

RECIPIENT NAME:Charlotte, City of  
AWARD NUMBER: NT10BIX5570088  
DATE: 02/17/2016

OMB CONTROL NUMBER: 0660-0037  
EXPIRATION DATE: 12/31/2015

### QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

#### General Information

<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b>  Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b>  NT10BIX5570088	<b>3. DUNS Number</b>  071064166
<b>4. Recipient Organization</b>  Charlotte, City of 600 East Fourth Street , Charlotte, NC 28202-2816		
<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  09-30-2015	<b>6. Is this the last Report of the Award Period?</b>  <input checked="" type="radio"/> Yes <input type="radio"/> No	
<b>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.</b>		
<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Rob Nix	<b>7c. Telephone (area code, number and extension)</b>  7043364580	
	<b>7d. Email Address</b>  rnix@ci.charlotte.nc.us	
<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  02-17-2016	

**Project Indicators (This Quarter)**

**1. Please describe significant project accomplishments completed during this quarter (600 words or less).**

During this third and final quarter, the City of Charlotte's main focus was completing all the documentation required to close out the project and the grant as the deployment was completed ahead of schedule and under budget. Below is an overall summary and benefits of this project.

- Network improvements deployed at all 60 planned Community Anchor Institutions.
- The deployment of all 800 planned Police vehicles.
- The deployment of 148 of 150 planned Fire vehicles.

NOTE: Due to a fire vehicle being out of service in a shop for repairs and another fire vehicle totaled in an accident, these 2 remaining Fire vehicles will be completed once returned to the fleet for active duty.

In summary, the BTOP improvements for the City of Charlotte's public safety infrastructure included:

1. Replace slower end-of-life infrastructure equipment for higher speed network gear in police divisions and fire stations.
2. Implement dual band mobile gateways, laptops, and tablets to the police and fire vehicles.

These improvements now utilize 4G LTE broadband speeds currently provided by commercial networks and has prepared Charlotte public safety for a future national public safety network (FirstNet). The improvements deployed a network which is capable of transporting real-time video, location-based information, and critical public safety applications across a wireless network and Wi-Fi.

The business value of these public safety infrastructure improvements now allow law enforcement to get out of the office and remain on the street. The BTOP project has made a notable impact to the betterment of the public safety with the improved bandwidth and throughput. This has allowed access to previously non-accessible critical criminal and safety applications in the field, where the business of public safety happens every day. These improvements allow faster real-time data access to policing applications and provide an essential robust network infrastructure for applications. As example, police officers in the field use electronic monitoring (EM) application to identify potential suspects near a scene of a crime. Charlotte's Fire department is known to be first on the scene, and these improvements offer first responders the ability to communicate vital information in life threatening emergencies to paramedics yet to arrive. Overall, the business of public safety happens in the streets every day, and these BTOP improvements have enabled the City of Charlotte public safety to operate more efficiently and effectively today and the future.

**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	100	Project completed.
2b.	Environmental Assessment	100	Project completed.
2c.	Network Design	100	Project completed.
2d.	Rights of Way	100	Project completed.
2e.	Construction Permits and Other Approvals	100	Project completed.
2f.	Site Preparation	100	Project completed.
2g.	Equipment Procurement	100	Project completed.
2h.	Network Build (all components - owned, leased, IRU, etc)	0	Project was restructured. Did not build an LTE Network.
2i.	Equipment Deployment	100	Project completed.
2j.	Network Testing	100	Project completed.
2k.	Other (please specify): Admin & Legal	100	Project completed.

**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).**

None.

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	0	Project restructured.
New network miles leased	0	N/A.
Existing network miles upgraded	0	N/A.
Existing network miles leased	0	N/A.
Number of miles of new fiber (aerial or underground)	0	N/A.
Number of new wireless links	0	Project restructured.
Number of new towers	0	N/A.
Number of new and/or upgraded interconnection points	0	Project restructured.

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:  
 N/A.

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:  
 N/A.

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).  
 N/A.

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)
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Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
<b>Broadband Wholesalers or Last Mile Providers</b>	Providers with signed agreements receiving new access	0	N/A.
	Providers with signed agreements receiving improved access	0	N/A.
	Providers with signed agreements receiving access to dark fiber	0	N/A.
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A.
<b>Community Anchor Institutions (including Government institutions)</b>	Total subscribers served	60	Project restructured.
	Subscribers receiving new access	0	Project restructured.
	Subscribers receiving improved access	60	Project restructured.
	Please identify the speed tiers that are available and the number or subscribers for each	60	<10Mb
<b>Residential / Households</b>	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.
<b>Businesses</b>	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).  
N/A.

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
N/A	N/A	N/A	N/A	N/A

**Project Indicators (Next Quarter)**

**1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).**  
 Project deployment ended last quarter, however the final two fire vehicles will be deployed once returned to service. One vehicle is in the shop for transmission issues and the other vehicle was totaled in an accident and will be replaced sometime in November.

**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	100	Project completed.
2b.	Environmental Assessment	100	Project completed.
2c.	Network Design	100	Project completed.
2d.	Rights of Way	100	Project completed.
2e.	Construction Permits and Other Approvals	100	Project completed.
2f.	Site Preparation	100	Project completed.
2g.	Equipment Procurement	100	Project completed.
2h.	Network Build (all components - owned, leased, IRU, etc.)	0	Project was restructured. Did not build an LTE Network.
2i.	Equipment Deployment	100	Project completed.
2j.	Network Testing	100	Project completed.
2k.	Other (please specify): Admin & Legal	100	Project completed.

**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).**  
 None.

**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	\$2,190,225	\$881,533	\$1,308,692	\$2,202,557	\$984,388	\$1,218,169	\$2,202,557	\$984,388	\$1,218,169
b. Land, structures, right-of-ways, appraisals, etc.	\$1,048,760	\$583,690	\$465,070	\$1,048,760	\$583,690	\$465,070	\$1,048,760	\$583,690	\$465,070
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$1,400,107	\$0	\$1,400,107	\$1,401,107	\$0	\$1,401,107	\$1,401,107	\$0	\$1,401,107
e. Other architectural and engineering fees	\$2,048,113	\$0	\$2,048,113	\$1,636,156	\$0	\$1,636,156	\$1,636,156	\$0	\$1,636,156
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$2,797,023	\$0	\$2,797,023	\$2,428,223	\$0	\$2,428,223	\$2,428,223	\$0	\$2,428,223
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
j. Equipment	\$11,188,208	\$2,924,730	\$8,263,478	\$10,021,510	\$2,462,606	\$7,558,904	\$10,021,510	\$2,462,606	\$7,558,904
k. Miscellaneous	\$420,007	\$0	\$420,007	\$406,287	\$0	\$406,287	\$406,287	\$0	\$406,287
<b>l. SUBTOTAL (add a through k)</b>	\$21,092,443	\$4,389,953	\$16,702,490	\$19,144,600	\$4,030,684	\$15,113,916	\$19,144,600	\$4,030,684	\$15,113,916
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>n. TOTALS (sum of l and m)</b>	\$21,092,443	\$4,389,953	\$16,702,490	\$19,144,600	\$4,030,684	\$15,113,916	\$19,144,600	\$4,030,684	\$15,113,916

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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