

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570120

DATE: 11/22/2011

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 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) 09-30-2011	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): 11-22-2011	

Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).
 Construction began this quarter on the first priority route leaving Charlotte, and at end of the quarter we had 67 miles of conduit placed, and pulled in the first seven miles of fiber. We continue to finalize the engineering of the route and working with the appropriate permitting agencies for ROW/easement access. During the quarter we closed an RFP to identify a marketing partner for commercial aspects of the build, and selected ECC Technologies who will be based out of Wake Forest for the project. In addition, we released and closed an RFP to determine an equipment vendor for the project, and released an RFP to determine a contractor to do the specialized bridge attachments required to complete the project. Negotiations continued during the quarter on contracts related to Indefeasible Rights to Use that were outlined in the original project plan, and for those identified after the project commenced with incumbent providers for existing/available fiber. At the end of the quarter we had completed acquisition of 26 miles of fiber from Zayo, and were nearing completion on IRU's with Blue Ridge Electric Membership Corporation and Skyline Telephone Membership Corporation. We continued to work with community colleges and universities around the state to finalize easements for land to locate telecommunication huts along the route. Lastly, we held a statewide virtual ground breaking in August attended by many members of the North Carolina Congressional Delegate as well as members of the NTIA staff.

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	11	This number for completeness is based on dollars spent. While the planning efforts of the project for engineering and permitting represent a great amount of work, they don't represent a great amount of spend, thus less than the 22% forecasted on the baseline. Over the next 2-3 quarters you will see this number bypass the baseline relative to number of miles deployed and dollars spent. At this point, we are not concerned with meeting expectations of the project and project overall completion of 67% by end of July 2012 and 100% completion by July of 2013.
2b.	Environmental Assessment	100	NA
2c.	Network Design	81	With some of the required reroutes of our projects pending, our original baseline for miles in the project is now wrong. We anticipate the final number of miles for the project if all reroutes are approved to be 1674 miles. We show approximately 992 miles fully engineered and 362 miles where IRU's/acquisition are agreed to in principle and working toward finalization, for a total of 1354 miles designed, or 81%. We anticipate making up this delta in the first part of 2012 as the design firm finalizes the designs of the reroutes once the changes have their EA amendment finalized.
2d.	Rights of Way	64	The permitting process continues to be a challenge in such a large project. We asked our engineering firm to prioritize routes that we wanted to start constructing first for permit as opposed to going project wide. This was required due to the back and forth that DOT was going through in this process. By focusing on certain spans, we had a higher probability for finalizing key segments. Thus, all permits have not yet been applied for. At the end of the quarter we had applied for 77 of the required 141 DOT permits; and 54 of the 65 railroad permits for a total of about 64% of the known permits. We are slightly behind where we hoped to be at this point but anticipate being on target next quarter. The change we employed continues to be the best approach knowing that some of the routes not yet applied for are 6-9 months away from commencement of construction.
2e.	Construction Permits and Other Approvals	37	We do not have as many permits obtained at the end of the quarter as expected due to a slower approval rate than we had anticipated. Effort has been great, but billings relative to effort are not incurred until the permits are complete and received. We would anticipate 67% completion by end of calendar 2011 and 100% completion by June 2012 at the latest.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2f.	Site Preparation	10	The process to finalize the easements at the universities and community colleges around the state where the huts will be located has been a long process. At the end of the quarter we had finalized (site plans, had surveys, and recorded easements) for about 4 of the 19 locations. All other locations are well along their way with agreements in principle and preliminary work started, but not completed. We expect to recover from this deficit over the next 2 quarters. At this point we have no concern that we are trending behind on this item. As the easements are complete, we will start preparing the sites for the huts. We forecast all complete by summer of 2012.
2g.	Equipment Procurement	1	We were behind in completion of IRU's that were on the immediate forecast for having equipment ordered to place on them, and thus that equipment has not been ordered. We released an RFP in this quarter to determine equipment for the overall design, and expect to start ordering equipment late in Y1Q4 or Y2Q1 quarter after selecting the vendor after completion of two proof of concept labs with the finalists. We expect to make up this delta by end of Y2Q2.
2h.	Network Build (all components - owned, leased, IRU, etc)	8	This number for 8% completeness if based on dollars spent. Relative to judging our build "completeness", by the end of the quarter our firm fiber total completed within the project stood at 93 miles. Of this, 40 were existing MCNC assets to be placed in to the project from a previously owned route from Level3, 20 from the BTOP1 project used to tie the round 1 and round 2 networks together, 26 from a finalized acquisition with Zayo, and 7 from completed new builds. This is approximately 6% of the expected 1674 miles (after all required reroutes and final engineering are done). If you add the additional miles of conduit constructed, which accounts for the bulk of the time during construction, you would add 60 more miles to the project, for a total of 153 miles, or about 9%. We expect to make up this difference to baseline in the next reporting quarter. Relative to dollars and to miles deployed, we would anticipate 67% complete by end of July 2012 and 100% complete by March 2013.
2i.	Equipment Deployment	0	Slower than expected deployment of IRU's impacted ordering schedule of equipment and thus deployment. We expect to begin deployment of equipment in earnest by the Y2Q2 quarter, and be back on track no later than Y2Q3 reporting period.
2j.	Network Testing	0	We did not have significant budget as part of this line item in the budget as these costs were part of the construction line item. Given that no new network testing equipment has been bought to date, this completion percentage is at 0%. However, we test our fibers as we acquire or build, and as such we correspond projection for this line item as 67% by July 2012 and 100% by March 2013. With approximately 6% of project activity done, we stand at 6% on testing relative to the proposed miles in the project but 0% relative to budget line item.
2k.	Other (please specify):	0	None

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).

The permitting process continues to be a work in progress, specifically with the NC Department of Transportation. We have also been requested by the NC Department of Natural Resources to apply for a Coastal Area Management Act Permit for 20 coastal counties because of the broad scope of the project, which is not something we were expecting to have to do based on guidance on their internet web site. While the process is expected to take about 4 months in total, because that construction is slated toward the end of our project, we don't believe this to be a concern. Coordination with the CAI's that will get direct fiber has been a challenge also, but we are gaining more traction with this and have roughly 1/2 of the sites completed now. We have encountered a few situations where our originally proposed route could not be continued due to a variety of issues including controlled access right of way, water crossings, and NC Forest Service permitting issues. This forced us to look at alternatives that we have presented to NTIA for consideration. None of these place the project at risk but add time delay to the execution of the project as we have to cycle through an EA

amendment process. Timely review by NTIA of these changes and the EA amendments associated with them will help us stay on track as we work around those areas that lack final approval.

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	Only 7 miles of fiber deployed. 60 additional miles of conduit without fiber has been deployed. Slower start to construction is the reason for the lower rate, but we expect to recover within 1-2 quarters. We project to be at 67% completion for fiber by end of July 2012 and 100% complete by end of March 2013.
New network miles leased	26	Completed the Zayo fiber acquisition. Formal agreements with BREMCO were close, but not signed off on. Expect to recover from this by next reporting quarter when as many as 4 of the remaining IRU's may finalize that we are expecting. We project to be at 67% completion for fiber leased by June of 2012 and 100% completion for fiber leased by December of 2012.
Existing network miles upgraded	60	60 miles of existing fiber (40 from existing owned Level3 route, 20 from BTOP1 project) are slated to be placed in to service.
Existing network miles leased	0	NA
Number of miles of new fiber (aerial or underground)	7	We are behind to our planned forecast. Primarily this is due to a slower start to construction which equates to a slower deployment of fiber in the built conduit. We have 7 miles of fiber placed and over 60 miles of conduit. We should recover from this discrepancy within 2 quarters. We project to be at 67% completion for fiber by end of July 2012 and 100% complete by end of March 2013.
Number of new wireless links	0	NA
Number of new towers	0	NA
Number of new and/or upgraded interconnection points	141	The delay in starting construction means we haven't hit this forecast. But with further acquisitions of IRU's and more construction in the next quarter, we should be back on schedule. We expect to be at 67% completion for fiber by end of July 2012 and 100% complete by end of March 2013.

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	0
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	0
Average term of signed agreements (in quarters)	0

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers:
 At the end of the quarter, we had no signed agreements. We have, however, selected a marketing partner to actively promote the fiber. Prospects from this company look extremely promising. While we had forecasted 3 agreement at this juncture, the delay in start to construction as well as finalizing the marketing partner contributed to us being behind. We would anticipate as segments are finished being built that over the next 3-4 quarters we will realize having signed agreements as this marketing firm begins their work.

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. We anticipate a carrier to gain access in the route in the future, who will offer a fully 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 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).

Not applicable at this time.

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	0	No variance to baseline
	Providers with signed agreements receiving improved access	0	No variance to baseline
	Providers with signed agreements receiving access to dark fiber	0	No variance to baseline
	Please identify the speed tiers that are available and the number of subscribers for each	0	No variance to baseline.
Community Anchor Institutions (including Government institutions)	Total subscribers served	0	Our projection on this was too fast and our build out of the middle mile not far enough along to allow for support of this yet. We will be 3-4 quarters away from realizing this target.
	Subscribers receiving new access	0	Our projection on this was too fast and our build out of the middle mile not far enough along to allow for support of this yet. We will be 3-4 quarters away from realizing this target.
	Subscribers receiving improved access	0	NA
	Please identify the speed tiers that are available and the number or subscribers for each	0	We will be providing dark fiber, IP services up to 10Gbps, and lambda (circuit) based services.
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

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	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).
NA

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
None to report at this time	None to report at this time	None to report at this time	None to report at this time	None to report at this time

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
We expect to begin construction on a larger scale during the quarter. We released and closed an RFP for equipment to be deployed on the network, and will be going through proof of concept labs with the finalists. We anticipate starting the highly specialized bridge construction involved over 15 miles of the project. We anticipate all engineering efforts to be mostly complete, as well as securing of many of the remaining permits required for construction. We also intend to close around 3-4 IRU agreements for miles associated with the project. By the end of the quarter we anticipate total deployment of 250 miles of conduit, 100 miles of fiber placed within that conduit, and finalization of IRU's representing 200 miles of leased fiber. We anticipate new fiber to potentially 10-12 CAI's within the period. We do not anticipate closing any new agreements for sales/leases of dark fiber.

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	20	Even with a delay to start of construction, we believe that we will recover sufficiently in the next quarter to be back on schedule if we close on IRU's that we anticipate and can realize between 50-75 miles of conduit construction per month as we ramp up our construction efforts. Once at full capacity, we have advised our contractors that we want to meet 100 miles a month if possible.
2b.	Environmental Assessment	100	N/A
2c.	Network Design	85	With some of the reroutes not officially approved to begin formal design work, we likely will have this effort slip in to the following quarter, where we would anticipate it being completed then.
2d.	Rights of Way	85	While this is behind our baseline, with the approach we're now taking, we believe it in line with where we will be in the process. We would anticipate closing all of these activities out in first quarter of FY12. Because the areas not

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
			yet applied for are lower in priority for construction, being behind in baseline here is not of material concern to us in completing the project.
2e.	Construction Permits and Other Approvals	80	While this is behind our baseline, with the approach we're now taking, we believe it is in line with where we will be in the process. We would anticipate closing all of these activities out in first quarter of FY12. Because the areas not yet applied for are lower in priority for construction, being behind in baseline here is not of material concern to us in completing the project.
2f.	Site Preparation	50	We will start placement of huts in this quarter. Our desire is to have all easements required by end of the quarter. Acquisition of the easements is in many cases more than half of the challenge in getting the huts established. As such, if we secure all of them, we will consider this element half completed. We forecast all huts being placed by summer of 2012.
2g.	Equipment Procurement	1	We anticipate making final selection of the equipment to be utilized in this quarter. We forecasted equipment expenditures too quickly based on how our selection criteria through an RFP and Proof of Concept lab worked out. Due to this, we likely will not procure any equipment in this quarter, but would anticipate making a great deal of orders in the first quarter of 2012, and be fully caught up on orders by summer of 2012, at least in terms of orders committed.
2h.	Network Build (all components - owned, leased, IRU, etc.)	33	We anticipate building between 125-150 miles of the conduit during this quarter, and finalizing IRU acquisitions on another approximately 250 miles, which would put us at about 550 miles of our project, or about 33%. If we are able to realize that amount of rate, we would be ahead of our baseline.
2i.	Equipment Deployment	0	We anticipate making final selection of the equipment to be utilized in this quarter. We forecasted equipment expenditures too quickly based on how our selection criteria through an RFP and Proof of Concept lab worked out. Due to this, we likely will not procure any equipment in this quarter, but would anticipate making a great deal of orders in the first quarter of 2012, and be fully caught up on orders by summer of 2012, at least in terms of orders committed.
2j.	Network Testing	0	We test our fibers as we acquire or build, and as such we correspond projection for this line item relative to the project completion to be 67% by July 2012 and 100% by March 2013. We did not have significant budget as part of this line item in the budget as these costs were part of the construction line item and to date have not incurred expense for this.
2k.	Other (please specify):	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).

Finalization of all permits is a major goal for the next quarter. Although some areas will not have construction start on them for 9-12 months, it is important to get these wrapped up so as not to have to continue to spend resource on them.

While we have not requested permission on a larger number of route adjustments, timely review and consideration of them by NTIA will be important to help us keep on track due to having to wait until formal acceptance by NTIA to order materials, equipment, and to begin construction. Given past history with NTIA on quick turnaround of these, we don't view this as a major challenge.

Fiber delivery is somewhat troubling. While our contract with Commscope is very aggressive and they have done a good job of committing a certain schedule of delivery to us, should they have any hiccup in their supply chain of glass to their cable manufacturing plant, we could fall behind. Based on their manufacturing commitment of 125,000 feet of fiber per week, and the number of miles we have to deploy, they will be manufacturing our cable for the next year. Any disruption in that will push our installation schedule out. However, we are not extremely worried about this due to our contract as noted before.

Lastly, with the onset of winter, weather in certain areas of the state could be problematic and any days lost to rain/snow/ice will add time to the end of the project.

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	\$742,946	\$180,432	\$562,514	\$792,946	\$192,576	\$600,370
b. Land, structures, right-of-ways, appraisals, etc.	\$5,692,533	\$1,920,062	\$3,772,471	\$261,155	\$63,424	\$197,731	\$522,310	\$126,849	\$395,461
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	\$3,713,805	\$901,938	\$2,811,867	\$4,500,000	\$1,092,874	\$3,407,126
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	\$6,738,932	\$3,889,849	\$2,849,083	\$15,000,000	\$6,126,329	\$8,873,671
j. Equipment	\$6,971,935	\$1,693,210	\$5,278,725	\$47,006	\$11,416	\$35,590	\$47,006	\$11,416	\$35,590
k. Miscellaneous	\$200,000	\$48,572	\$151,428	\$129,975	\$31,566	\$98,409	\$200,000	\$48,572	\$151,428
l. SUBTOTAL (add a through k)	\$106,091,969	\$30,334,680	\$75,757,289	\$11,633,819	\$5,078,625	\$6,555,194	\$21,062,262	\$7,598,616	\$13,463,646
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	\$11,633,819	\$5,078,625	\$6,555,194	\$21,062,262	\$7,598,616	\$13,463,646

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