

**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>  NT10BIX5570102	<b>3. DUNS Number</b>  122452563
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<b>4. Recipient Organization</b>  University of Arkansas System 4301 W. Markham St, ST63, Little Rock, AR 72205-7101
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<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  09-30-2011	<b>6. Is this the last Report of the Award Period?</b>  <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.

<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Rebecca Nickelson	<b>7c. Telephone (area code, number and extension)</b>  X
	<b>7d. Email Address</b>  rgnickleson@uams.edu

<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  11-14-2011
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**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 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 474 "integrated network" sites.

In Year 2 Quarter 1, the following activities were undertaken or accomplished to meet the mission described above:

**Overall Project**

- o The project gained substantial momentum in the implementation phase, which included the post of Requests for Proposals (RFPs), purchase of initial hardware, and acceleration of outreach efforts with Community Anchor Institutions (CAIs).

**Arkansas Telehealth Network (Arkansas Telehealth Oversight Management-ATOM)**

- o Finalized contracts on interactive video (IAV) equipment. This process includes opening/awarding bids followed by contract negotiation. This enables a large portion of CAIs to receive telemedicine equipment that will prepare their sites for participation in the ATN Network.
- o Undertook significant steps toward equipment procurement, which included the preparation of Request for Proposals (RFP) for public safety equipment; posting RFPs for eICU equipment, leased facilities, infrastructure management equipment and routers/aggregators; and the placement of orders for clinical interactive video personal computers (PCs), public access PCs, and eICU PCs.
- o Expanded outreach efforts, including the creation of the "Arkansas e-Link" brand, which offers a new namesake and identity for the Arkansas Healthcare, Higher Education, Public Safety, and Research Integrated Broadband Initiative. Arkansas e-Link will be easily recognized as the BTOP-funded integrated networks by the citizens of the state and participating CAIs.
- o Accepted bids for web site development that will adhere to federal guidelines to provide Internet-based tools that serve as a destination for stakeholders that focus on project accomplishments and introduce the Arkansas e-Link graphic and concept.
- o Validated site contact information and mailed introductory and preparation packets to CAI administrators. Subsequently, program managers began initial visits to hub sites that included a baseline assessment of the CAI's knowledge, use, needs, perception/acceptance of telehealth, along with the retrieval of signed Memorandums of Agreement (MOAs). Once the MOAs were processed, Program Managers began disseminating site readiness assessments to the Information Technology contact at each CAI. By the end of the reporting quarter, 51 of 99 MOAs were processed.
- o Improved tracking database allowing for not only ad hoc reporting but also efficient coordination of site documentation such as Memorandums of Agreement, Baseline Assessments, Site Readiness Assessments, and communication with vendor when site is ready for placement on routing schedule for equipment delivery.

**Arkansas Research and Education Optical Network (ARE-ON)**

ARE-ON, the program's sub-recipient, reports these project accomplishments:

- o Completed four (4) of 22 planned IRU agreements with providers;
- o Started fiber construction on four routes: Pine Bluff, Little Rock West, Little Rock Central & Morrilton; and
- o Started hut construction at four locations: Pine Bluff, Morrilton, Hope, and Malvern

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 474 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)
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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	6	<p>This section of the Performance Project Report compares actual expenditures to the Year 2 Quarter 1 figures on the revised baseline submitted to the project's Federal Program Officer on May 24, 2011.</p> <p>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 ATOM portion of the project has distributed Requests for Proposals (RFPs), awarded bids negotiated contracts, and placed orders for personal computers (PCs) and interactive video equipment (IAV). However, invoices were not paid in this quarter, as invoices were not issued at such a time that they could be paid with respect to the Automated Standard Application for Payments (ASAP) system's scheduled down time which resulted in a 14% variance.</p>
	2b. Environmental Assessment	77	<p>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 9%.</p>
	2c. Network Design	98	<p>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.</p>
	2d. Rights of Way	0	N/A
	2e. Construction Permits and Other Approvals	9	<p>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%.</p>
	2f. Site Preparation	0	N/A
	2g. Equipment Procurement	1	<p>The revised Baseline Report assumed that infrastructure management equipment procurement would occur this reporting quarter, however, contract negotiations are ongoing and are anticipated to be finalized by next quarter. Although procurement commenced, invoices were not paid in this quarter, as invoices were not issued at such a time that they could be paid with respect to ASAP system's scheduled down time resulting in a 24% variance.</p>
	2h. Network Build (all components - owned, leased, IRU, etc)	7	<p>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 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%.</p>

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			The legal action involving one of the unsuccessful IRU vendors and the University is still pending but is expected to be resolved by Year 2 Quarter 3.
2i.	Equipment Deployment	8	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 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 20% 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): easements, project management costs Indirect costs, huts,	5	The revised Baseline Report assumed that costs for shipping huts would be greater; value engineering to reduce costs necessitated some rebidding resulting in a variance of 3% for this reporting quarter. Contracts were negotiated for hub/hut facilities.

**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 clinical and educational equipment interactive video invoicing and the ASAP scheduled down time precluded expenditure of funds for invoices during Year 2 Quarter 1. 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)	10	The Baseline assumed this measure should include fiber laid in addition to conduit. Based on the revised criteria incorporating conduit miles, we show 10 miles of new fiber versus the 9 miles in the Baseline.
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 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 2 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 325 telehealth interactive video units, 284 public access PCs, and 81 Home Healthcare interactive video units during next quarter. The infrastructure management equipment contract facilitating 24/7 video network support is also expected to be finalized. Vendor(s) selection and contract negotiation for leased facilities broadband connectivity will be undertaken during the next quarter, which will impact 305 community anchor institutions (CAIs).

Program managers will continue outreach activities to include visits to sites and ongoing coordination between vendors and CAIs for the installation of clinical and educational interactive video units and public access PCs. A dynamic re-design of the project web site is expected to improve stakeholder navigation and allow greater capabilities for the BTOP team to disseminate project progress quickly.

ARE-ON, the program's sub-recipient, reports these project accomplishments are planned for completion during the next quarter: Fiber construction completion at: Pine Bluff, Little Rock West, and Morrilton

Hut completion at Pine Bluff, Morrilton, Malvern, and Hope  
 Start fiber construction at: Malvern, West Memphis, Hope, and Forrest City  
 Start Hut construction at: West Memphis, Forrest City, Harrison, Mountain Home, Melbourne, Batesville, Newport, and Fayetteville

Specifically, we project 17 new network miles deployed with fiber and an additional 10 conduit miles of new fiber (underground). We do not expect the completion of new leased miles or connections to CAIs during the next 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	29	---
2b.	Environmental Assessment	89	---
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 1. 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.
2f.	Site Preparation	0	N/A
2g.	Equipment Procurement	37	---
2h.	Network Build (all components - owned, leased, IRU, etc.)	27	---
2i.	Equipment Deployment	41	---
2j.	Network Testing	82	---
2k.	Other (please specify): -	12	---

**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).**

Leased facilities agreements and negotiations are likely to spread into the next quarter. There are additional concerns about availability and receptivity of the installation sites due to CAI staff vacations during the November and December holiday season. Weather is unpredictable and icy road conditions during the last month of the next reporting quarter 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 may delay anticipated deployment at Arkansas Telehealth Network CAI sites. Now that equipment vendor contract negotiations are finalized, the UAMS BTOP team will utilize vendor delivery time-line commitments and site readiness to refine the time-line as needed.

A portion of IRU funds are expected to be expended in Year 2 Quarter 2, 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 Year 2 Quarter 3. 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.

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	\$10,709,094	\$88,400	\$10,620,694	\$1,111,100	\$0	\$1,111,100	\$1,383,670	\$0	\$1,383,670
b. Land, structures, right-of-ways, appraisals, etc.	\$10,711,692	\$9,851,632	\$860,060	\$0	\$0	\$0	\$1,048,733	\$0	\$1,048,733
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$2,172,357	\$0	\$2,172,357	\$9,062	\$0	\$9,062	\$905,247	\$0	\$905,247
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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$28,195,212	\$0	\$28,195,212	\$4,337,618	\$0	\$4,337,618	\$13,323,856	\$0	\$13,323,856
j. Equipment	\$43,605,098	\$15,998,347	\$27,606,751	\$1,830,425	\$1,562,285	\$268,140	\$17,820,121	\$7,770,683	\$10,049,438
k. Miscellaneous	\$33,188,367	\$512,048	\$32,676,319	\$306,434	\$0	\$306,434	\$3,293,513	\$0	\$3,293,513
<b>l. SUBTOTAL (add a through k)</b>	\$128,581,820	\$26,450,427	\$102,131,393	\$7,594,639	\$1,562,285	\$6,032,354	\$37,775,140	\$7,770,683	\$30,004,457
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>n. TOTALS (sum of l and m)</b>	\$128,581,820	\$26,450,427	\$102,131,393	\$7,594,639	\$1,562,285	\$6,032,354	\$37,775,140	\$7,770,683	\$30,004,457

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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