AWARD NUMBER: NT10BIX5570120

DATE: 10/29/2013

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

QUARTERLY PERFORMANCE PROG	GRESS REPOR	T FOR BROADBAN	D INFRASTRUCTURE P	ROJECTS		
General Information						
Federal Agency and Organizational Element to Which Report is Submitted	2. Award Identific	ation Number	3. DUNS Number			
Department of Commerce, National Telecommunications and Information Administration	NT10BIX557012	20	018946590			
4. Recipient Organization	1					
MCNC 3021 Cornwallis Road, Research Triangl	e Park, NC 27709	-2889				
5. Current Reporting Period End Date (MM/DD/YYY	Υ)	6. Is this the last Repo	rt of the Award Period?			
09-30-2013						
7. Certification: I certify to the best of my knowledge purposes set forth in the award documents.	ge and belief that th	is report is correct and	complete for performance of a	activities for the		
7a. Typed or Printed Name and Title of Certifying C	official	7c. Telepho	ne (area code, number and ex	tension)		
Patricia Moody		9192481820	9192481820			
		7d. Email A	ddress			
Chief Financial Officer		pmoody@r	mcnc.org			
7b. Signature of Certifying Official		7e. Date Re	port Submitted (MM/DD/YYYY)):		
Submitted Electronically		10-29-2013	10-29-2013			

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Project Indicators (This Quarter)

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

At the end of the quarter, we had completed all efforts on the project. We have completed a total of 1697 miles of fiber within the project through a combination of new build, IRU acquisition, or existing upgraded miles. Of the 1697 miles, 1301 miles are new construction, 336 miles are newly executed IRU's, and 60 miles are upgraded miles.

Deployment of backbone and CPE equipment was completed during the quarter.

Total CAI's with newly placed fiber totaled 175 for the project.

The project is now complete as awarded and adjusted during the project life.

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	100	Actual completion based on dollars is 99%, lower to the baseline of 100% forecasted. We were able to achieve some savings on construction due to a couple of IRU's executed during the project in the more difficult areas of construction. The project as outlined in the proposal is complete.
2b.	Environmental Assessment	100	This task is 100% complete for the project as approved in the application.
2c.	Network Design	100	This task is 100% complete for the project as approved in the application.
2d.	Rights of Way	100	This task is 100% complete for the project as approved in the application.
2e.	Construction Permits and Other Approvals	100	This task is 100% complete for the project as approved in the application.
2f.	Site Preparation	100	This task is 100% complete for the project as approved in the application.
2g.	Equipment Procurement	100	This task is 100% complete for the project as approved in the application.
2h.	Network Build (all components - owned, leased, IRU, etc)	97	This number (97% completeness) is based on dollars spent, below our 100% forecasted in baseline for completion of fiber. One of the reasons for this has been savings achieved due to fiber acquisitions via IRU's as opposed to builds. The other issue is that the original budget as approved included \$2,291,533 or Rights or Ways (ROW) costs, but the actual ROW costs were captured in the Land, structures, ROW, appraisals, etc line. The project as outlined in the application is complete.
2i.	Equipment Deployment	100	This task is 100% complete for the project as approved in the application.
2j.	Network Testing	100	This task is 100% complete for the project as approved in the application.
2k.	Other (please specify):	0	N/A

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).

There were no unexpected challenges experienced during the quarter that kept us from completing the project by the required deadline.

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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	1,301	This represents the number of miles of fiber actually placed due to new construction. We are below the baseline of 1340 established at the start of the project due to miles being moved to execution of IRU's as documented to NTIA and subsequently approved by NTIA as opposed to new construction.
New network miles leased	336	We are ahead of baseline on this metric, and always will be, due to IRU executions approved during the project instead of builds. Formal agreements with Zayo (26.5 miles), BREMCO (136 miles), Skyline (16 miles), Pangea (9 miles), ERC (42.5 miles), Country Cable (11 miles), French Broad Electric Membership Corporation (13 miles), Balsamwest (65 miles), Morris Broadband (9 miles) and Greenlight (8 miles) have been completed to account for these totals and represent all IRU's that will be completed.
Existing network miles upgraded	60	We are below the baseline projection of 106 here due to counting in error the miles associated with the ERC IRU acquisition noted above in this category during baseline. The actual miles turned out to be 42.5 as noted above, and were secured with an IRU during the project and were not existing to MCNC at the time baseline was created
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	1,301	We are below baseline of 1694. Baseline contained acquired indefeasible right to use miles as well, in error, and thus we would always be below baseline.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	2,035	Slightly higher to baseline due to approved reroutes during the project creating new points with new constructed routes.

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	7
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	5
Average term of signed agreements (in quarters)	63

- **5b.** Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: Signed agreements completed to date are as follows:
- 1. Broadplex (dark fiber)
- 2. Dukenet Communications (dark fiber)
- 3. RST Communications (dark fiber)
- 4. Lightleap (lit service) via ERC subrecipient
- 5. Conterra (dark fiber)
- 6. Earthlink (dark fiber)
- 7. MOX Networks (dark fiber)

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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:

None available at this time from the newly signed contracts. We anticipate the carriers to offer a full array of telecom services. To our CAI constituents, we will be offering IP and MPLS based transport services up to 10Gbps, 10Gbps lambda (point to point circuit) services, as well as dark fiber under lease and or IRU as requested.

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).

Dukenet Communications out of Charlotte, NC is providing locate and maintenance services on the fiber as it is completed by the contractors. They are not a sub recipient, but as reported in the last quarter have acquired fibers in a portion of the route and discussions for them to acquire in other areas continues.

Contacts:

Dukenet Communications Tony Cockerham, COO 704-382-5247 400 S. Tryon Street, Charlotte, NC 28202

MCNC Tommy Jacobson, COO 919-248-1178

3021 E. Cornwallis Road, Research Triangle Park, NC 27709

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	In our baseline we in error put new fiber purchases in this section. Thus our baseline of 5 was too aggressive as our market has always been for dark fiber as MCNC is not a wholesale carrier to other communication companies.
	Providers with signed agreements receiving improved access	0	No variance to baseline
	Providers with signed agreements receiving access to dark fiber	6	We are ahead of our baseline of 2 signed dark fiber agreements.
	Please identify the speed tiers that are available and the number of subscribers for each	1	The existing lit service noted above is for 15M of access. We anticipate RST beginning to provide 50M service to residential regions within the next 6-9 months as they start developing their business plan along certain portions of the route where they have obtained fibers. All carriers, based on the equipment they intend to deploy that they've revealed to us, will be in a position to provide service levels from 10M up to 10G.
Community Anchor Institutions (including Government institutions)	(including nment Total subscribers served	175	Our baseline was wrong in that it contained projections for services subscribed, and not locations served. For example we felt like some CAI's would subscribe to both internet and transport services. These were in our forecasts. Our number of 175 here represents those locations for which fiber was approved for construction to.
	Subscribers receiving new access	175	Our baseline was wrong due to our interpretation of what improved versus new service meant, and a combination of the two was used in development of our baseline. As a result of the approved construction plan, the number of 175 shown now represents those locations for which fiber was built to.
	Subscribers receiving improved access	0	In error we forecasted in our baseline for improved service to CAI's. Given that the CAI's outlined in our proposal included all new builds for new services, these estimates in the baseline were wrong. This metric will be 0 for all future reports, and due to the continued forecasting error, a variance to baseline in all future reports.

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Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Please identify the speed tiers that an available and the number or subscribers for each	r e 13	Service will be provisioned to the CAI's at 1Gbps with varying contracted speeds up to 1Gbps. Currently the quantity at each tier based on deployment is: 10M:6 20M:4 30M:1 50M:6 100M:52 150M:1 250M:30 275M:2 475M:1 500M:13 1G:11 2G:2 3G:1
Residential / Households	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved acce	ess 0	N/A
	Please identify the speed tiers that an available and the number of subscribers for each	r e 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 acce		N/A
	Please identify the speed tiers that an available and the number of subscribers for each	0 0	N/A
Our network enables s based on the road map		os as required. the equipment.	The optronics deployed have tremendous growth capability Our willingness and ability to lease dark fiber to CAI's ing will be received well.
	management practices changed over	the last quarter	? ○ Yes ● No
8b. If so, please descrik N/A	pe the changes (300 words or less).		
connected to your netw cumulatively). Also ind	olease provide a list by service area of ork as a result of BTOP funds. Figure icate whether your organization is cur	s should be represently providing	v anchor institutions (including Government institutions) ported for the most recent reporting quarter only (NOT g broadband service to the anchor institution. Finally, provide a P-funded infrastructure (300 words or less).
Institution Name	Area (town or county) Institution (as defined in your baseline) institution (as defined in your service)	vou also the oadband ce provider for this stitution?	arrative description of how anchor institutions are using BTOP- funded infrastructure

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Institution Name	Service Area (town or county)	7.	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
N/A	N/A	N/A	N/A	N/A

Project Indicators (Next Quarter)

- Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
 N/A as the project is complete.
- 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).

u. gc	inger provided in your baseline plan (500 words of less).						
	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)				
2a.	Overall Project	100	We came in under budget, so when measured against dollars budgeted, we are 99% complete.				
2b.	Environmental Assessment	100	This activity is 100% complete				
2c.	Network Design	100	This activity is 100% complete				
2d.	Rights of Way	100	This activity is 100% complete				
2e.	Construction Permits and Other Approvals	100	This activity is 100% complete				
2f.	Site Preparation	100	This activity is 100% complete				
2g.	Equipment Procurement	100	This activity is 100% complete				
2h.	Network Build (all components - owned, leased, IRU, etc.)	97	We came in under budget, so when measured against dollars budgeted, we are 97% complete.				
2i.	Equipment Deployment	100	This activity is 100% complete				
2j.	Network Testing	100	This activity is 100% complete				
2k.	Other (please specify):	0	N/A				

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).

N/A as the project is complete.

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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	\$757,080	\$183,865	\$573,215	\$1,064,529	\$258,532	\$805,997	\$1,064,529	\$258,532	\$805,997
b. Land, structures, right-of-ways, appraisals, etc.	\$3,401,000	\$1,363,539	\$2,037,461	\$4,944,441	\$1,818,664	\$3,125,777	\$4,944,441	\$1,818,664	\$3,125,777
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$7,425,748	\$1,803,424	\$5,622,324	\$5,722,349	\$1,389,735	\$4,332,614	\$5,722,349	\$1,389,735	\$4,332,614
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$7,205	\$1,750	\$5,455	\$7,205	\$1,750	\$5,455	\$7,205	\$1,750	\$5,455
g. Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$87,329,001	\$25,240,320	\$62,088,681	\$84,959,325	\$24,584,535	\$60,374,790	\$84,959,325	\$24,584,535	\$60,374,790
j. Equipment	\$6,971,935	\$1,693,210	\$5,278,725	\$7,820,412	\$1,899,272	\$5,921,140	\$7,820,412	\$1,899,272	\$5,921,140
k. Miscellaneous	\$200,000	\$48,572	\$151,428	\$336,402	\$81,699	\$254,703	\$336,402	\$81,699	\$254,703
I. SUBTOTAL (add a through k)	\$106,091,969	\$30,334,680	\$75,757,289	\$104,854,663	\$30,034,187	\$74,820,476	\$104,854,663	\$30,034,187	\$74,820,476
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of I and m)	\$106,091,969	\$30,334,680	\$75,757,289	\$104,854,663	\$30,034,187	\$74,820,476	\$104,854,663	\$30,034,187	\$74,820,476

^{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: \$0 b. Program Income to Date: \$0