

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570011

DATE: 02/13/2012

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 NT10BIX5570011	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) 12-31-2011	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): 02-13-2012	

Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).
 We closed in on completion of construction related to the project during the quarter. The remaining portions of the build continue to be challenging, but there were milestones. We placed in to operation segments built between Mocksville and Asheville, representing nearly 60 miles of new builds to complement fibers over nearly 100 miles that MCNC had IRU rights to operate on. This enabled the North Carolina Research and Education Network operated by MCNC to upgrade connectivity in to the Hickory and Asheville points of presence to 10G. Construction efforts continued and at the end of the quarter we had an aggregate of about 2 miles of conduit left to place to finish all of those efforts. Construction during the quarter did finalize the bore of the Trent River in New Bern which was one of the last major hurdles in eastern North Carolina. In total nearly 410 miles of conduit have been placed, with 357 miles of fiber placed within that conduit. Anticipating more fiber completion along other defined segments, we have now started the deployments of the remaining equipment so that it is in place when the fiber is completed and spliced. The project remains ahead of schedule and we project that all components of the project (fiber and equipment deployment) will complete by the end of the March reporting quarter.

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	68	Relative to the original project budget, we are approximately 68% complete. We are lower to baseline due to savings realized in costs during execution of the project, as well as some of our contractors not billing us upon completion of sub-segments as timely as they could be. Relative to the defined project scope of work we are roughly 85% complete.
2b.	Environmental Assessment	100	NA
2c.	Network Design	100	NA
2d.	Rights of Way	100	NA
2e.	Construction Permits and Other Approvals	100	NA
2f.	Site Preparation	100	NA
2g.	Equipment Procurement	100	NA
2h.	Network Build (all components - owned, leased, IRU, etc)	61	Relative to the construction portion of the original budget, we are at 61% completion. Variances to budget are due to savings in the construction process, as well as the timing of billings from our contractors. Relative to the actual network being built, we are at 94% completion as we have formalized Indefeasible Rights to use for fibers or built fibers totaling 845 of 901 forecasted miles of our project.
2i.	Equipment Deployment	54	Due to delays in construction start, and then with difficulties in the mountains of North Carolina slowing down construction to Sylva from Asheville, we are slightly behind deployment schedule. We did deploy equipment to another POP in this quarter and began operating another segment between Hickory and Asheville. Remaining efforts to deploy equipment had commenced at the end of the quarter, but the facilities enabled by those deployments were not complete as fiber was still being built. We forecast full completion of the equipment deployment in the March reporting quarter.
2j.	Network Testing	82	We are testing the fibers as they are acquired or built and spliced. More fiber was placed at the end of the quarter than had had final splicing performed on. Due to this we don't report much more over last quarter, but still ahead of baseline schedule.
2k.	Other (please specify): NA	0	NA

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).

Similar to what was reported in the last quarter, the major challenge remains getting through rocky terrain encountered in western North Carolina. While less than 2 miles remains to be built, it is under challenging creek crossings in granite formations that simply take time to complete. We only have about 10 of these locations remaining and expect all fiber to be complete and placed by February.

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	357	By the end of this reporting cycle we had begun to catch up with fiber placement relative to conduit placement as had been forecasted in previous quarters and are now ahead of baseline.
New network miles leased	291	Our projections on network miles leased have been inaccurate due to misinterpretation of network miles leased versus network miles upgraded in our baseline projections. As it relates to leasing (or in our case acquisition under IRU), we have now fully executed all that were planned or approved by NTIA once our project started. The total of 291 is from 197 from ERC and FRC routes communicated in application, 61 from Morris Broadband acquisition, and 33 from the Balsam and Plateau IRU's approved during the project. This number will always be less than the final projection of 420, but is now complete at 291. The higher number reported in baseline are miles that now reside in the upgraded section below. The 197 miles referenced in this paragraph that are attributable to FRC and ERC acquisitions are different from the 197 referenced in the existing network miles upgraded section below.
Existing network miles upgraded	197	These miles represent fiber that MCNC already had the rights to via IRU from a BTI Telecom acquisition in 2007 and MCNC put in to the project as in-kind match. BTOP funded the equipment used to light this fiber. Baseline always showed 0 throughout the project due to misunderstanding of guidance and were moved from the "network miles leased" area here in quarterly reporting.
Existing network miles leased	0	NA
Number of miles of new fiber (aerial or underground)	357	In total we have placed 357 miles of fiber and 410 miles of conduit, and so now are ahead of our baseline of 295 miles for this quarter.
Number of new wireless links	0	NA
Number of new towers	0	NA
Number of new and/or upgraded interconnection points	1,062	We are ahead of baseline as this number is representative of all splice enclosures and hand holds on the route, which enable interconnect points.

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

Indicators	
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	5
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:
 MCNC has signed agreements for an approved swap with ERC and FRC as part of the project that was defined at application. We also signed an agreement with Haywood County Government on a 5 year lease of fibers in the western portion of the project over a short 2 mile segment of the route. Because this is not a wholesaler we do not include it in the numbers above.

FRC, our subrecipient, has been discussing agreements with Zayo Bandwidth and Dukenet Communications for fibers in the route but contracts are not signed. They are now also talking to Pangea Internet about a possible IRU acquisition. Of these three possible agreements, the Dukenet Communications agreement is forecasted for no later than June of 2012 by FRC. The Zayo discussions have stalled on the Zayo side and may not materialize. The Pangea efforts will likely not come to fruition before end of calendar 2012 if they occur.

MCNC is exploring additional agreements with ERC for more fibers they would IRU along the BTOP route than originally planned that may officially close by June of 2012.

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:
 MCNC is not providing wholesale services. The Agreements noted above are part of the IRU swaps that were negotiated and submitted to the NTIA for approval and those sites are expected to supply those services.

FRC is planning response to a number of RFP's related to wireless service but pricing plans are not yet available as the overall proposal contains BTOP and non-BTOP related fibers.

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).
 FRC has been contracted to provide fiber maintenance (locates and break/fix) on the fiber once construction is complete. They will provide route maintenance on 100% of the newly constructed fiber. On fiber assets that they retain in the new fiber footprint, they will be in a position to provide wholesale services to other wholesale carriers, last mile carriers, and private enterprise. MCNC would be focused on the education, government, and public health sectors.

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	Baseline is 1, so no variance. Discussions continue between FRC, Zayo, and Dukenet, but nothing formally signed.
	Providers with signed agreements receiving improved access	0	We have found that most providers we've talked to are interested in dark services and not lit wholesale, so our projections here have been wrong.
	Providers with signed agreements receiving access to dark fiber	2	Interest from existing providers has been tepid, and interest from new providers is not yet there. Our marketing partner in the round 2 project is starting to gain some traction related to that project, which is extending further interest in to the round 1 footprint, so we hope to see more activity in this arena over the next year.
	Please identify the speed tiers that are available and the number of subscribers for each	0	NA
Community Anchor Institutions (including Government institutions)	Total subscribers served	1,279	We believe our projections in our application may be wrong due to misinterpretation of the guidance. What we report here are CAI's that were already directly connected to the North Carolina Research and Education Network (NCREN) backbone that have received improved access due to the deployment of fiber and higher grades of service (i.e. 10Gbps internet service) out of NCREN maintained facilities. Our projections were based on those types of institutions located in those counties our fiber route passes through, but some of which may not actually be a part of

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
			NCREN today. The final number we anticipate receiving improved access are 1890.
	Subscribers receiving new access	0	NA
	Subscribers receiving improved access	1,279	We believe our projections in our application may be wrong due to misinterpretation of the guidance. What we report here are CAI's that were already directly connected to the North Carolina Research and Education Network (NCREN) backbone that have received improved access due to the deployment of fiber and higher grades of service (i.e. 10Gbps internet service) out of NCREN maintained facilities. Our projections were based on those types of institutions located in those counties our fiber route passes through, but may not actually be a part of NCREN today.
	Please identify the speed tiers that are available and the number or subscribers for each	1,279	None of the improved access is due to directly connected CAI's, but rather an improved middle mile infrastructure. That infrastructure has capability for 100G connectivity. We anticipate the final number of subscribers benefitting and served from the new infrastructure to be 1890.
Residential / Households	Entities passed	0	NA
	Total subscribers served	0	NA
	Subscribers receiving new access	0	NA
	Subscribers receiving improved access	0	NA
	Please identify the speed tiers that are available and the number of subscribers for each	0	NA
Businesses	Entities passed	0	NA
	Total subscribers served	0	NA
	Subscribers receiving new access	0	NA
	Subscribers receiving improved access	0	NA
	Please identify the speed tiers that are available and the number of subscribers for each	0	NA

7. Please describe any special offerings you may provide (600 words or less).
 We are able to provide lambda based point to point based circuits between all NCREN POP's enabled by the new infrastructure and to portions of the central core (defined as the Charlotte to Raleigh corridor) of the NCREN network that existed prior to application.

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

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

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?	Narrative description of how anchor institutions are using BTOP-funded infrastructure

			(Yes / No)	
NA	NA	NA	NA	NA

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
 We expect to complete the project as awarded with all fiber placed and equipment deployed.

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	78	We expect to have 100% of the project completed which will correlated to 78% of the original budget.
2b.	Environmental Assessment	100	NA
2c.	Network Design	100	NA
2d.	Rights of Way	100	NA
2e.	Construction Permits and Other Approvals	100	NA
2f.	Site Preparation	100	NA
2g.	Equipment Procurement	100	NA
2h.	Network Build (all components - owned, leased, IRU, etc.)	100	NA
2i.	Equipment Deployment	100	NA
2j.	Network Testing	100	NA
2k.	Other (please specify): NA	0	NA

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 only challenge that could potentially keep us from completing as described would be a delay in these final few placements of conduit not occurring. Weather and geography could factor in to that. While the risk for this occurring over a three month period is low, it is a risk nonetheless. Additionally if for whatever reason our fiber that has been ordered was to be damaged during placement by the contractors, replacement reels could be delayed in being received due to a backlog of fiber by our contractor. We can mitigate that if needed, though, by having them manufacture from our allocated allotment of glass for the round 2 project if that were to occur.

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	\$379,500	\$83,808	\$295,692	\$435,768	\$96,234	\$339,534	\$535,000	\$118,149	\$416,851
b. Land, structures, right-of-ways, appraisals, etc.	\$350,000	\$77,294	\$272,706	\$399,108	\$88,139	\$310,969	\$415,000	\$91,648	\$323,352
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$1,397,142	\$308,543	\$1,088,599	\$1,772,855	\$391,515	\$1,381,340	\$1,813,000	\$400,381	\$1,412,619
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$3,470	\$766	\$2,704	\$3,717	\$821	\$2,896	\$3,717	\$821	\$2,896
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	\$31,439,915	\$6,943,153	\$24,496,762	\$19,342,352	\$4,271,542	\$15,070,810	\$23,457,500	\$5,180,326	\$18,277,174
j. Equipment	\$6,415,529	\$4,346,474	\$2,069,055	\$5,059,652	\$2,898,976	\$2,160,676	\$5,119,410	\$2,912,173	\$2,207,237
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
l. SUBTOTAL (add a through k)	\$39,985,556	\$11,760,038	\$28,225,518	\$27,013,452	\$7,747,227	\$19,266,225	\$31,343,627	\$8,703,498	\$22,640,129
m. Contingencies									
n. TOTALS (sum of l and m)	\$39,985,556	\$11,760,038	\$28,225,518	\$27,013,452	\$7,747,227	\$19,266,225	\$31,343,627	\$8,703,498	\$22,640,129

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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