

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570011

DATE: 05/04/2011

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) 03-31-2011	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): 05-04-2011	

Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).
 MCNC used award funds to place in to service 197 miles of fiber previously owned between Raleigh and Wilmington using dense wave division multiplexing equipment. The first service enabled on this path is a 10Gbps IP network improving service to 490 community anchor institutes who are provided service through the Fayetteville and Wilmington NCREN points of presence and who were previously on a limited capacity lease of a 1Gbps backbone. Construction efforts ramped up significantly with approximately 120 miles of conduit placed by the end of the quarter through work on five defined spans of the project totaling approximately 150 miles of the overall build. While none of the conduit had yet had fiber deployed through it, construction of the conduit is the most significant part of the task in locating the fiber. The reason the fiber had not yet been placed was to allow for completion of the entire spans within a region before deploying any of the fiber for safety reasons of the fiber and balance of the project. An infeasible right to use (IRU) was closed with an incumbent provider on 61 miles of fiber that were previously planned for construction between Hendersonville and Cashiers, but approved for acquisition by NTIA during 4th quarter of 2010. 95% of all required permits on all segments have been obtained by the end of the quarter for the entire project. In addition, equipment purchases and commits for \$1.6M of the project have been made.

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	35	Given where we're at in the execution of contracts, agreements, and conduit placed in the ground, we believe our project is performing slightly ahead of the schedule communicated in the baseline relative to deployment of the mileage forecasted. However, due to the lack of fibers actually placed, we will only report equal to the baseline from a completeness standpoint.
2b.	Environmental Assessment	100	During the quarter we received confirmation that a required approximate 30 mile reroute had gained clearance. In addition we filed a second shorter approximately 2 mile reroute request that was still having EA work completed at quarter end.
2c.	Network Design	100	All engineering activities related to the fiber construction of the project are completed, including the approximately 2 mile reroute spoke about in the environmental assessment. The only lingering issue is the EA review of that segment.
2d.	Rights of Way	100	All right's of way required on the project have now been applied for.
2e.	Construction Permits and Other Approvals	94	At this point we only lack encroachment agreements from NC DOT in two counties, seven railroads, and United States Forest Service for the Croatan Forest across the entire footprint of the project. Together these areas represent approximately 25 miles of the entire 414 miles to be constructed as part of the project. All other areas have required construction/encroachment or equivalent permits. Note we've previously communicated 407 miles of new construction. With the required reroutes previously referenced, the number of engineering miles is now 414.
2f.	Site Preparation	0	Not applicable at this time.
2g.	Equipment Procurement	63	We have placed orders for equipment for all segments that total approximately 461 of the engineered miles. Relative to all operated miles that reflects 51%. However, in terms of the procurements to dollars in the budget, and what we will report, we're at \$1.6M of commit or actually received on equipment, or about 63%.
2h.	Network Build (all components - owned, leased, IRU, etc)	52	We have formalized agreements and/or built 461.5 miles of the 894 (adjusted to reflect reroute) forecasted miles of our project. 197 are via IRU's from FRC and ERC, 197 from an existing IRU, 61 from the new IRU with Morris Broadband, and 6.5 miles constructed. If you factor in the miles of conduit completed, the number would be 581.5 miles. For the purpose of this report and the percentage noted, we will use the lower value of 461.5 or 52% complete, which still tracks ahead of our

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			30% forecast in the baseline. If to the higher number we would be at 66%.
	2i. Equipment Deployment	22	Due to delays in getting started on construction by approximately two quarters, this milestone will lag by about one quarter in reporting. We base the deployment number at 197 miles now operated of the 887 reflecting the placement of equipment between Raleigh and Wilmington. Originally we would have expected to have had Mocksville/Asheville and Rocky Mount/Greenville deployed as well, but the delay in construction did not allow. These spans likely will deploy in late summer and may not make the Y2Q2 report either, but we have no concerns at this point with being back on schedule no later than Y2Q3.
	2j. Network Testing	52	We are testing the fibers we build as they are constructed, or as they are obtained and ready to put in to service. At the end of the quarter, we had tested 461.5 of the 887 miles to be deployed.
	2k. Other (please specify):na	0	Not applicable.

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).

It was a good quarter. The biggest challenges have continued to be final acquisition for all relevant encroachment agreements from NC DOT, as well as a few sticking ones with various railroad operators. They've certainly taken longer than we forecasted, but we feel good with where we're at at this point. Communication and feedback from NTIA has improved dramatically over the last quarter. Input and feedback is timely. As we have shifted to construction the challenges are now different and relate more to local issues in the field with dealing with cuts of utilities, working with contractors to make sure they are not impacting homeowners and businesses on the route, etc. At this point we feel confident about our ability to finish the project ahead of schedule. Biggest area we need to solve soon will be guidance on how to sale and lease fiber if new guidance is forthcoming.

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	7	While we have officially only deployed 7 miles, we have constructed by end of quarter approximately 127 miles of fiber and conduit. Placement of fiber is the last work step and not the hard part of the construction process. While we are behind relative to the number reported in the baseline, we anticipate being fully caught up by no later than the end of Y2Q3.
New network miles leased	258	197 from ERC and FRC. 61 from Morris Broadband acquisition.
Existing network miles upgraded	197	Put in to operation 197 miles from Raleigh to Wilmington that MCNC already had rights to the fiber. The BTOP project funded the equipment.
Existing network miles leased	0	na
Number of miles of new fiber (aerial or underground)	462	Total number of miles enabled by the project includes the existing miles upgraded MCNC previously owned (197), newly acquired miles this quarter from Morris (61), and all the miles acquired through agreements as part of the application (197) and fully constructed miles (7).
Number of new wireless links	0	Not applicable
Number of new towers	0	Not applicable
Number of new and/or upgraded interconnection points	133	76 are from fibers in the FRC acquisition. 16 from from fibers in the ERC acquisition. 23 from the Morris Broadband fiber acquisition. 18 from MCNC new builds.

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	3
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	1
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:

The Education and Research Consortium (ERC)
 FRC, LLC, a subsidiary of PalmettoNet
 Morris Broadband (an IRU from them)

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 NTIA for approval and those sites are expected to supply those services.

FRC is currently negotiating for a long term IRU sale of Dark Fiber assets along specific portions of the planned ring build. The potential customer is a company known as Zayo LLC, a Colorado company. Pricing for the fiber has been offered at a one time IRU fee of \$1.8M, and annual maintenance fees of \$70.19K, or \$5848.00 per month. The deal has not yet closed.

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/Palmettonet has been contracted to provide fiber maintenance (locates and break/fix) on the fiber once constructed. 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	The baseline was incorrect due to interpretation of what was asked. We have two agreements where providers will receive fibers in BTOP funded routes. One is with the newly designated sub-recipient. The second agreement is with a different company (pending approval by NTIA of a sale/lease waiver) as part of a planned swap of fiber identified in the initial MCNC application. We have a signed agreement for the swap between the two organizations on fibers exchanged and maintenance components associated with it, and will be submitting the request for sale/lease waiver soon. Our baseline had forecasted swaps with another company that did not play out due to the arrangement shifting to straight IRU agreements. We've executed from them and anticipate at some point they will execute on BTOP fibers. The cumulative total to date is 2.
	Providers with signed agreements receiving improved access	0	The baseline was incorrect due to interpretation of what was asked. We have two agreements where providers will receive fibers in BTOP funded routes. One is with the newly designated sub-recipient. The second agreement is with a different company (pending approval by NTIA of a sale/lease waiver) as part of a planned swap of fiber identified in the initial MCNC application. We have a signed agreement for the swap between the two organizations on fibers exchanged and maintenance components associated with it, and will be submitting the request for sale/lease waiver soon. Our baseline had forecasted swaps with another company that did not play out due to the arrangement shifting to

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
			straight IRU agreements. We've executed from them and anticipate at some point they will execute on BTOP fibers.
	Providers with signed agreements receiving access to dark fiber	2	Similarly to the above two responses, our baseline turns out to be wrong based on interpretation at the time of completing it. To date, only two agreements for access to new fibers have occurred.
	Please identify the speed tiers that are available and the number of subscribers for each	0	Not Applicable
Community Anchor Institutions (including Government institutions)	Total subscribers served	497	This number represents the number of CAI's on MCNC's network that receive service through the NCREN points of presence in Fayetteville and Wilmington. With the deployment of the new fibers and equipment to these areas, these users went from a limited 1Gbps shared arrangement to a 10Gbps IP backbone. The reason the number missed what was reported in the baseline is due to a slower than expected deployment on the fibers that were to be constructed by the end of this quarter. As we begin deployment of the constructed fibers in Y2Q2 and Y2Q3 we anticipate recovering.
	Subscribers receiving new access	0	na
	Subscribers receiving improved access	497	This number represents the number of CAI's on MCNC's network that receive service through the NCREN points of presence in Fayetteville and Wilmington. With the deployment of the new fibers and equipment to these areas, these users went from a limited 1Gbps shared arrangement to a 10Gbps IP backbone. The reason the number missed what was reported in the baseline is due to a slower than expected deployment on the fibers that were to be constructed by the end of this quarter. As we begin deployment of the constructed fibers in Y2Q2 and Y2Q3 we anticipate recovering.
	Please identify the speed tiers that are available and the number of subscribers for each	497	10Gbps shared backbone is available to all of these subscribers with more bandwidth available to be provisioned as required.
Residential / Households	Entities passed	0	N/A to our project
	Total subscribers served	0	N/A to our project
	Subscribers receiving new access	0	N/A to our project
	Subscribers receiving improved access	0	N/A to our project
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A to our project
Businesses	Entities passed	0	N/A to our project
	Total subscribers served	0	N/A to our project
	Subscribers receiving new access	0	N/A to our project
	Subscribers receiving improved access	0	N/A to our project
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A to our project

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 the NCREN POP's enabled by the new infrastructure.

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? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
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 anticipate placement of at least 100 miles of fiber in the sections of conduit that have been completed thus far. Additionally we believe we will deploy another 120-150 miles of conduit in the quarter ending in June. Our hope will be to deploy equipment on the fibers enabled to Asheville and Greenville, but this activity may slip until later in the summer. All permits should be received by the end of this quarter and we would anticipate having all 11 segments of the network under active construction or complete. We lastly expect to close on both the Plateau and Balsamwest IRU's to enable approximately 38 miles in the far western part of the network.

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	50	We believe we will begin to be slightly ahead of schedule by end of June quarter and significantly ahead of schedule by end of September quarter due to the pace of construction we're seeing. We're averaging placement of approximately 40 miles of conduit per month. As fiber is ready, equipment will be arriving to be deployed.
2b.	Environmental Assessment	100	No variance
2c.	Network Design	100	No variance
2d.	Rights of Way	100	No variance
2e.	Construction Permits and Other Approvals	100	No variance
2f.	Site Preparation	0	No variance
2g.	Equipment Procurement	75	Due to the fact we're advancing ahead of schedule with miles of conduit placed, coupled with the lead times reported by Cisco currently on the type of equipment we need to deploy, we anticipate ordering equipment about one quarter in advance at a minimum of when we would deploy. Based on that, we will be ahead of pace to the baseline on this line item going forward.
2h.	Network Build (all components - owned, leased, IRU, etc.)	68	Based on where we're at now and with a minimum of 100 miles placed, we would expect to be at 68% (conservatively) by end of June, which would be ahead of our baseline estimate.
2i.	Equipment Deployment	40	Based on the lighting of completed spans, we would anticipate having about 1/2 of the network elements deployed by June, but to remain conservative, will only forecast 40% for now.
2j.	Network Testing	68	Based on where we're at now and with a minimum of 100 miles placed, we would expect to be at 68% (conservatively) by end of June, which would be ahead of our baseline estimate.
2k.	Other (please specify): na	0	N/A to our project

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570011

DATE: 05/04/2011

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 12/31/2013

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).

At this point we don't anticipate any challenges beyond potentially adverse weather. All contractors are performing well and are under contract for completion of the project. All segments in our project plan will be released for construction by end of the quarter and in doing so, the crew will ramp up at a quicker pace.

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	\$356,718	\$78,777	\$277,941	\$381,718	\$84,298	\$297,420
b. Land, structures, right-of-ways, appraisals, etc.	\$350,000	\$77,294	\$272,706	\$318,428	\$70,321	\$248,107	\$328,428	\$72,530	\$255,898
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	\$1,577,058	\$348,276	\$1,228,782	\$1,696,017	\$374,546	\$1,321,471
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$3,470	\$766	\$2,704	\$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	\$31,439,915	\$6,943,153	\$24,496,762	\$3,112,656	\$687,395	\$2,425,261	\$14,728,785	\$3,252,687	\$11,476,098
j. Equipment	\$6,415,529	\$4,346,474	\$2,069,055	\$3,133,472	\$2,473,601	\$659,871	\$3,843,351	\$2,630,370	\$1,212,981
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	\$8,498,332	\$3,658,370	\$4,839,962	\$20,978,299	\$6,414,431	\$14,563,868
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$39,985,556	\$11,760,038	\$28,225,518	\$8,498,332	\$3,658,370	\$4,839,962	\$20,978,299	\$6,414,431	\$14,563,868

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
---	--------------------------------