

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
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4. Recipient Organization University of Hawaii Systems 2530 Dole Street, SAK D-200, Honolulu, HI 96822-2309

5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2011	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 Yaa-Yin Fong	7c. Telephone (area code, number and extension) X
	7d. Email Address yaayin@hawaii.edu

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 02-08-2012
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Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).
 Construction for the project is in full swing. Engineering and joint pole applications are proceeding on four islands. Fiber has been pulled to 18 sites, but those sites, due to the location in the network topology have not yet been activated with improved services. Work on lighting those sites will continue the next quarter. An interisland circuit from the Big Island to Oahu was activated at the end of the quarter, as well as the the activation of a key hub site on the Big Island. Additional sites that already had existing fiber were activated and other sites within the network were upgraded. Equipment deployment has increased significantly.

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	30	Significant progress has been made this quarter. 18 sites have had fiber installed, but due to their location on the network, the optical paths have not yet been built. Project is still behind the baseline due to delay in receiving the EA FONSI. We are working with the DOE and HSPLS to increase staff support to help overcome the initial delays. Overall project percentage is based on actual completion of the project - i.e. deploying fiber, equipment and activation of services and may not directly correspond to the percentage expended since not all equipment may be deployed or work completed in the same quarter as expenditures are recorded.
2b.	Environmental Assessment	100	Completed per baseline
2c.	Network Design	100	Completed per baseline
2d.	Rights of Way	0	n/a
2e.	Construction Permits and Other Approvals	0	n/a
2f.	Site Preparation	100	Completed per baseline
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)	17	Key sites have been upgraded and put into service to allow for further expansion of the network on the neighbor islands. Sites that have existing fiber have been upgraded or installed as the network allows. All interisland circuits have been installed and will be activated as the network allows. 18 sites have had fiber installed this quarter, but the optical network has not yet been built so they have not been counted in the network build but are reflected in the overall project percentage. The network build percentage is below the baseline due to the initial delays in the EA process and DOE and HSPLS staffing issues.
2i.	Equipment Deployment	40	Project has made considerable progress this quarter and continues to deploy equipment deployment every quarter. The remainder of the equipment to be deployed will be received and inventoried through the next quarter and will be deployed throughout the next few quarters. Deployment continues to lag Baseline due to the initial EA-related delays while the DOE and Libraries continue to find ways to overcome staffing issues, but deployment delays have not impeded overall project progress.
2j.	Network Testing	17	Network testing is in sync with the Network Build percentage - as sites are built or upgraded, the fiber connections or upgraded paths are tested and put into production.
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).

Coordination issues with the DOE, HSPLS, UH and Oceanic Time Warner Cable and its contractors for site surveys initially delayed the joint pole application progress. This has been resolved and routine conference calls between all the parties have significantly improved coordination and communication and have sped up the construction process. This has resulted in more apps being submitted on a monthly basis. At the end of December 12 apps were approved, which will be built during the next quarter. The number of approved apps did not track projections this past quarter and the project network miles and CAls connected and upgraded was significantly lower due to factors such as the Hawaiian Tel strike in November, the network maintenance freeze during the APEC Conference on Oahu in November, an Oceanic Time Warner Cable blackout for fiber trunk work due to a City & County of Honolulu prohibition on road closures between Thanksgiving and New Year. These external factors are cleared as of the next quarter (1Q2012), and the road closure prohibition will be factored into end-of-2012 planning. That said, work over the last quarter with the DOE and HSPLS has proved to be successful as the deployment rate has increased and is starting to track closer to the baseline. No assistance from the BTOP program is requested or required 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	13	Additional miles were built to 18 sites, but are not counted as they have not been activated due to network engineering limitations. The amount of new miles are lower than the baseline due to the delays in the start of construction. The number of miles will continue to be below baseline for the next few quarters as the project catches up.
New network miles leased	0	n/a
Existing network miles upgraded	253	94 miles of fiber were upgraded this quarter - bringing the total to 253 miles. This is significant progress, although still under the baseline amount due to the previous quarter delays in construction.
Existing network miles leased	0	n/a
Number of miles of new fiber (aerial or underground)	13	10 new miles were activated bringing to the total to 13 miles. Additional miles were built to 18 sites, but are not counted as they have not been activated. This is far less than the baseline since construction only recently began in earnest due to the previous quarters' delays and unexpected factors (Hawaiian Tel strike, APEC, holiday blackouts).
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
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
Community Anchor Institutions (including Government institutions)	Please identify the speed tiers that are available and the number of subscribers for each	0	n/a
	Total subscribers served	38	15 CAIs were given new or improved access this quarter. This is well below the baseline due to the delays from the previous quarters from the late receipt of the FONSI.
	Subscribers receiving new access	14	8 CAIs were given new access this quarter for a total of 14. This is less than the Baseline due to the delayed start in construction due to the late receipt of the FONSI.
	Subscribers receiving improved access	24	7 CAIs were given improved access this quarter for a total of 24. This is less than the baseline as deployment of new equipment was delayed by equipment delivery and construction delays over the holidays.
Residential / Households	Please identify the speed tiers that are available and the number of subscribers for each	2	There are two speed tiers - 10Gbps and 1Gbps. 2 of the new sites are at 10Gbps and 3 improved sites are at 10Gbps. All other sites including the 6 new and 4 improved are at 1Gbps (total of 102 sites).
	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
Businesses	Please identify the speed tiers that are available and the number of subscribers for each	0	n/a
	Entities passed	0	n/a
	Total subscribers served	0	n/a

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

none

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
Kealahou High School	Pukalani	K-12	no	BTOP connectivity provides 1Gbps bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
UH Center West Hi	Kealahou	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff use.
Canada France Hawaii Telescope	Waimea	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff use.
Kauai Community College	Lihue	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff use.
Maui Community College - Lahaina	Lahaina	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff use.
Manoa Innovation Center	Honolulu	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff use.
Maalaea Passive	Maalaea	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff use.
Campbell High School	Ewa Beach	K-12	no	BTOP connectivity provides 1Gbps bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
Ewa Elementary	Ewa Beach	K-12	no	BTOP connectivity provides 1Gbps bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
Mauna Lani Hub	Waimea	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH Network for student and staff 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
Holomua Elementary	Ewa Beach	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
Ilima Intermediate	Ewa Beach	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
Keoneula Elementary	Ewa Beach	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
Nanaikapono Elementary	Waianae	K-12	no	BTOP connectivity provides 1Gpbs bandwidth to the State of Hawaii Department of Education network for student and staff use. Prior to BTOP the site had a 6Mbps cable modem access.
Wavecom Lanai POP	Lanai City	Higher Ed	yes	BTOP Connectivity provides 1 or 10Gbps to University of Hawaii Higher Education Sites to the UH 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).

All interisland circuits should be completed and activated during the next quarter. Significant progress is expected in fiber builds and site activations. Regrooming efforts on Oahu are expected to get started next quarter and sites across the existing network will be upgraded.

Projected Forecasts

New Network Miles: 60 New backbone and lateral miles

Total CAIs connected: 20 CAIs improved, 40 CAIs New Access

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	Previous delays due to the late receipt of the FONSI and a decreased construction work schedule during the holidays have caused the project to fall behind the Baseline. Significant progress is expected over the next quarter as sites are being lined up for actual fiber construction and more pole applications are being approved. Overall project percent completion will not directly correspond to percentage expended for a number of reasons, including: equipment may not be installed in exactly the same quarter as received or may be received and installed but not paid or drawn down in the same quarter. Work may be performed but not paid or drawn down in the same quarter and specific item costs may be slightly more or less that budgeted.
2b.	Environmental Assessment	100	completed per baseline
2c.	Network Design	100	completed per baseline
2d.	Rights of Way	0	n/a
2e.	Construction Permits and Other Approvals	0	n/a
2f.	Site Preparation	100	completed per baseline
2g.	Equipment Procurement	98	Almost all equipment will have been received, inventoried and paid for by the end of this quarter. Procurement will be slightly less than the Baseline until construction can progress to the point where the final equipment is needed and is procured.

	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.)	34	All interisland links will have been completed and activated by the end of this quarter. Significant progress will be made with new or improved CAIs as the fiber construction progresses. The network build percentage is below the baseline due to the previous quarters' delays in the EA process and the resulting delay in construction.
2i.	Equipment Deployment	60	Installation of equipment will continue on all islands but deployment is not expected to catch up to the Baseline projections this quarter. UH will be working 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.
2j.	Network Testing	34	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.
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. As construction progresses, the project will track closer to the projected baseline. Project completion percentages include fully completed sites as well as sites that have just fiber installed, but are not connected to the network yet. Approved pole-use applications for fiber builds are coming in batches (12 in the last week of December) and Oceanic is now building out mileage as quickly as they can once approvals are received. Fiber builds are expected to increase, but network build rates will not necessarily track the fiber builds. Oceanic builds out fiber as the approved pole-use applications are approved - but these new sites cannot necessarily be connected to the network until key intermediate sites have also been built and activated. This sometimes results in sites that have fiber built but connectivity cannot be activated until intermediate sites are connected and activated in a future quarter. This will be reflected in the overall project completion percentage, but not the network build nor CAI list. Equipment deployment will continue on all islands. Work over the last quarter with the DOE and HSPLS has proved to be successful as the deployment rate has increased and is starting to track closer to the baseline. No assistance from the BTOP program 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.

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	\$75,000	\$0	\$75,000	\$110,978	\$0	\$110,978	\$110,978	\$0	\$110,978
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	\$602,566	\$117,107	\$485,459	\$1,204,000	\$233,000	\$971,000
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	\$2,600,000	\$754,000	\$1,846,000	\$3,726,600	\$1,080,600	\$2,646,000
j. Equipment	\$14,663,000	\$823,200	\$13,839,800	\$6,807,032	\$549,455	\$6,257,577	\$9,925,455	\$659,455	\$9,266,000
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	\$10,120,576	\$1,420,562	\$8,700,014	\$14,967,033	\$1,973,055	\$12,993,978
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	\$10,120,576	\$1,420,562	\$8,700,014	\$14,967,033	\$1,973,055	\$12,993,978

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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