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

NT10BIX5570140

3. DUNS Number

965088057

4. Recipient Organization

University of Hawaii Systems 2530 Dole Street, Honolulu, HI 96822-2309

5. Current Reporting Period End Date (MM/DD/YYYY)

09-30-2012

6. Is this the last Report of the Award Period?

◯ 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

Yaa-Yin Fong

Director

7c. Telephone (area code, number and extension)

(808) 956-7800

7d. Email Address

yaayin@hawaii.edu

7b. Signature of Certifying Official

Submitted Electronically

7e. Date Report Submitted (MM/DD/YYYY):

11-16-2012

Project Indicators (This Quarter)

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

Construction and site activation continues across the state for the project. Fiber has been pulled to a total of 54 new sites. Most of these sites have not yet been connected to the network due to the layout of the network topology and the pending completion of the splicing, termination and testing. As these tasks are completed the sites are added to the network. All interisland circuits have been completed and are in service. Upgrades to sites that are already on the network are continuing.

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	38	Overall project percentage reported is based on funds expended (Total funds including match) but the actual progress, based on the fiber construction, equipment installation and site activation, is 55% complete. Overall project completion is actually much higher than the percentage of money expended this quarter indicates because our major subcontractor is in the process of revising its billing system so some large invoices for work completed have been delayed until next quarter. An additional 54 sites have had fiber built to them this quarter; however, not all of these sites have had their optical paths lit due to the network topology or they are waiting for fiber termination and splicing. The project is still behind the baseline due to the delay in the start of construction. The project has met the 18 site builds per month and is on track to complete the site builds by the end of May 2013 as planned. The project will be tracking the Progress Project Table that was submitted in June 2012 going forward. Based on this revised schedule, construction is on target but site activations are behind. The site activation delays are due to the fiber termination delays and splicing delays due to other planned work that Oceanic had on their schedule. We expect to catch up to the site numbers later this quarter as many of the sites are lined up and and will be completed once Oceanic catches up to the schedule.
2b.	Environmental Assessment	100	Completed
2c.	Network Design	100	Completed
2d.	Rights of Way	0	n/a
2e.	Construction Permits and Other Approvals	0	n/a
2f.	Site Preparation	100	Completed
2g.	Equipment Procurement	98	Almost all equipment has been purchased for the project and is in the process of being received and inventoried. Equipment procurement percentage reflects quantities of equipment, not dollar value. Procurement is less than the Baseline since it is not practical to order the final equipment items until most of the installations are complete.
2h.	Network Build (all components - owned, leased, IRU, etc)	55	As sites are spliced into the INET rings, they are being activated where the network topology allows. The network build percentage is below baseline due to initial delays from late receipt of the FONSI. The project will be tracking the Progress Project table that was submitted in June 2012. The project is behind that project table due to delays in fiber termination and outside plant splicing and the resulting inability to connect sites to the network.
2i.	Equipment Deployment	80	Equipment deployment continues across the State by DOE, HSPLS and UH staff. Most of the equipment on Maui and Oahu have been installed.
2j.	Network Testing	55	Network testing is in sync with the Network Build.
2k.	Other (please specify):	0	n/a

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).

Construction is progressing on schedule. Coordination meetings between all parties has paid off by streamlining the process and approvals and identifying issues that may arise. DOE, HSPLS and UH staff continue to work through the activation of sites onto the network where possible. There have been some delays in splicing built sites into the INET due to scheduling conflicts with Oceanic, however the project is confident that Oceanic will catch up in the coming months. Oceanic has committed to completing their work by the end of May of 2013. Additionally, some miscommunication with Oceanic has resulted in the low site activation numbers - specifically the Oceanic engineering was waiting for large strings of sites to be completed on the outside plant before giving the project the go ahead to begin work. This resulted in delays in activating sites.
No assistance from the BTOP project is requested at this time.

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	101	Some of the miles that were built to the new sites were not counted in this category as they have not yet been activated on the network. A total of 24 new backbone miles were lit on Oahu, along with 20 miles of lateral fiber across the entire state for a total of 44 new network miles. The number of miles will remain below the baseline as construction catches up from the earlier delays in the start of construction. The project will be tracking the Progress Project table that was submitted in June 2012 going forward. By this revised schedule, the project is just slightly behind, due to delays at the end of June in fiber terminations and the resulting site activations.
New network miles leased	0	n/a
Existing network miles upgraded	481	44 miles of backbone fiber were upgraded this quarter for a cumulative total of 481 miles. This number is still below the baseline due to previous quarters' construction delays. The project will be tracking the Progress Project table that was submitted in June 2012 going forward. By this revised schedule, the project is just slightly behind, due to delays at the end of June in fiber terminations and site activation.
Existing network miles leased	0	n/a
Number of miles of new fiber (aerial or underground)	101	A total of 101 new network miles of fiber have been deployed to date, a total of 76 miles of new backbone and 25 miles of new lateral. This number is below the baseline due to previous quarters' delays. The project will be tracking the Progress Project table that was submitted in June 2012 going forward. By this revised schedule, the project is just slightly behind, due to delays at the end of June in fiber terminations and site activation.
Number of new wireless links	0	n/a
Number of new towers	0	n/a
Number of new and/or upgraded interconnection points	0	n/a

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

Indicators	
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 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**	101	A total of 27 CAIs were given new access or upgraded access this quarter. This number is below the baseline due to delays in completing the splices and terminations at the sites, continuing effects of the late receipt of FONSI. Based on projected build rates, the project is estimated to reach baseline numbers towards the later quarters of Year 3. The project will be tracking the Progress Project table that was submitted in June 2012 going forward. This is a revised schedule and the project is behind those revised projections due to delays at the end of June in fiber terminations and resulting site activations.
	Subscribers receiving new access	52	24 CAIs were given new access this quarter. This is less than the baseline due to the delayed start of construction and network topology limitations. Project participants have been working on improving production rates over the last quarter. Based on projected build rates, the project is estimated to reach baseline numbers towards the later quarters of Year 3. The project will be tracking the Progress Project table that was submitted in June 2012 going forward. This is a revised schedule and the project is behind those revised projections due to delays at the end of June in fiber terminations.

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Subscribers receiving improved access	49	3 CAIs were upgraded this quarter. This is less than the baseline due to the delayed start of construction and network topology limitations. Project participants have been working on improving production rates over the last quarter. Based on projected build rates, the project is estimated to reach baseline numbers towards the later quarters of Year 3. The project will be tracking the Progress Project table that was submitted in June 2012 going forward. This is a revised schedule and the project is behind those revised projections due to delays at the end of June in fiber terminations.
	Please identify the speed tiers that are available and the number or subscribers for each	2	There are two speed tiers - 10Gbps and 1Gbps. 1 of the new sites are at 10Gbps and 2 improved sites are at 10Gbps. All others were at 1Gbps.
Residential / Households	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
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
Pahala Library	Pahala	Libary	no	BTOP connectivity provides 1Gpbs bandwidth to the Hawaii State Public Library System for staff and public use.

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
Kamalii El	Kihei	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Kihei El	Kihei	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Lihikai Elementary	Kahului	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Lokelani Intermediate	Kihei	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Paia Elementary	Paia	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Pomaikai Elementary	Kahului	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Kihei Library	Kihei	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Ahuimanu Elementary	Kaneohe	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Aikahi Elementary	Kailua	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Hauula Elementary	Hauula	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Kahuku Elementary	Kahuku	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Kalaheo High School	Kailua	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Kaneohe Elementary	Kaneohe	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Laie Elementary	Laie	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the Hawaii State Public Library System for staff and public use.
Maunawili Elementary	Kailua	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Mililani High School	Mililani	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Ben Parker Elementary	Kaneohe	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Pearl CIty High School	Pearl City	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.
Pope Elementary	Waimanalo	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.

Puohala Elementary	**Kaneohe**	**K-12**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.**
Radford High School	**Honolulu**	**K-12**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.**
Waiahole Elementary	**Waimanalo**	**K-12**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.**
Waimalu Elementary	**Aiea**	**K-12**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.**
Kaneohe Library	**Kaneohe**	**Library**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the Hawaii State Public Library System for staff and public use.**
Waimanalo Library	**Waimanalo**	**Library**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the Hawaii State Public Library System for staff and public use.**
Pukalani Elementary	**Makawao**	**K-12**	**no**	**BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use.**

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).

Newly built sites will be added to the network as the the network topology and fiber splicing allows.

Projected Forecasts
60 new Fiber builds
40 new CAI activations

Planned for approximately 115 Miles of new backbone; 70 miles of new lateral for total of 185 miles of new fiber.

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**	52	Overall project completion percentage is based on funds expended (total funds including match). It is expected that the major subcontractor, Oceanic Time Warner, will catch up on invoicing during this quarter so that project expenditures will more closely match the actual project completion, projected at close to 70%. Overall completion is still behind the baseline due to previous delays in previous quarters from late receipt of the FONSI. Construction is progressing at a steady and more rapid rate than the previous quarter and this activity rate is expected to be carried through the following quarter. Overall project completion will not directly correspond to percentage expended since equipment may not be deployed in the same quarter as paid and construction work completed and invoiced may not result in immediate turn up of sites. The project will be tracking the Progress Project table that was submitted in June 2012 going forward.
2b.	**Environmental Assessment**	100	Completed
2c.	**Network Design**	100	Completed
2d.	**Rights of Way**	0	n/a
2e.	**Construction Permits and Other Approvals**	0	n/a
2f.	**Site Preparation**	100	Completed
2g.	**Equipment Procurement**	98	Almost all equipment has been purchased. Remaining equipment will be purchased later during the project as required so will remain at slightly less than Baseline until then.

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2h.	Network Build (all components - owned, leased, IRU, etc.)	70	All interisland links have been completed and significant progress will be made with new or improved CAIs as the fiber construction progresses. The network build percentage is still below the Baseline due to the previous quarters' delays in the EA process and the resulting construction delays. The project is expecting to reach baseline numbers towards the later quarters of Year 3. The project will be tracking the Progress Project table that was submitted in June 2012 going forward.
2i.	Equipment Deployment	85	Installation of equipment will continue on all islands but deployment is not expected to catch up to the Baseline projections this quarter. UH continues to work with DOE and HSPLS to complete the installs on Oahu and begin the installation of the equipment on the neighbor islands over the next quarters. The project is expecting to reach baseline numbers towards the later quarters of Year 3.
2j.	Network Testing	70	Network testing will track network build and will continue to be behind the Baseline until the project catches up on installations. As sites are connected, the links will be fully tested and put into production.The project is expecting to reach baseline numbers towards the later quarters of Year 3. The project will be tracking the Progress Project table that was submitted in June 2012 going forward.
2k.	Other (please specify):	0	n/a

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).

Previous quarters' delays continue to impact the reported progress of the project. Construction progress has been significant in terms of sites completed due to the improved coordination that has occurred over the past quarters. Maintaining the build rate and activation rate in the next quarters will require continued coordination among all project partners. The project continues to look at ways to streamline the builds and deployments. Construction build rates have been meeting the target and the project expects the current rate to continue through next quarter.

The upcoming quarter may experience a slight downturn in activations due to the Christmas holiday. State and City regulations prevent Oceanic from working on the streets so they are planning to work where they can to abide by those restrictions. Additionally the University is required to take administrative leave days during the last two weeks of the year and staff cannot work during that time. The project will work through these restrictions to the best of its abilities.

A requested network freeze on the INET by the State due to the upcoming general elections in November may also impact the activations; however, the project is doing its best to continue the progress of the project by working around the State's wavelength and concentrating on paths that do not carry any State traffic. Additionally, the project has negotiated with the State to reduce the one month freeze to one week.

The project realizes that it is falling behind the project site activation rate. While construction is proceeding according to schedule, the project is waiting for sites that have been built to be spliced into the INET rings. Only once they have been spliced in can the project complete the turn up process for that site. Oceanic is aware of the delays and is working on getting these sites handed over to us. During the last quarter Oceanic was waiting on getting a string of sites ready and then handing them over to the project. We have since worked out a new procedure with Oceanic in which that they will let us know when sites are completed and we will base our site activations to locations where we can obtain end to end connectivity. This will allow us to have a better change a meeting our CAI numbers. Oceanic also expects a large number of sites to be handed over to us during the middle of the next quarter as previously scheduled upgrades to their network will allow the sites to be connected to the Oahu rings.

No technical assistance from the BTOP project is requested or required 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.

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	$75,000	$0	$75,000	$111,008	$0	$111,008	$111,008	$0	$111,008
b. Land, structures, right-of-ways, appraisals, etc.	$0	$0	$0	$0	$0	$0	$0	$0	$0
c. Relocation expenses and payments	$0	$0	$0	$0	$0	$0	$0	$0	$0
d. Architectural and engineering fees	$2,200,000	$608,554	$1,591,446	$866,587	$257,244	$609,343	$1,268,726	$362,431	$906,295
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	$25,528,000	$7,061,446	$18,466,554	$4,716,263	$1,362,223	$3,354,040	$8,883,868	$2,452,328	$6,431,540
j. Equipment	$14,663,000	$823,200	$13,839,800	$10,403,428	$676,432	$9,726,996	$11,749,316	$691,400	$11,057,916
k. Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0
l. SUBTOTAL (add a through k)	$42,466,000	$8,493,200	$33,972,800	$16,097,286	$2,295,899	$13,801,387	$22,012,918	$3,506,159	$18,506,759
m. Contingencies	$0	$0	$0	$0	$0	$0	$0	$0	$0
n. TOTALS (sum of l and m)	$42,466,000	$8,493,200	$33,972,800	$16,097,286	$2,295,899	$13,801,387	$22,012,918	$3,506,159	$18,506,759

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