

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570120

DATE: 02/28/2013

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) 12-31-2012	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): 02-28-2013	

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 1606 miles complete through conduit construction, IRU acquisition or existing MCNC controlled miles, representing approximately 94% of the project miles. Within the conduit installed we have placed 1010 miles of fiber. More equipment related to backbone segments had been deployed with the first working segments of the network between Charlotte and Whiteville, Raleigh and Henderson, and Sanford and Hamlet becoming active.
 As of this quarter fiber had been deployed to a total of 132 locations. No other IRU or leases were executed, but there were currently eight additional opportunities that are in various stages of discussion.

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	85	This number reported for completeness is based on dollars spent, which is 85%, which is slightly behind baseline of 90% forecasted. Relative to the project miles when consideration is given to miles of conduit constructed and IRU's executed, we are at 94% complete, which is slightly ahead of the baseline. The variance to baseline can be attributed to the pace of contractor billings and our acceptance of fiber . 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	100	This task is 100% complete for the project as approved in the application.
2g.	Equipment Procurement	84	This task as expected is slightly ahead of baseline and due to quicker order of equipment as engineering requirements finalized.
2h.	Network Build (all components - owned, leased, IRU, etc)	87	This number (87% completeness) is based on dollars spent, slightly below our 88% forecasted in baseline. Relative to judging our build through actual completion in the field, by the end of the quarter our firm fiber total completed within the project was 1406 miles. Of this, 60 miles are existing MCNC fibers to be placed into the project; 336 from finalized IRU's and 1010 from completed new builds. This is approximately 82% of the anticipated network. In analyzing conduit miles constructed, we could reasonably increase this number to a total of 1606 or about 94% of the anticipated project total. We do not have concern with completing the project on time.
2i.	Equipment Deployment	50	While quite a bit below the projected 80% completion in baseline, this effort continues to go as expected. We are placing equipment in the huts now that they are in place ahead of the fiber completion and this number should be at or ahead of baseline by the end of the March reporting quarter. We have no concerns with our ability to fully meet this criteria by the end of project.
2j.	Network Testing	87	Nearly at baseline of 88%. We are below simply due to timing of completion of the fiber splicing and acceptance of the fibers. No concerns with this line item from our perspective.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
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 now relate to a rainy start to the winter season in December as well as the expected holiday break for contractors slowing us down a bit in our construction efforts. Scheduling for site access at the CAI's is time consuming and doesn't always work well within schedules for the site and our project plan. This is a minor issue, but one that does take quite a bit of coordination. At this point we still do not have concerns about completing the project on time however as the pace of construction is slightly ahead of pace.

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	1,010	This represents the number of miles of fiber actually placed, which is below the baseline of 1148 miles forecasted. We have constructed 1210 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 on this metric. A slower start to construction by both MCNC and ERC is the primary driver for lower number to baseline. We expect to recover from this by the end of the first quarter of calendar 2013.
New network miles leased	336	<p>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.</p> <p>Note that this number is lower than the 344 reported in the previous quarter due to a double counting in error of one of the executed IRU's. The 336 represented here is the final number of network miles planned for lease in the project.</p>
Existing network miles upgraded	60	60 miles of existing fiber are secured and ready to be lit when complementary fiber adjacent to them 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 in operation today.
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	1,010	We are below baseline of 1503. 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
Number of new and/or upgraded interconnection points	1,779	Slightly ahead of baseline of 1765 due to number attributable to access points located on the IRU's executed and the builds completed to date. Interconnect points occur at a minimum of roughly every one mile along the new construction, more frequently within the metro areas.

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	8
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:
 No new agreements have been signed but there are 8 agreements being negotiated that have strong potential. We're slightly behind to base line due to the timing of the completion of the routes, potential carriers availability to have capital funds for purchases, and negotiations taking longer than anticipated. We are confident, however, that within the next two reporting quarters we will have other agreements finalized. Signed agreements to date are with Broadplex Communications and Dukenet Communications.

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 (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	2	We forecasted agreements too soon in our baseline based on completion cycle of the build. While meeting the projection forecasted in the 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	No variance to baseline.
	Providers with signed agreements receiving access to dark fiber	2	While meeting the projection forecasted in the 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. The carriers that we are speaking to, however, have a wide array of offerings in their current networks that we anticipate would be made available where they would buy fiber from us.
Community Anchor Institutions (including Government institutions)	Total subscribers served	132	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 fiber construction is complete.
	Subscribers receiving new access	132	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 fiber construction is complete.
	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	7	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:0 20M:2 50M:1 100M:11 250M:10 500M:8 1G:4
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).

N/A

9. Community Anchor Institutions:

Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported for the most recent reporting quarter only (NOT cumulatively). Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (300 words or less).

Institution Name	Service Area (town or county)	Type of Anchor Institution (as defined in your baseline)	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
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).

We believe by the end of the March 2013 reporting quarter we will be nearing completion of the build elements of the project. Relative to fiber placement, we anticipate being with 50 miles of completion and all conduit will be placed outside of the 14 mile segment in the Graham county area in the western part of the state which isn't planned for start until the end of February or first of March. Significant effort as it relates to turning on segments with equipment will occur in this quarter. As it relates to CAI's we anticipate being approximately at baseline of 179. 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	93	Based on dollars spent at the end of the March quarter we anticipate being ahead of baseline of 90%.
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	We project this activity to be 100% complete next quarter
2h.	Network Build (all components - owned, leased, IRU, etc.)	99	We project this activity to be at 99% complete next quarter, the only dependency being the Graham County build referenced above
2i.	Equipment Deployment	95	We project this activity to be at baseline of 95%
2j.	Network Testing	95	We project this activity to be 100% complete 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).

Our primary concerns in the project at this juncture relate to the winter weather in the areas left for construction. A snowy, wet winter will cause delays in one of the remaining regions of the project. Scheduling of equipment deployment is proving to be a challenge, but we intend to secure more part time staff resources as required to help in this effort. At this point, the focus is pushing through to completion of the project as much as we can in the March 2013 reporting quarter.

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	\$994,371	\$241,494	\$752,877	\$1,000,000	\$242,861	\$757,139
b. Land, structures, right-of-ways, appraisals, etc.	\$5,692,533	\$1,920,062	\$3,772,471	\$3,966,714	\$1,121,923	\$2,844,791	\$5,000,000	\$1,372,867	\$3,627,133
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	\$5,540,730	\$1,345,626	\$4,195,104	\$6,000,000	\$1,457,165	\$4,542,835
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	\$74,049,369	\$22,885,339	\$51,164,030	\$81,851,354	\$24,289,020	\$57,562,334
j. Equipment	\$6,971,935	\$1,693,210	\$5,278,725	\$5,729,521	\$1,391,476	\$4,338,045	\$6,250,000	\$1,517,881	\$4,732,119
k. Miscellaneous	\$200,000	\$48,572	\$151,428	\$300,242	\$72,917	\$227,325	\$350,000	\$85,001	\$264,999
l. SUBTOTAL (add a through k)	\$106,091,969	\$30,334,680	\$75,757,289	\$90,580,947	\$27,058,775	\$63,522,172	\$100,451,354	\$28,964,795	\$71,486,559
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	\$90,580,947	\$27,058,775	\$63,522,172	\$100,451,354	\$28,964,795	\$71,486,559

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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