QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted	2. Award Identification Number	3. DUNS Number
Department of Commerce, National Telecommunications and Information Administration	NT10BIX5570102	122452563

4. Recipient Organization

University of Arkansas System 4301 W. Markham St, ST63, Little Rock, AR 72205-7101

5. Current Reporting Period End Date (MM/DD/YYYY)	6. Is this the last Report of the Award Period?
12-31-2011	◯ Yes ◉ 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	7c. Telephone (area code, number and extension)
Suzanne Alstadt	X
	7d. Email Address sealstadt@uams.edu

7b. Signature of Certifying Official	7e. Date Report Submitted (MM/DD/YYYY):
Submitted Electronically	02-15-2012

Project Indicators (This Quarter)

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

The University of Arkansas System project will integrate isolated community anchor networks to expand the broadband capabilities and geographic reach of the Arkansas Telehealth Network managed by Arkansas Telehealth Oversight & Management (ATOM) Network-a group of community anchor institutions with limited bandwidth and equipment that offer healthcare, higher education, public safety, and research services-and the Arkansas Research & Education Optical Network (ARE-ON), the state's only public-owned fiber optic network currently serving four-year universities. This project will permit high-speed delivery and transmission of the following broadband benefits at the 467 "integrated network" sites. (Note: The grant application indicated 474 sites, however, during our activities we identified seven sites that closed.)

In Year 2 Quarter 2, the following activities were undertaken or accomplished to meet the mission described above:

Overall Project
o The project continued to gain substantial momentum in the implementation phase, which included finalizing contracts, bid awards, procurement for clinical assessment tools, procurement and delivery of wireless telehealth devices, installation of 261 interactive video (IAV) units and 161 Public Access PCs. The team's outreach efforts included launching of a re-designed web site to enhance efforts with Community Anchor Institutions (CAI).

Arkansas Telehealth Network (Arkansas Telehealth Oversight Management-ATOM)
• Awarded bid and finalized procurement for clinical assessment tools/peripherals. This process includes opening/awarding bids followed by procurement. Subsequently, an order was placed for over 500 peripherals for attachment to clinical IAV carts that will allow clinicians at CAI the ability to view and/or capture images that will aid in timely, accurate diagnoses.
• Static images were placed on 290 public access PCs prior to deployment to CAI that identifies them as being a part of the BTOP funded Arkansas e-Link project and provides useful web links to citizens who may not be familiar with internet navigation.
• Procurement of eICU sole source video items/furniture was completed and delivered to CAI.
• Procurement and delivery of 68 wireless telehealth devices to the HomeCare Association was accomplished enabling them to distribute these devices to 13 home health agencies within the state serving Arkansas' home-bound population.
• Awarded bids for leased facilities, connectivity devices/managed services for hubs, and MVP/Public Safety/MEMS impacting 305 community anchor institutions (CAI). Contracts for these awards are expected to be finalized next quarter.
• Program managers completed visits to all corporate CAI sites, meeting executive level administrators, Information Technology (IT) and education staff at hospitals, community health centers, mental health clinics and libraries to retrieve signed Memorandums of Agreement (MOAs). By the end of the reporting quarter, 99 of 103 MOAs were processed. In addition to retrieval of MOAs, Program Managers conducted a baseline assessment of the CAI's knowledge, use, needs, perception/acceptance and vision of Telehealth that will be useful as the Arkansas e-Link team develops sustainability strategies.
• Program managers disseminated site readiness assessments to IT contacts at each CAI in order to complete the final step in the deployment planning process, resulting in installation of 261 IAV units and 161 Public Access PCs.
• A dynamic re-design of the project web site was launched that introduces the "Arkansas e-Link" brand. This new web site (www. arkansaselink.com) is expected to improve stakeholder navigation and allow greater capabilities for the Arkansas e-Link team to quickly disseminate the BTOP project progress.

Arkansas Research and Education Optical Network (ARE-ON)

ARE-ON, the program's sub-recipient, reports these project accomplishments:
IRUs: Contracted final route (Jonesboro to Pocahontas) bringing the total fiber miles contracted for to 690 miles. Fiber engineering is completed for 13 of the 17 routes. Construction is 99% complete for two routes, 66% complete for three routes and 33% complete for two routes.
Construction: Lateral fiber - complete for Little Rock West project; complete for Pine Bluff and Morrilton projects except for final splicing; construction of conduit in progress in Little Rock (Center), Hope, Forrest City and Malvern.
Huts: Hut installed in Morrilton; hut dirt work was completed for West Memphis, Forrest City, Harrison, Mountain Home, Melbourne, Newport, Malvern, Hope, Pine Bluff and Fayetteville; hut manufacturing was initiated for Pine Bluff, Hope, Harrison, Malvern and Forrest City

The sum of these activities comprise the initial steps of the grant's implementation phase, allowing the University of Arkansas System to gather and disseminate the information and procure the resources necessary to effectively implement the proposed project. At the end of the three-year grant period, all 467 sites will function on an "integrated network" fusing ATOM and ARE-ON sites, benefiting from the following BTOP deliverables:

Substantial bandwidth upgrades
Significant network expansion
Interactive video equipment additions
Public computer additions

Fully available after grant funding ends, these deliverables will provide the tools needed to enable participation in activities that once were only limitedly available in Arkansas.			

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**	20	This section of the Performance Project Report compares actual expenditures to the Year 2 Quarter 2 figures on the revised baseline submitted to the project's Federal Program Officer on May 24, 2011. ARE-ON, the program's sub-recipient, has contracted for Indefeasible Rights of Use (IRUs) from four (4) providers over 17 intercity fiber routes. Most of the IRU contracts have milestone payments based on completion of engineering and construction for any new routes, with the final milestone payment planned once the fiber has been delivered and tested. There are 690.14 miles total of contracted fiber for the four (4) IRUs. It is projected that the final milestone payment for all IRUs will not be reached until Year 3 Quarter 2. Additionally, the telemedicine portion of the project has distributed Requests for Proposals (RFPs), awarded the bid negotiated contract, and placed orders for infrastructure equipment. However, invoices were not paid in this quarter, as invoices were not issued by the vendor at such a time that they could be paid which resulted in a 9% variance.
2b.	**Environmental Assessment**	78	The revised Baseline Report assumed that UAMS would continue employing the services of the Environmental Assessment (EA) contractor over the course of the grant to accommodate any environmental concerns that may arise during the implementation phase. The revised Baseline Report assumed these expenses may be paid more rapidly than currently planned. As such, the project will continue to incur EA expenses throughout the remainder of the project with 100% completion of the Environmental Assessment milestone at the end of the grant period. The variance for this reporting quarter is 11%.
2c.	**Network Design**	98	Although these fees have been paid in full, the invoice total cost varied from projections in the revised Baseline Report, resulting in a 2% variance.
2d.	**Rights of Way**	0	N/A
2e.	**Construction Permits and Other Approvals**	9	Fewer miles of fiber are being constructed; therefore, there were fewer railroad crossings and, thus, fewer required permits. However, other permit fees may be incurred in coming quarters for fiber construction. Cost savings from this budget item will be applied in other areas where costs are higher than anticipated. The variance for this reporting quarter is 91%.
2f.	**Site Preparation**	0	N/A
2g.	**Equipment Procurement**	30	The revised Baseline Report assumed that infrastructure management equipment procurement would occur this reporting quarter. However, invoices were not paid in this quarter as invoices were not issued in time by the vendor. This resulted in a 7% variance.
2h.	**Network Build (all components - owned, leased, IRU, etc)**	16	The revised Baseline Report assumed Indefeasible Rights of Use (IRUs) payments to be completed by Year 2 Quarter 1. ARE-ON has contracted for IRUs from four (4) providers over 17 intercity fiber routes. Most of the IRU contracts have milestone payments based on completion of engineering and construction for any new routes, with the final milestone payment planned once the fiber has been delivered and tested. There are 690.14 miles total of contracted fiber for the four (4) IRUs. It is

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			projected that the final milestone payment for all IRUs will not be reached until Year 3 Quarter 2. The variance for this reporting quarter is 11%.
2i.	Equipment Deployment	28	The project contributes a large amount of in-kind equipment toward its match amount. The revised Baseline Report reflected this match contribution proportional to the grant funds expected to be expended within each quarter. Since delays in the finalization of IRU agreements have resulted in fewer funds being expended this quarter, fewer equipment matching funds were contributed resulting in a 13% variance.
2j.	Network Testing	0	The revised Baseline Report assumed that infrastructure management equipment would have been installed and tested. However, contract negotiations were protracted longer than anticipated resulting in a 82% variance.
2k.	Other (please specify): Indirects, huts, easements, project management costs	12	---

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 unfortunate timing of the infrastructure management equipment invoicing precluded expenditure of funds for invoices during Year 2 Quarter 2. The legal action involving one of the unsuccessful IRU vendors and the University is still pending. We do not anticipate that the legal action will adversely affect any of the executed IRUs. Resolution of this conflict protest is anticipated by Year 2 Quarter 3.

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	---
New network miles leased	0	---
Existing network miles upgraded	0	N/A
Existing network miles leased	0	---
Number of miles of new fiber (aerial or underground)	34	The Baseline assumed this measure should include fiber laid in addition to conduit. Based on the revised criteria incorporating conduit miles, we show a cumulative 24 miles of new fiber this quarter alone exceeding the cumulative 18 miles in the Baseline resulting in a variance of 6 additional miles.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	0	---

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

Indicators	
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 this third party operates (600 words or less).
UAMS has one sub-recipient that will operate a portion of the BTOP-funded network: the Arkansas Research and Education Optical Network. This portion includes the publicly owned fiber network connecting the state's four-year universities and two-year colleges to high speed fiber optic services, including 33 total sites. ARE-ON is a state-supported entity. The sub-recipient's contact information appears below:
Arkansas Research and Education Optical Network (ARE-ON)
Michael D. Abbiatti, Executive Director
155 S. Razorback Road
Fayetteville, AR 72101
479-575-3901

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**	0	---
	Subscribers receiving new access	0	---
	Subscribers receiving improved access	0	---
	Please identify the speed tiers that are available and the number or subscribers for each	0	---
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).
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).
Year 2 Quarter 3 is anticipated to include several significant steps toward project completion. The UAMS BTOP team (consisting of project director, program managers, project specialists, technologists and other UAMS directors) expects to complete deployment of approximately 123 public access PCs and 64 IAV units during next quarter. We also anticipate installation of managed services for hubs that will facilitate 24/7 video network support. Our grant application's mission is to integrate and expand two existing networks. In the process of rolling out this grant, we have deployed equipment to sites that have existing connectivity (which has improved service at these sites). Full integration does not occur until later in the project. As a result, at this point in time we are projecting that by the end of the next quarter we will have a total project-to-date of 364 CAIs connected.

Contracts are expected to be finalized for eICU, Public Safety, Hub connectivity/Managed services and CAIs Leased Facilities Broadband Connectivity. Once the Hub Connectivity Leased Facilities contracts are finalized, the project's momentum will pick up substantially. Program Managers will begin coordination of circuit installs or upgrades with CAI. We anticipate delivery and field installation of approximately 500 clinical assessment tools/peripherals that will allow clinicians at CAI the ability to view and/or capture images that will aid in timely, accurate diagnoses. Implementation of the infrastructure equipment, allowing for multi-point conference

calls, managed directories, technical support, overall usage management and reporting is expected. eICU equipment software and associated video software contracts will be finalized, purchased and installed. Finally, individual video management devices will be attached to IAV equipment to facilitate mobility, cart management, management of multiple video units within a site at CAI. Program managers will continue outreach activities to include visits to sites and ongoing coordination between vendors and CAIs for the installation of public access PCs, IAV units, clinical assessment tools/peripherals, individual management devices and broadband leased facilities and fiber backbone connectivity.

ARE-ON, the program's sub-recipient, providing fiber backbone for the network, reports these project accomplishments for completion during the next quarter:

Completion of fiber construction at Pine Bluff, Morrilton, Hope, Forrest City, West Memphis, and Malvern
Completion of hut at Pine Bluff, Malvern, Hope, Harrison, and Forrest City

Estimated number of miles planned for deployment next quarter:
Construction Miles: 33.41 Miles
IRU Contracted Miles: 690.14 Miles
Total Miles: 723.55 Miles

ARE-ON does not plan to be a broadband wholesaler or provider for last-mile providers. This project is planned for middle mile deployment for integrating and expanding two existing networks (AREON and ATN/ATOM).

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**	48	---
2b.	**Environmental Assessment**	92	---
2c.	**Network Design**	100	---
2d.	**Rights of Way**	0	N/A
2e.	**Construction Permits and Other Approvals**	9	The Revised Baseline Report assumed that permits would be at 100% by Year 2 Quarter 2. However, fewer miles of fiber are being constructed; therefore, there are fewer railroad crossings and, thus, fewer required permits. However, other permit fees may be incurred in coming quarters for fiber construction. We anticipate permits to be approximately $10,000 per quarter for the remainder of the grant. Budgeted permits amount to $96,000. However, no permits were acquired this quarter and we do not anticipate any future acquisitions by our sub-recipient. We anticipate an 81% variance throughout the end of the project.
2f.	**Site Preparation**	0	N/A
2g.	**Equipment Procurement**	56	---
2h.	**Network Build (all components - owned, leased, IRU, etc.)**	47	---
2i.	**Equipment Deployment**	69	---
2j.	**Network Testing**	82	---
2k.	**Other (please specify):**	21	---

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).

There are concerns about icy road conditions during the next reporting quarter which could create some issues in remote and mountainous areas of the deployment region. Although time-line projections have been conservative, it is possible equipment delivery and leased facility installations may delay anticipated deployment at Arkansas Telehealth Network CAI sites.

A portion of IRU funds are expected to be expended in Year 2 Quarter 3, however, it is projected that the final milestone payment for all IRUs will not be reached until Year 3 Quarter 2. The legal action involving one of the unsuccessful IRU vendors and the University is still pending but is expected to be resolved by the next reporting quarter. We do not anticipate that the legal action will adversely affect

any of the executed IRUs. Lastly, any significant issues involving IRUs and hut construction could cause shifts in time-lines shared by UAMS and ARE-ON, both of which are aware of project dependencies and how to manage them accordingly to keep the project on track for timely completion.

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.

Cost Classification	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		
	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	$10,709,094	$88,400	$10,620,694	$1,600,119	$0	$1,600,119	$1,966,587		$1,966,587
b. Land, structures, right-of-ways, appraisals, etc.	$10,711,692	$9,851,632	$860,060	$820,355	$0	$820,355	$2,401,179		$2,401,179
c. Relocation expenses and payments	$0	$0	$0	$0	$0	$0	$0		$0
d. Architectural and engineering fees	$2,172,357	$0	$2,172,357	$349,591	$0	$349,591	$1,727,606		$1,727,606
e. Other architectural and engineering fees	$0	$0	$0	$0	$0	$0	$0		$0
f. Project inspection fees	$0	$0	$0	$0	$0	$0	$0		$0
g. Site work	$0	$0	$0	$0	$0	$0	$0		$0
h. Demolition and removal	$0	$0	$0	$0	$0	$0	$0		$0
i. Construction	$28,195,212	$0	$28,195,212	$8,791,538	$0	$8,791,538	$22,254,747		$22,254,747
j. Equipment	$43,605,098	$15,998,347	$27,606,751	$13,652,238	$5,375,145	$8,277,093	$28,049,199	$12,769,706	$15,279,493
k. Miscellaneous	$33,188,367	$512,048	$32,676,319	$916,021	$0	$916,020	$5,677,263		$5,677,263
l. SUBTOTAL (add a through k)	$128,581,820	$26,450,427	$102,131,393	$26,129,862	$5,375,145	$20,754,716	$62,076,581	$12,769,706	$49,306,875
m. Contingencies									
n. TOTALS (sum of l and m)	$128,581,820	$26,450,427	$102,131,393	$26,129,862	$5,375,145	$20,754,716	$62,076,581	$12,769,706	$49,306,875

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