

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 NT10BIX5570097	3. DUNS Number 023716181
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4. Recipient Organization

Department of Information Technology 715 Alta Vista, Santa Fe, NM 87505-4108

5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2015	6. Is this the last Report of the Award Period? <input checked="" type="radio"/> Yes <input type="radio"/> No
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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 Peter Gonzales Financial Coordinator	7c. Telephone (area code, number and extension) 5058270023
	7d. Email Address Peter.J.Gonzales@state.nm.us

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 01-28-2016
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Project Indicators (This Quarter)

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

Broadband Technology Opportunities Program (BTOP) Grant Extension:

The no-cost grant extension for the Department of Information Technology (DoIT) grant award has been approved by National Telecommunications and Information Administration. The new end date for the grant is December 31, 2015. Therefore, the closeout for the grant is March 30, 2016.

Digital Microwave (DMW):

DoIT had twenty-four BTOP construction sites. Construction for all twenty-four sites is complete.

DMW Marketing and Outreach Initiatives:

Historically, marketing and outreach efforts for radio telecommunications have not been required as use of the system is mandated by state statute. Information regarding the radio telecommunications network is available on the following State of New Mexico, DoIT service catalog web pages, http://www.doit.state.nm.us/service_catalog/radio.html and http://www.doit.state.nm.us/service_catalog/networkandinternet_cat.html. The cost of the system is recovered via radio telecommunications services provisioned by DoIT.

Long Term Evolution (LTE):

Phase I deployment initiated with establishment of a Virtual Core Network (VCN) at the DoIT Simms facility. In addition, remote core connectivity between DoIT Simms building in Santa Fe and Adams County (ADCOM), Colorado facility established by June 30th. All LTE equipment has been installed with final turn up and testing of the LTE system located at the Regional Emergency Dispatch Authority (REDA) at the Federal Law Enforcement Training Center (FLETC) is complete. Inter-governmental agreement between DoIT and ADCOM is complete. DoIT has completed an agreement with Eddy County and has obtained a fully executed sub-recipient agreement with Dona Ana County.

LTE Marketing and Outreach Initiatives:

DoIT established a system demonstration at the Albuquerque International Balloon Fiesta (AIBF) with thirty public safety entities using the system. A total of seventy UE devices were available with up to fifty devices in simultaneous use at any given time. The secure nature of the LTE network provided for the first time the ability for the FBI to share secure information with other law enforcement agencies. WiFi services were also activated allowing law enforcement agencies to submit web based reports in real time. A command center was also established at the site enabling public safety coordination. As a result, AIBF expressed interest in advanced planning for the 2016 event. Continued efforts also include demonstration of CalAmp UE devices with various first responders in Dona Ana County and the City of Albuquerque. DoIT continues discussions with Customs Border Protection (CBP) to establish demonstration scenarios in support of CBP missions. DoIT has continued interaction with Department of Interior (DOI) to identify early adopters in the Dona Ana County and Eddy County region. The Memorandum of Understanding is pursuant to the FirstNet Key Learning Condition to establish a federal partnership. In addition, DoIT continues discussions with White Sands Missile Range. DoIT established a system demonstration at the New Mexico State Fair with great success; one day of the event was set aside for LTE vendors to provide education and outreach on various hardware and software solutions for first responders.

Sustainable Cost:

The calculated fee basis required to account for the LTE sustainable costs is estimated at \$51 per month with a standard published rate of \$55 per month per device being offered.

Request for Proposal for 700 MHz LTE Equipment Status:

General Dynamics was selected to perform build out of the Early Builder Public Safety LTE system with all contract deliverables now complete.

Network Performance Monitoring:

DoIT implemented ProVision and SolarWinds to provide network and system monitoring. DoIT noted a significant decrease in public safety network outages starting April 2015 with zero outages in the last 180 days. This reduction is attributed to network protocols that have been put in place.

Personnel Hires:

Not Applicable (N/A)

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)
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	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)																
2a.	Overall Project	96	<p>Middle Mile transition is complete. All LTE sites are constructed and activated. Dona Ana County sub-recipient agreement complete. Percentage complete is pending final Davis Bacon Act payroll reporting.</p> <p>Percentage Breakdowns:</p> <p>Middle Mile Percentage Completed is based on: Middle Mile \$31,984,498 Cash Match \$5,399,999 In-Kind Match \$11,600,004 Total \$48,984,501 Expended \$48,312,517 Percentage 98.63%</p> <p>700MHz LTE Percentage Completed is based on: LTE \$4,006,500 Cash Match \$0 Total \$4,006,500 Expended \$2,596,838 Percentage 64.82%</p> <p>Administration & Legal Percentage Completed is based on: Total \$2,708,999 Expended \$2,775,204 Percentage 102.44%</p> <p>Administration funds have been expended for general project support.</p> <p>Overall Percentage Completed is based on: Overall \$38,699,997 Cash Match \$5,399,999 In-Kind Match \$11,600,004 Total \$55,700,000 Expended \$53,684,559 Percentage 96.38%</p>																
2b.	Environmental Assessment	100	No Variance																
2c.	Network Design	100	No Variance																
2d.	Rights of Way	0	N/A																
2e.	Construction Permits and Other Approvals	100	There are no planned construction permits for LTE since the state will be utilizing existing infrastructure. The Dona Ana County sub-recipient language is complete and fully executed.																
2f.	Site Preparation	100	LTE site preparation is complete.																
2g.	Equipment Procurement	100	<table border="1"> <thead> <tr> <th>Area</th> <th>Budget Amount</th> <th>Amount Spent</th> <th>Percent Spent</th> </tr> </thead> <tbody> <tr> <td>DMW</td> <td>\$17,293,716</td> <td>\$17,735,809</td> <td>102.56%</td> </tr> <tr> <td>LTE</td> <td>\$2,443,000</td> <td>\$2,020,579</td> <td>82.71%</td> </tr> <tr> <td>Overall</td> <td>\$19,736,716</td> <td>\$19,756,388</td> <td>100.10%</td> </tr> </tbody> </table>	Area	Budget Amount	Amount Spent	Percent Spent	DMW	\$17,293,716	\$17,735,809	102.56%	LTE	\$2,443,000	\$2,020,579	82.71%	Overall	\$19,736,716	\$19,756,388	100.10%
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Overall	\$19,736,716	\$19,756,388	100.10%																
2h.	Network Build (all components - owned, leased, IRU, etc)	100	DoIT provisioned 1,082 existing network miles upgraded, 450 new network miles deployed, 306 new network miles leased and 350 existing network miles leased.																

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
	2i. Equipment Deployment	98	The following DMW equipment has been installed: Shelters - 24 of 24 Towers - 24 of 24 Batteries - 36 of 36 Radio & network equipment has been installed at all twenty four sites. LTE VCN installed. LTE equipment for all sites has been received and installed. DoIT is awaiting delivery of UE devices that were ordered prior to December 31, 2015. HVAC and shore power upgrade components for Tesuque Peak have been purchased and will be deployed using DoIT funds in the Spring of 2016. A UE deployment plan will be provided as a part of the grant closeout package.
	2j. Network Testing	100	Network equipment has been installed at all sites, has been turned up and final testing has been completed. The State of New Mexico has a self-healing network. The REDA/FLETC LTE site is up and running.
	2k. Other (please specify):	99	Based on actual administrative, financial and legal expenditures, the percentage is 99.19%.

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 project continues to face challenges related to the establishment of State, and Local partnerships. In most cases, the issue resides with lack of available budget. With limited coverage inherent with an early adopter system, potential users are challenged with paying two monthly connect fees: one for access to the LTE system and one for access to commercial services when they are not in range of a band class fourteen LTE transmitter. The current approach is to deploy UE devices to users at low or no cost to demonstrate system capability so that State and Local entities can justify funding request for system deployment.

Another challenge is to ensure that sufficient funds are available to purchase UE devices. DoIT has reviewed all contracts to identify and reallocate any unused funds that can be made available for the purchase of additional UE devices prior to the grant end date. As of December 31, 2015, forty-four additional CalAmp vehicle modems have been ordered.

The framework for national public safety network plan is under development led by FirstNet and the State plan is yet to be written.

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	450	All of the new miles identified in this report have been installed and activated throughout the BTOP. These values are now being reported correctly.
New network miles leased	306	These miles constitute CenturyLink connectivity from the VCN located in Santa Fe, NM to the ADCOM core located in Boulder, Co.
Existing network miles upgraded	1,082	Sixty-eight upgraded miles were added to connect Eureka to La Mosca.
Existing network miles leased	350	These miles constitute CenturyLink/Plateau fiber leased lines.
Number of miles of new fiber (aerial or underground)	0	N/A
Number of new wireless links	17	DoIT has provisioned seventeen new wireless links throughout the duration of the BTOP.
Number of new towers	24	Twenty-four towers have been completed.
Number of new and/or upgraded interconnection points	1	DoIT implemented a new LTE VCN connection to ADCOM's VCN core.

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)
Broadband Wholesalers or Last Mile Providers	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
Community Anchor Institutions (including Government institutions)	Total subscribers served	23	No new CAIs were added in the fourth quarter.
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	23	Upgraded systems enhance broadband service. Which, went from DS3 90mb/s to Ethernet 300mb/s.
	Please identify the speed tiers that are available and the number or subscribers for each	1	Tier 1 = 300mb/s. Number of subscribers = Twenty-Three CAIs servicing approximately 1,500 users.
Residential / Households	Entities passed	0	N/A

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

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).

With the introduction of the new network monitoring tools and protocols, our procedures and troubleshooting techniques have been streamlined. Changes include automated outage notification via email and/or text messaging, expedited resolution time leading to decreased impact of public safety outages. As a new sub-recipient, Dona Ana County has been added to the notification list.

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).

CAI:
Negotiations are ongoing with five additional CAIs: CBP, DOI, WSMR, Eddy County and Dona Ana County. DoIT will continue to validate service cost model established through our service architect with those users participating in and the sustainment of the LTE Early Builder project.

Continuing efforts to comply with Federal Interest Requirement (FIR).

Continuing efforts to resolve all outstanding Davis Bacon Act certified payroll reporting discrepancies and process final contractor payments.

Full fill all BTOP program closeout requirements including, but not limited, to development of DoIT's UE device deployment plan.

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	<p>Pending final resolution of Davis Bacon Act payroll reporting issues and processing of final payment to contractors, DoIT anticipates 100 values for each of the following performance areas.</p> <p>Percentage breakdowns: Middle Mile Percentage Completed is based on: Middle Mile \$31,984,498 Cash Match \$5,399,999 In-Kind Match \$11,600,004 Total \$48,984,501 Expended \$49,328,885 Percentage 100.70%</p> <p>700MHz LTE Percentage Completed is based on: LTE \$4,006,500 Cash Match \$0 Total \$4,006,500 Expended \$3,506,848 Percentage 87.53%</p> <p>Administration & Legal Percentage Completed is based on: Total \$2,708,999 Expended \$2,864,267 Percentage 105.73%</p> <p>Administration funds have been expended for general project support to include legal support for LTE Spectrum Lease Agreement negotiations.</p> <p>Overall Percentage Completed is based on: Overall \$38,699,997 Cash Match \$5,399,999 In-Kind Match \$11,600,004 Total \$55,700,000 Expended \$55,700,000 Percentage 100.00%</p>																
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2h.	Network Build (all components - owned, leased, IRU, etc.)	100	The team has transitioned service to the new DMW network.																
2i.	Equipment Deployment	100	All DMW and LTE equipment is operational.																
2j.	Network Testing	100	Final testing is complete.																

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2k.	Other (please specify):	100	With the extension of the grant award the expenses for administrative, financial and legal efforts are also extended; therefore the percent complete to the overall grant time line has been adjusted accordingly.
3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less). The project may continue to face challenges related to the establishment of state and local partnerships. Davis Bacon Act certified payroll reporting compliance is a significant risk for at least one of our prime contractors. Completion of FIR documentation and submittal process prior to the end of the BTOP program closeout date.			

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	\$2,708,999	\$0	\$2,708,999	\$2,775,204	\$0	\$2,775,204	\$2,864,267	\$0	\$2,864,267
b. Land, structures, right-of-ways, appraisals, etc.	\$2,384,958	\$2,245,188	\$139,770	\$2,376,245	\$2,245,188	\$131,057	\$2,376,245	\$2,245,188	\$131,057
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$9,050,224	\$65,693	\$8,984,531	\$7,888,763	\$65,693	\$7,823,070	\$9,042,736	\$65,693	\$8,977,043
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$2,157,993	\$0	\$2,157,993	\$1,732,190	\$0	\$1,732,190	\$1,733,758	\$0	\$1,733,758
h. Demolition and removal	\$1,500,000	\$0	\$1,500,000	\$1,148,570	\$0	\$1,148,570	\$1,380,090	\$0	\$1,380,090
i. Construction	\$6,501,107	\$0	\$6,501,107	\$6,347,195	\$0	\$6,347,195	\$6,347,195	\$0	\$6,347,195
j. Equipment	\$19,736,715	\$3,089,118	\$16,647,597	\$19,756,388	\$3,089,118	\$16,667,270	\$20,295,705	\$3,089,118	\$17,206,587
k. Miscellaneous	\$11,660,004	\$11,600,004	\$60,000	\$11,660,004	\$11,600,004	\$60,000	\$11,660,004	\$11,600,004	\$60,000
l. SUBTOTAL (add a through k)	\$55,700,000	\$17,000,003	\$38,699,997	\$53,684,559	\$17,000,003	\$36,684,556	\$55,700,000	\$17,000,003	\$38,699,997
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$55,700,000	\$17,000,003	\$38,699,997	\$53,684,559	\$17,000,003	\$36,684,556	\$55,700,000	\$17,000,003	\$38,699,997

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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