

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570120

DATE: 11/16/2012

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 12/31/2013

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 NT10BIX5570120	3. DUNS Number 018946590
4. Recipient Organization MCNC 3021 Cornwallis Road, Research Triangle Park, NC 27709-2889		
5. Current Reporting Period End Date (MM/DD/YYYY) 09-30-2012	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 Patricia Moody Chief Financial Officer	7c. Telephone (area code, number and extension) 9192481820	
	7d. Email Address pmoody@mcnc.org	
7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 11-16-2012	

Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).
 Construction progress continued to be on pace with our expectations. At the end of the quarter we are able to call 1435 miles complete through conduit construction or IRU, representing approximately 84% of the project. Within the conduit installed of 1076 miles, we had placed 721 miles of fiber. We began deploying more equipment related to the backbone elements of the project and had some segments actually "lit", but not yet in a position to provide service as they are not tied back to the core network elements as of the end of the quarter. We anticipate that by end of the December 2012 reporting quarter we will have placed in to service the first several segments related to the project.

We signed two agreements for IRU's related the fiber with Dukenet Communications and Broadplex.

Ordering of most equipment has now completed as it relates to the backbone segments, and as CAI's are scheduled to come on line, the Customer Premise Equipment (CPE) required to make those connections is being ordered and deployed. Must more of this activity will occur in the upcoming 1-2 quarters.

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	74	This number reported for completeness is based on dollars spent, which is 74%, slightly behind baseline of 81% forecasted. Relative to the project miles with conduit miles placed and IRU's executed, we are at 84% complete, which is slightly ahead of the baseline. Contractor billings have delayed by about one month, which means we likely should be at or ahead of baseline by the end of the December reporting quarter. We believe the project relative to deployment plan is essentially on track. At this point, we are not concerned with meeting expectations of the project and overall completion by July of 2013.
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	89	By the end of the quarter, 16 of the 18 planned telecommunication huts were on the ground and placed. All design work on the others was complete and start dates in October planned. The construction cycle of these was a bit slower than anticipated, but at this point we are still well ahead of baseline of 71% and anticipate finishing this function by end of the December reporting quarter.
2g.	Equipment Procurement	75	Most backbone elements related to the project had been ordered and received, prepping for deployment. At the end of the quarter we had bought 75% of the equipment forecasted as part of the project, well above baseline of 66%.
2h.	Network Build (all components - owned, leased, IRU, etc)	74	This number (74% completeness) is based on dollars spent, slightly ahead of our 71% established in baseline. Relative to judging our build "completeness", by the end of the quarter our firm fiber total completed within the project was 1125 miles. Of this, 60 miles were existing MCNC fibers to be placed into the project; 344 from finalized IRU's and 721 from completed new builds. This is approximately 66% of the anticipated network. In analyzing conduit miles constructed, we could reasonably increase this number to a total of 1435 or about 84% of the anticipated project total. At this point, we are slightly ahead of baseline established

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			for the project for dollars and miles and do not have concern with completing the project on time.
	2i. Equipment Deployment	5	Deployment of backbone equipment is going as planned and had picked up at the end of the quarter. This continued effort in to the December reporting quarter will allow this number to increase closer to baseline in the next 1-2 quarters. CAI deployment and scheduling has to come after the backbone elements are complete and is taking a larger effort for scheduling than anticipated.
	2j. Network Testing	66	Slightly behind baseline of 71 at this point. We will recover on this in the next reporting quarter. Being behind in this line item is not a concern to us.
	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).

Challenges related to the schedule of materials has now largely abated. At this point, the challenges relate to keeping the contractors motivated more than 2 years in to the project. Because we have tight contracts signed with them, we are not concerned with them not completing the work, but it does require a lot of ongoing discussion with them as it relates to scheduling and project management. They are prone to complete easier portions of the build in advance of the more difficult aspects, and that is something that has to be monitored very closely. At this point, there is nothing more that the NTIA can do to help us we are in full deployment mode as we have been most of the last year.

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	721	This represents the number of miles of fiber actually placed, which is below the baseline of 955 miles forecasted. We have constructed 1076 miles of conduit, which takes much more time than installation of the fiber, and because of this we are not concerned about being behind at this point. A slower start to construction by both MCNC and ERC is the primary driver for lower number to baseline. We expect to fully recover from this by the end of fourth quarter of 2012 or first quarter of 2013.
New network miles leased	344	We are ahead of baseline on this metric. Formal agreements with Zayo, BREMCO, Skyline, Pangea, ERC, Country Cable, French Broad Electric Membership Corporation and Greenlight have been completed to account for these totals. These represent planned IRU acquisitions from the original proposal, as well as some approved during project by NTIA. The number is ahead of the number established for the entire project in baseline due to project changes approved for IRU's during the project by NTIA.
Existing network miles upgraded	60	60 miles of existing fiber are secured and ready to be lit when complementary fiber is completed in the project. This fiber will be used to tie the BTOP2 construction together to the existing North Carolina Research and Education network.
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	721	We are below baseline of 1205. Baseline contained acquired indefeasible right to use miles as well, in error, and thus we will be below baseline for this and all future reports.
Number of new wireless links	0	N/A
Number of new towers	0	N/A

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Number of new and/or upgraded interconnection points	1,458	Ahead of baseline of 1416 due to number attributable to IRU's and the builds. Interconnect points occur at a minimum of roughly every one mile along the new construction.

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	2
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	3
Average term of signed agreements (in quarters)	80

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: During the quarter we executed on an four fibers on an IRU of approximately 100 miles of new fiber with Dukenet as well as an IRU with Broadplex on 1 fiber over the entire footprint of the new build when complete, approximately 1435 miles. We're slightly behind to base line due to the timing of the completion of the routes, potential carriers timing to have capital funds, and negotiations taking longer than anticipated.

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 service up to 10Gbps, lambda (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 this third party operates (600 words or less). During the quarter we signed a contract with Dukenet Communications out of Charlotte, NC to provide locate and maintenance services on the fiber when it is completed as a contractor. This contract signed represented a 9 month process to select a vendor to perform this critical task. They have also acquired a portion of the route to begin operations on and are continuing discussions on other parts to acquire and operate for commercial purposes.

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	2	We forecasted agreements too soon in our baseline based on completion cycle of the build. While at baseline, some other potential agreements have not signed due to timing related to completion of the routes and availability of capital resources on the part of the provider acquiring routes.
	Providers with signed agreements receiving improved access	0	We forecasted agreements too soon in our baseline based on completion cycle of the build. While it's hard to forecast when any agreements will be signed, we are encouraged by discussions our marketing firm is having with potential carriers. Due to planned completion dates of specific routes, as well as ongoing discussions by our marketing firm with folks interested in those routes, we anticipate being back on schedule to baseline by Q1Y3.
	Providers with signed agreements receiving access to dark fiber	2	We forecasted agreements too soon in our baseline based on completion cycle of the build. While at baseline, some other potential agreements have not signed due to timing related to completion of the routes and availability of capital resources on the part of the provider acquiring routes.

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 are available and the number of subscribers for each	0	We forecasted agreements too soon in our baseline based on completion cycle of the build. While it's hard to forecast when any agreements will be signed, we are encouraged by discussions our marketing firm is having with potential carriers. Due to planned completion dates of specific routes, as well as ongoing discussions by our marketing firm with folks interested in those routes, we anticipate being back on schedule to baseline by Q1Y3.
Community Anchor Institutions (including Government institutions)	Total subscribers served	92	We are ahead of baseline on this based on number of CAI's we have now built fiber to. At this point we have not turned service on to all of them due to timing of deployment in the core or their ability to sign a contract at this time, but the fiber has been deployed
	Subscribers receiving new access	92	We are ahead of baseline on this based on number of CAI's we have now built fiber to. At this point we have not turned service on to all of them due to timing of deployment in the core or their ability to sign a contract at this time, but the fiber has been deployed
	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.
	Please identify the speed tiers that are available and the number or subscribers for each	1	Service will be provisioned to these locations at 1Gbps. As needed and/or requested by the users, the capability can grow to 10Gbps.
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).
 Our network, once fully deployed, will enable service offerings of 1Gbps to 100Gbps as required. The optronics we will deploy will have tremendous growth capability based on the road maps presented to us by the vendor of the equipment. Our willingness and ability to lease dark fiber to CAI's between their respective institutions in a confined geography we are hearing will be received well.

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

8b. If so, please describe the changes (300 words or less).
 We have now implemented our mapping software package which allows us to more easily work with data related to the actual placement of the fiber route. This will enable us to understand how/where to meet other locations for build in the future and help with management of the actual route.

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
See addendum	See addendum	See addendum	See Addendum	See Addendum

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
 Assuming that there is not a great amount of bad weather, at the end of the next quarter we anticipate being within 100 miles of completion of the project for all conduit placement. Relative to fiber placement, we anticipate being with 250 miles of completion. Significant effort as it relates to turning on segments with equipment will begin to occur, but that effort will continue in to the reporting quarters of 2013. As it relates to CAI's we anticipate being approximately at baseline of 125. In addition we believe we could have as many as 4 agreements in total executed with providers along the completed fiber route.

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	87	We anticipate being slightly behind baseline of 90% as it relates to dollars expended, but ahead in terms of actual effort related to work in the project.
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	We are forecasting this activity to be 100% complete.
2g.	Equipment Procurement	100	We are forecasting this activity to be nearly 100% complete. The ordering of customer premise equipment is being performed in close proximity to the need which is a bit different than what was planned initially.
2h.	Network Build (all components - owned, leased, IRU, etc.)	87	This activity will nearly be on schedule with baseline of 88%.
2i.	Equipment Deployment	50	Equipment deployment to CAI's is taking longer than anticipated. We, however, expect to catch up on this when all fiber is in place toward end of the first quarter of 2013.
2j.	Network Testing	90	We expect to be at or ahead of baseline on this function by end of next quarter.
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).
 Winter weather beginning to set in could have an impact on efforts in the north central portions of the network. 60 miles of construction remains in that mountainous area and if we have a lot of rain or snow, efforts will be slowed down. Beyond that, continuing to line up human capital for deployments with our internal staff and scheduling with the CAI's for installation will be a challenge, but not one that cannot be overcome.

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	\$962,773	\$233,820	\$728,953	\$975,000	\$236,789	\$738,211
b. Land, structures, right-of-ways, appraisals, etc.	\$5,692,533	\$1,920,062	\$3,772,471	\$3,335,470	\$911,273	\$2,424,197	\$5,000,000	\$1,315,522	\$3,684,478
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	\$5,380,422	\$1,306,694	\$4,073,728	\$5,600,000	\$1,360,021	\$4,239,979
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	\$0	\$0	\$0	\$0	\$0	\$0
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	\$85,037,468	\$24,683,797	\$60,353,671	\$63,261,929	\$20,265,492	\$42,996,437	\$74,000,000	\$22,873,349	\$51,126,651
j. Equipment	\$6,971,935	\$1,693,210	\$5,278,725	\$5,224,988	\$1,268,945	\$3,956,043	\$6,000,000	\$1,457,165	\$4,542,835
k. Miscellaneous	\$200,000	\$48,572	\$151,428	\$288,107	\$69,970	\$218,137	\$308,000	\$74,801	\$233,199
l. SUBTOTAL (add a through k)	\$106,091,969	\$30,334,680	\$75,757,289	\$78,453,689	\$24,056,194	\$54,397,495	\$91,883,000	\$27,317,647	\$64,565,353
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$106,091,969	\$30,334,680	\$75,757,289	\$78,453,689	\$24,056,194	\$54,397,495	\$91,883,000	\$27,317,647	\$64,565,353

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
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