

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 NT10BIX5570017	3. DUNS Number 188655898
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4. Recipient Organization Executive Office of the Commonwealth of Pennsylvania (Office of Administration) 225 Capitol Building, Harrisburg, PA 17120-0001

5. Current Reporting Period End Date (MM/DD/YYYY) 03-31-2012	6. Is this the last Report of the Award Period? <input type="radio"/> Yes <input checked="" 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 Holly Caudill Administrative Officer	7c. Telephone (area code, number and extension) 7174257650
	7d. Email Address hcaudill@state.pa.us

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 05-10-2012
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Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).
 As of the close of Q1 2012, the Commonwealth of Pennsylvania has completed 51 of 71 microwave radio connections resulting in 800 miles of upgraded network. This is approximately 72% of the microwave equipment upgrades scheduled for the project. We have completed Quality of Service testing for the provisioning of the circuits within a test bed environment and created an implementation plan for the roll out of upgrades to our switching hubs. The implementation plan allows for the installation of switching equipment at all sites to follow within the second and third quarters of 2012. The Commonwealth of Pennsylvania added an additional resource to the project with a network technician skilled in MPLS technology during Q1. We continued work on our Request for Information and participated in multiple meetings with potential community anchor institutions as well as last mile service providers. We worked through line-of-sight technical difficulties for the WiMax leg of the project and neared the final configuration for this equipment.

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	44	When measured by expenditures, the overall project percentage complete is only 44%; however, the project is actually on schedule. Due to the structure of our purchasing documents with the main vendor on the project, microwave radio installations as well as switching equipment installations were quoted together per site. As a result, our vendor is unable to invoice us for services rendered until both the microwave radio and the switching equipment have been installed at each site. According to the current project schedule, a majority of the switching equipment installations are scheduled to be completed within the second and early third quarters, as a result, we expect this percent complete to increase exponentially to show agreement with the baseline in the third quarter of 2012.
2b.	Environmental Assessment	100	This milestone is complete.
2c.	Network Design	73	Our Network Design milestone remains at 73% of completion as a result of tasks added to this indicator. During the first quarter we requested additional tower analyses and path surveys as part of a route change which alters the progress in this category. These path surveys and tower analyses are anticipated to be complete within the second quarter. Additionally the final design for the connections to our last mile providers and community anchor institutions are yet to be finalized due to line of sight challenges experienced during the pilot program's final engineering. The final design for the connection to last mile and community anchor institutions is expected to be determined early within the second quarter of 2012 as we evaluate alternate routes to connect with last mile service providers.
2d.	Rights of Way	0	N/A This milestone does not apply to our project.
2e.	Construction Permits and Other Approvals	0	N/A This milestone does not apply to our project.
2f.	Site Preparation	70	This milestone remains on schedule.
2g.	Equipment Procurement	41	Our Equipment Procurement milestone trails that of the baseline report submitted at the start of the project. Microwave radio equipment upgrades have been paid to date. We anticipate the receipt of invoices for the switching equipment following installation and configuration which is expected to occur within the second and third quarters of 2012 allowing this milestone to come into agreement with the baseline in the third quarter.
2h.	Network Build (all components - owned, leased, IRU, etc)	100	This milestone is complete.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
	2i. Equipment Deployment	9	<p>Our Equipment Deployment milestone also trails that of the baseline report. This milestone shows a lack of significant progress due to the fact that the vendor providing the service to install both the microwave radio and switching equipment had quoted the services together on a site by site basis allowing them only to invoice once each site is upgraded with both types of equipment.</p> <p>At this point in the project all microwave radio installations that have been completed have not been able to be invoiced because the switching equipment installations/configurations have not been completed.</p> <p>According to the project schedule, these switching equipment upgrades will be completed within the second and early third quarters of 2012 allowing the project to make dramatic progress and catch the baseline report in the third quarter.</p>
	2j. Network Testing	62	This milestone remains on schedule.
	2k. Other (please specify): Customer Acquisition, Support and Billing	39	<p>The Customer Acquisition, Support and Billing milestone trails the progress anticipated within the baseline report submitted at the start of the project; however, we expect to make significant progress within the second quarter of 2012.</p> <p>As we have moved closer to determining the connections to the last mile providers and community anchor institutions, we have been able to move forward in providing the necessary specifications to our vendor for the business support component of the project allowing for final configuration, invoicing and payment of those portions of the project. We anticipate making marked progress on this expenditure during the second and third quarters of 2012.</p>

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 business development portion of the project has been our most challenging. To help us, we hired a firm to research the business potential in our project area as well as to put together an information packet or "Request for Information" that we could send out to all appropriate entities. While working with this firm to develop the business and pricing structure, the consultant assigned to us fell seriously ill and ceased work on the project. The firm's other members stepped in to work towards completion of the project, but unfortunately did not possess the appropriate skill set forcing us to end the engagement. On the positive side, over the past several months, our team has gained enough experience to complete the work ourselves.

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	No new network miles have been deployed.
New network miles leased	0	N/A for this project.
Existing network miles upgraded	800	51 of 71 microwave radio connections have been upgraded as of the close of Q1, 2012. The project remains on schedule.
Existing network miles leased	0	N/A for this project.
Number of miles of new fiber (aerial or underground)	0	N/A for this project.
Number of new wireless links	51	The project is on schedule with the deployment of new microwave radio connections.
Number of new towers	5	This indicator is complete.

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Number of new and/or upgraded interconnection points	0	Interconnection points will be added to the network as new customers and their requirements are determined. Negotiations are ongoing with community anchor institutions and last mile service providers. We anticipate the first connections could take place within the second quarter.

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	3
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 this date, we have not signed any agreements with wholesale or last mile providers; however, we are working with multiple entities and anticipate the confirmation of our first agreement within the second quarter.

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:

While services and pricing models are still in development, the plan continues to be to offer Ethernet virtual circuits at 3, 6, 10, 20, and 50 Mbps. Pricing is expected to be based upon Network Interface Access and possibly the number of microwave connections between ports. Standard features will include Layer 2 MPLS Ethernet ports and best effort routing with route protection in backbone connections. Base price shall include burst capability of up to 25% of contracted bandwidth at no cost if excess capacity is available. Agreement is expected to include tower site compound access but not tower space.

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).

At this point, the Commonwealth has not designated a third party to manage all or a portion of our network.

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	Network infrastructure continues to be built. No services have been offered to providers to date; however, we have been finalizing plans on a pilot project. The pilot has taken longer than expected due to line of sight challenges at the originally selected locations.
	Providers with signed agreements receiving improved access	0	Network infrastructure continues to be built. No services have been offered to providers to date; however, we have been finalizing plans on a pilot project. The pilot has taken longer than expected due to line of sight challenges at the originally selected locations.
	Providers with signed agreements receiving access to dark fiber	0	N/A dark fiber is not a part of the Commonwealth of Pennsylvania project.

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	The actual speed tiers available as well as the number of subscribers will be determined at the time of the first connections to the network; however, our baseline identified that we would offer our customers Ethernet virtual circuits at 10, 20, and 50 Mbps. We anticipate the first connections to be made within the second quarters of 2012.
Community Anchor Institutions (including Government institutions)	Total subscribers served	0	Network infrastructure continues to be built, and no services have been offered to providers to date. It is anticipated that most, if not all community anchor institutions that connect will be reached through a last mile service provider. We anticipate that the first community anchor institutions will be connected within the second or early third quarters of 2012 as a result of our pilot projects.
	Subscribers receiving new access	0	Network infrastructure continues to be built, and no services have been offered to providers to date. It is anticipated that most, if not all community anchor institutions that connect will be reached through a last mile service provider. We anticipate that the first community anchor institutions will be connected within the second or early third quarters of 2012 as a result of our pilot projects.
	Subscribers receiving improved access	0	Network infrastructure continues to be built, and no services have been offered to providers to date. It is anticipated that most, if not all community anchor institutions that connect will be reached through a last mile service provider. We anticipate that the first community anchor institutions will be connected within the second or early third quarters of 2012 as a result of our pilot projects.
	Please identify the speed tiers that are available and the number of subscribers for each	0	Network infrastructure continues to be built, and no services have been offered to providers to date; however, our baseline identified that we would offer our customers Ethernet virtual circuits at 10, 20 and 50 Mbps. We anticipate the first connections to be made within the second or early third quarters of 2012.
Residential / Households	Entities passed	0	N/A. This middle-mile infrastructure project does not and will not connect to any residence or households directly.
	Total subscribers served	0	N/A. This middle-mile infrastructure project does not and will not connect to any residence or households directly.
	Subscribers receiving new access	0	N/A. This middle-mile infrastructure project does not and will not connect to any residence or households directly.
	Subscribers receiving improved access	0	N/A. This middle-mile infrastructure project does not and will not connect to any residence or households directly.
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A. This middle-mile infrastructure project does not and will not connect to any residence or households directly.
Businesses	Entities passed	0	N/A. This middle-mile infrastructure project does not and will not connect to any businesses directly.
	Total subscribers served	0	N/A. This middle-mile infrastructure project does not and will not connect to any businesses directly.
	Subscribers receiving new access	0	N/A. This middle-mile infrastructure project does not and will not connect to any businesses directly.
	Subscribers receiving improved access	0	N/A. This middle-mile infrastructure project does not and will not connect to any businesses directly.
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A. This middle-mile infrastructure project does not and will not connect to any businesses directly.

7. Please describe any special offerings you may provide (600 words or less).
 We noted on our application that we plan to offer discounts to Government and Public Safety organizations.

8a. Have your network management practices changed over the last quarter? Yes No

8b. If so, please describe the changes (300 words or less).
 Our network management practices have not changed. Additional information is publicly available on our website.

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
To be determined.	To be determined.	To be determined.	To be determined.	To be determined.

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
 During the second quarter of 2012, our team will complete an additional 5 microwave radio connections giving us a total of 857 miles of existing network miles upgraded. We anticipate completion of a significant portion of the switching equipment installation and configurations and that our switching hubs will be upgraded as well.
 Also scheduled for the second quarter is completion of the billing support system allowing us to generate invoices and adjust the criteria upon which the invoice is determined.
 During the second quarter we will be completing the assessments, tower analyses and path surveys to finalize multiple minor route changes that allow us to reach interested community anchor institutions.
 Due to challenges experienced with the vendor chosen for assistance with our business model, we expect to complete our Request for Information early in the second quarter which will assist us in getting information into the hands of last mile service providers. These last mile service providers, are expected to be the link between our project and Community Anchor Institutions connecting to the network. We anticipate connecting to two or more community anchor institutions near the end of the second quarter. We also anticipate signing our first agreement with a broadband wholesaler or last mile provider near the end of the second quarter.

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	53	When measured by expenditures, the overall project percentage complete is anticipated to be only 53%; however, the project is actually on schedule. Due to the structure of our purchasing documents with the main vendor on the project, microwave radio installations as well as switching equipment installations were quoted together per site. As a result, our vendor is unable to invoice us for services rendered until both the microwave radio and the switching equipment have been installed at each site. According to the current project schedule, a majority of the switching equipment installations are scheduled to be completed within the second and early third quarters, as a result, we expect this percent complete to increase exponentially to show agreement with the baseline in the third quarter of 2012.
2b.	Environmental Assessment	100	This milestone is complete.
2c.	Network Design	77	Our Network Design milestone is anticipated to climb to 77% of completion in the second quarter with the payment of invoicing for tower analyses and path surveys associated with multiple minor route changes. It is also anticipated that our team will have determined some of the final engineering to connect to last mile service providers and community anchor institutions.
2d.	Rights of Way	0	N/A. This milestone does not apply to our project.
2e.	Construction Permits and Other Approvals	0	N/A. This milestone does not apply to our project.
2f.	Site Preparation	100	This milestone is expected to reach completion for all site preparation known as of the writing of this report; however, it is anticipated that there may be additional site preparation at one or more of the sites newly added to the project through a series of route changes.
2g.	Equipment Procurement	52	During Q2, our crews will shift their main focus from microwave radio upgrades to the installation and configuration of switching equipment before moving back to the microwave radio upgrades once again. The installation and configuration of the switching equipment during Q2 will enable invoicing and payment of this

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
			equipment likely within Q3. These additional expenditures are anticipated to bring the Equipment Procurement milestone into agreement with the baseline report in Q3.
2h.	Network Build (all components - owned, leased, IRU, etc.)	100	This milestone is complete.
2i.	Equipment Deployment	10	As noted above in the Equipment Procurement milestone, according to schedule, our crews will shift their main focus during Q2 from microwave radio upgrades to the installation and configuration of switching equipment before moving back to the microwave radio upgrades once again. With the shift in focus to switching equipment, our crews will complete the "service" tasks at multiple sites allowing for invoicing of the services rendered. The receipt and payment of these invoices will allow our Equipment Deployment milestone progress to come into agreement with the baseline report within Q3. As noted previously, this milestone has been deficient in progress due to the procurement vessel presented by our vendor which tied the payment of services to completion of both microwave radio upgrades and installation /configuration of the switching equipment.
2j.	Network Testing	72	This milestone is expected to remain on schedule.
2k.	Other (please specify): Customer Acquisition, Support and Billing	82	During Q2, we anticipate reaching 82% completion on the Customer Acquisition, Support and Billing portion of the project with payment of signification portions of this milestone during the second quarter.

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).

Much of the progress that our project plans to attain during the second quarter lies with switching equipment upgrades and configuration of that equipment. Project stakeholders and the schedule are very much on-schedule; therefore, we expect to not have any problem in exceeding our construction goals for the quarter.

The Commonwealth continues to focus on securing end users/customers of the rural network, Community Anchor Institutions (CAI) in particular. We continue to focus on last mile providers, since they are the key to deploying broadband Internet in the project area. We have two agreeable LM providers working with us at this time.

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	\$2,881,250	\$0	\$2,881,250	\$1,231,489	\$0	\$1,231,489	\$2,206,560	\$0	\$2,206,560
b. Land, structures, right-of-ways, appraisals, etc.	\$5,497,900	\$5,303,410	\$194,490	\$5,125,890	\$5,125,890	\$0	\$5,270,367	\$5,125,890	\$144,477
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$2,997,474	\$0	\$2,997,474	\$1,282,624	\$0	\$1,282,624	\$1,532,790	\$0	\$1,532,790
e. Other architectural and engineering fees	\$495,125	\$0	\$495,125	\$347,710	\$0	\$347,710	\$381,360	\$0	\$381,360
f. Project inspection fees	\$1,763,200	\$0	\$1,763,200	\$910,757	\$0	\$910,757	\$1,075,000	\$0	\$1,075,000
g. Site work	\$7,603,022	\$0	\$7,603,022	\$60,000	\$0	\$60,000	\$60,000	\$0	\$60,000
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$2,414,984	\$560,077	\$1,854,907	\$1,523,938	\$498,463	\$1,025,475	\$1,754,889	\$498,463	\$1,256,426
j. Equipment	\$12,327,062	\$1,332,516	\$10,994,546	\$5,217,527	\$706,104	\$4,511,424	\$6,878,126	\$1,040,449	\$5,837,677
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
l. SUBTOTAL (add a through k)	\$35,980,017	\$7,196,003	\$28,784,014	\$15,699,935	\$6,330,457	\$9,369,479	\$19,159,092	\$6,664,802	\$12,494,290
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$35,980,017	\$7,196,003	\$28,784,014	\$15,699,935	\$6,330,457	\$9,369,479	\$19,159,092	\$6,664,802	\$12,494,290

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: \$1,567,257 b. Program Income to Date: \$0