the remaining additional laterals.

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	90	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 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

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			center from Siemens, 14) power upgrade from NStar for the colocation data center that was 16 months in planning.
2b.	Environmental Assessment	100	Completed.
2c.	Network Design	100	The design of the microwave, transport, and municipal RAN networks are complete and final fiber strand maps and patch panel assignments are complete.
2d.	Rights of Way	98	All rights of way are complete. Additional late billing of make-ready for the rights of way are still being received. Approval of the additional laterals this quarter triggered the need for additional pole license agreements. Engineering work began that will lead to additional pole license applications as needed.
2e.	Construction Permits and Other Approvals	98	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	94	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 colocation 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)	90	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	90	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	60	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): Misc contract work	97	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).

Post construction OTDR results continued to uncover fiber that was damaged during construction, bad splicing, and swapped bundles. The testing is progressing, but at a slow rate. As the network segments are tested, three crews are utilized. Two crews are dispatched to the end points of the segment while the third crew moves along the fiber route to rectify any issues discovered during the testing. A 100% test approach is being utilized in that every fiber is being tested. When completed, the network fiber will be working 100% and will exceed contractual performance specifications.

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	310	Below goals of PIP. See Sections 2a and 3 above. Remaining construction is ongoing, with blocked conduit issues scheduled for resolution in one remaining lateral build in the initial 72 programmed laterals. Engineering is underway on the additionally approved laterals so that construction of as many of

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
		those as possible will be completed during the grant period. Microwave network continues to be under construction.
New network miles leased	0	Lease negotiations underway.
Existing network miles upgraded	0	N/A
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	310	Final mile of new fiber under construction. Route being replotted with as built drawings to validate distances.
Number of new wireless links	0	3 building permits in hand. Pushing remaining through local permitting processes.
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	77	11 backbone and 66 CAI interconnection points established.

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 wholesale 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 Lightbridge Inc (formerly 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)

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 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.
	Please identify the speed tiers that are available and the number of subscribers for each	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.
Community Anchor Institutions (including Government institutions)	Total subscribers served	66	CAIs are connected to the network fiber, service pending cross connections to upstream providers.
	Subscribers receiving new access	0	Delay in microwave network.
	Subscribers receiving improved access	66	CAIs are connected to the network fiber, service pending cross connections to upstream providers.
	Please identify the speed tiers that are available and the number or subscribers for each	0	Speed tiers available range up to 1 Gbps, with the increment defined by the needs of the customer.
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
	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 Are 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).
 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
Bridgewater State College	Bridgewater	Other Institutions of Higher Education	No	Connected, service not yet offered.
Bristol Community College	Bristol	Community College	No	Connected, service not yet offered.
Marine Biological Laboratory	Woods Hole	Other Institutions of Higher Education	No	Connected, service not yet offered.
National Marine Fisheries Service	Woods Hole	Other Institutions of Higher Education	No	Connected, service not yet offered.
Sea Education Association	Woods Hole	Other Institutions of Higher Education	No	Connected, service not yet offered.
U.S. Geological Survey	Woods Hole	Other Institutions of Higher Education	No	Connected, service not yet offered.
Woods Hole Oceanographic Institutions	Woods Hole	Other Institutions of Higher Education	No	Connected, service not yet offered.
Woods Hole Research Center	Woods Hole	Other Institutions of Higher Education	No	Connected, service not yet offered.
Cape Cod Regional Technical School	Barnstable County	Schools (K12)	No	Connected, service not yet offered.
Chatham High School	Chatham	Schools (K12)	No	Connected, service not yet offered.
Falmouth High School	Falmouth	Schools (K12)	No	Connected, service not yet offered.
Nauset Regional High School	Brewster, Eastham, Orleans, Wellfleet	Schools (K12)	No	Connected, service not yet offered.
Sandwich High School	Sandwich	Schools (K12)	No	Connected, service not yet offered.
Veterans Memorial School	Provincetown	Schools (K12)	No	Connected, service not yet offered.
Barnstable/Sturgis Library	Barnstable	Libraries	No	Connected, service not yet offered.
Brewster Ladies Library	Brewster	Libraries	No	Connected, service not yet offered.
Centerville Public Library	Centerville	Libraries	No	Connected, service not yet offered.

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
Chatham/Eldridge Public Library	Chatham	Libraries	No	Connected, service not yet offered.
Eastham Public Library	Eastham	Libraries	No	Connected, service not yet offered.
Harwich/Brooks Free Library	Harwich	Libraries	No	Connected, service not yet offered.
Hyannis Public Library	Hyannis	Libraries	No	Connected, service not yet offered.
Mashpee Public Library	Mashpee	Libraries	No	Connected, service not yet offered.
Osterville Free Library	Osterville	Libraries	No	Connected, service not yet offered.
South Dennis Free Public Library	Dennis	Libraries	No	Connected, service not yet offered.
West Dennis Free Public Library	Dennis	Libraries	No	Connected, service not yet offered.
West Falmouth Library	Falmouth	Libraries	No	Connected, service not yet offered.
Woods Hole Public Library	Woods Hole	Libraries	No	Connected, service not yet offered.
Yarmouthport Library	Yarmouth	Libraries	No	Connected, service not yet offered.
Town of Brewster Police Department	Brewster	Public Safety Entities	No	Connected, service not yet offered.
Town of Dennis Town Hall	Dennis	Other Community Support Organizations	No	Connected, service not yet offered.
Town of Eastham Town Hall	Eastham	Other Community Support Organizations	No	Connected, service not yet offered.
Town of Harwich Public Safety Complex	Harwich	Public Safety Entities	No	Connected, service not yet offered.
Town of Mashpee Town Hall	Mashpee	Other Community Support Organizations	No	Connected, service not yet offered.
Town of Wellfleet Town Hall	Wellfleet	Other Community Support Organizations	No	Connected, service not yet offered.
Town of Yarmouth Town Hall	Yarmouth	Other Community Support Organizations	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).
 The fiber network will be completed during this next quarter. Internet and point to point services will be offered on the network. The data center will be operational. All initial 72 CAIs will be connected. Additional laterals approved by NTIA will also be completed. The number will depend on utility company make ready efforts. All microwave radio sites will be completed.

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	99	All network will be operational. Closeout will be underway.
2b.	Environmental Assessment	100	Complete
2c.	Network Design	100	Complete
2d.	Rights of Way	100	Complete
2e.	Construction Permits and Other Approvals	100	Complete
2f.	Site Preparation	0	N/A
2g.	Equipment Procurement	100	Complete
2h.	Network Build (all components - owned, leased, IRU, etc.)	100	Complete
2i.	Equipment Deployment	100	Complete
2j.	Network Testing	100	Complete
2k.	Other (please specify): Misc contract work	100	Complete

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).

Completion of the microwave radio network will be a challenge. The local permitting processes operate on a timeline that cannot easily be influenced by OpenCape, with some mandatory review and objection periods.

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	\$2,007,994	\$616,583	\$1,391,411	\$2,078,966	\$616,583	\$1,462,383
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	\$1,766,628	\$587,707	\$1,178,921	\$1,909,249	\$587,707	\$1,321,542
f. Project inspection fees	\$1,066,100	\$165,000	\$901,100	\$692,319	\$80,149	\$612,170	\$1,066,100	\$165,000	\$901,100
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	\$20,367,755	\$3,226,478	\$17,141,277	\$22,467,158	\$3,684,004	\$18,783,154
j. Equipment	\$11,200,689	\$2,000,000	\$9,200,689	\$10,570,968	\$1,720,692	\$8,850,276	\$11,200,689	\$2,000,000	\$9,200,689
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
l. SUBTOTAL (add a through k)	\$40,161,393	\$8,089,299	\$32,072,093	\$36,244,499	\$7,067,614	\$29,176,885	\$39,560,997	\$7,889,299	\$31,671,698
m. Contingencies	\$0	\$0	\$0						
n. TOTALS (sum of l and m)	\$40,161,393	\$8,089,299	\$32,072,093	\$36,244,499	\$7,067,614	\$29,176,885	\$39,560,997	\$7,889,299	\$31,671,698

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: \$4,219,398
---	--