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	NT10BIX5570044	041544081

4. Recipient Organization

University of Illinois 506 S. Wright St.
364 Henry Admin. Bldg., Urbana, IL 61801-3620

5. Current Reporting Period End Date (MM/DD/YYYY)	**6. Is this the last Report of the Award Period?**
12-31-2010	◯ 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)**
Michael K Smeltzer	2172443835
Director of Networking	**7d. Email Address** smeltzer@illinois.edu
7b. Signature of Certifying Official Submitted Electronically	**7e. Date Report Submitted (MM/DD/YYYY):** 02-23-2011

Project Indicators (This Quarter)

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

The primary project accomplishment of the 4th quarter was the issuance of the Request for Proposals (RFP) for Engineering Services and the ultimate selection and hiring of Shive-Hattery, a civil engineering firm based in the Chicago area. They in turn have subcontracted with NewCom Technologies from Des Moines, which specializes in fiber construction planning and design. Both firms have been actively engaged in permit submittals, easement acquisition, surveying and design of the backbone rings and fiber-to-the-premise (FTTP) fiber infrastructure since the approval of Shive-Hattery's contract on November 18th by the University of Illinois Board of Trustees.

Additionally, we finalized the evaluation criteria and issued an RFP for FTTP Electronics. The responses to that RFP were due in early January.

The first two full-time grant-funded employees were also hired in December. The first is a GIS specialist and project manager with a Masters degree in Urban Planning who is working with Shive-Hattery on mapping and coordinating with our Anchor Institutions. The second is a fiber construction specialist with 30+ years of experience who has built fiber infrastructure in this community before and who is also working with Shive-Hattery on the construction planning and the outside plant materials specifications.

In November, a local organization called eBlackCU sponsored a day-long symposium that explored how Big Broadband could impact education, religious organizations, community groups, social service organizations and social justice in the community. The event was well attended, with at times more than 125 people in the room. They have scheduled two follow-up workshops for the first quarter of 2011. Archives of the November symposium are available at: http://eblackcu.net/portal/symposium.

Two faculty members from the University's Graduate School of Library and Information Science (GSLIS) have written research proposals to closely study how UC2B and other Illinois BTOP and BIP projects will impact their communities. One of those proposals was submitted to the Ford Foundation, and has been awarded $140,000 over two years. The other was submitted to the Partnership for a Connected Illinois in this last quarter. Despite the potential different funding sources, we expect the two GSLIS faculty to work closely with each other to document UC2B and other projects and to publicize their findings.

Finally, in December the University executed a contract with the State of Illinois Department of Commerce and Economic Opportunity (DCEO) for the $3.5 million that was pledged by the State in 2009 as part of UC2B's local matching funds.

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	1	See narrative below.
2b.	Environmental Assessment	100	Completed on Schedule
2c.	Network Design	25	Baseline was 100%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the engineering would be complete by the end of the 4th quarter. We did hire our engineering firm - Shive-Hattery - in this quarter quarter and they had been on the job for a month at the end of this quarter. Despite the record snowfall in December, they made a lot of progress towards completing this milestone. As things stand now, they are scheduled to deliver the construction bid documents in early April.
2d.	Rights of Way	25	Baseline was 100%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the rights-of-way would be acquired by the end of the 4th quarter. Since they have been working on our project, our engineering firm - Shive-Hattery - has identified the needed private easements for rights-of-way. In order to continue to make progress on the construction, an "easement free" design will initially be bid, with the paths that require private easements bid as alternates. That will allow the lengthy process of securing the

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
			private easements to continue in parallel with the construction bidding. We know that we will have to do some of our construction in 2012, and the areas that will require private easements for rights-of-way will be scheduled for that second year of construction. That should allow a sufficient period of time for the easement negotiation process to be successfully concluded. This milestone may not be completed for yet another year, but it will not impede the start of our construction.
2e.	Construction Permits and Other Approvals	25	Baseline was 100%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the construction permits and other approvals would be complete by the end of the 4th quarter. All permits have been applied for and Shive-Hattery will secure all needed permits prior to the release of the construction bid documents in April of 2011.
2f.	Site Preparation	0	As planned
2g.	Equipment Procurement	10	As planned. The fiber-to-the-premise (FTTP) electronics Request for Proposals (RFP)was released in December.
2h.	Network Build (all components - owned, leased, IRU, etc)	0	As planned
2i.	Equipment Deployment	0	As planned
2j.	Network Testing	0	As planned
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).

No sooner than our contract with our engineering firm - Shive-Hattery - was approved, Champaign-Urbana had an all-time record snowfall for the month of December - some 28 inches. This early and heavy snow impacted the ability of Shive-Hattery's surveyors to complete their in-field survey work for both the backbone rings and the fiber-to-the-premise (FTTP) areas.

The overall physical network design proposed for UC2B is somewhat nontraditional, and the City of Urbana requested that once the engineering firm was hired that their first deliverable be a review of that backbone design with recommendations for possible improvements. Before the engineering firm could deliver that review, they needed to know the technology that would be deployed for the FTTP areas, as that technology choice would directly impact the infrastructure design needed for those areas and potentially the backbone ring design. Getting the FTTP electronics RFP perfected and released took longer than we wanted it to and that delayed the work of our engineers.

The Overall Project completion percentage above only reflects the actual payments that have been processed by the University's Grants and Contracts office. Because we are essentially still ramping up this project, the expenses that show on that financial report do not yet accurately reflect the actual level of effort. For instance, at the close of this quarter our engineering firm had not yet billed us. Over the next two quarters our costs should become more representative of the actual effort. All other percentages above reflect the estimated level of completion whether the work has been paid for yet or not.

4. Please report the following information regarding network build progress. Write "0" in the Total column and "N/A" in the Narrative column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	0	No construction was planned as of this quarter.
New network miles leased	0	Discussions are ongoing with several organizations that may have infrastructure available that may be useful for our project and may be priced lower than what it would cost us to build it. Those discussions will be completed in the first quarter of 2011.
Existing network miles upgraded	0	No construction was planned as of this quarter.

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Existing network miles leased	0	Both the City of Urbana and the City of Champaign have some existing conduit and fiber in the ground that will be sold to UC2B. While the verbal agreements have been in place for quite some time, the formal paperwork will not be executed until the second or third quarter of 2011.
Number of miles of new fiber (aerial or underground)	0	No construction was planned as of this quarter.
Number of new wireless links	0	N/A - we will not be deploying wireless links
Number of new towers	0	N/A - we will not be building any towers
Number of new and/or upgraded interconnection points	0	No construction was planned as of this quarter.

For questions 5 and 6 please include information relating to agreements that you are negotiating or have entered into, or that your sub recipient, contractor or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

Indicators	
Number of signed agreements with broadband wholesalers or last mile providers	0
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	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:

None. We are 6 months away from turning up services, and we have focused our energies on getting the engineering complete and the construction process started. While we have had discussions with several last-mile providers and inquiries from others, those discussions will not get serious until the 2nd quarter of 2011 when the construction has been bid and we can shift our attention to recruiting service providers. We have both Marketing and Open Access subcommittees that are exploring ways to attract last-mile providers and to make the UC2B network a desirable place for them to do business.

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:

We will provide middle-mile and last mile wholesale services on our backbone rings, and in our fiber-to-the-premise (FTTP) service areas. We agreed to provide Indefeasible Rights of Use (IRU) agreements for dark fiber for 8 organizations. We will also make dark fiber available to two state agencies - The Illinois Department of Transportation and to the Illinois Century Network (ICN), which provides Internet connectivity to state agencies, schools and local government. ICN will also have BTOP-funded cross-country fiber built to the edges of our community. We have agreed to provide fiber to connect their fiber to their Point of Presence. (Wholesale pricing plan is attached.)

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).

We have not designated a third party to operate our network.

6. Please provide the data according to the type of subscriber. Write "0" in the Total column and "N/A" in the Narrative column if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (300 words or less).

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	0	We had not planned to provide wholesale services in this quarter.
	Providers with signed agreements receiving improved access	0	We had not planned to provide wholesale services in this quarter.
	Providers with signed agreements receiving access to dark fiber	0	We had not planned to provide wholesale services in this quarter.

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Please identify the speed tiers that are available and the number of subscribers for each	0	While we are not yet providing any wholesale services, the attached "Wholesale Services" document lists the tiers of services we plan to provide.
Community Anchor Institutions (including Government institutions)	Total subscribers served	0	We had not planned to provide services to Anchor Institutions in this quarter.
	Subscribers receiving new access	0	We had not planned to provide services to Anchor Institutions in this quarter.
	Subscribers receiving improved access	0	We had not planned to provide services to Anchor Institutions in this quarter.
	Please identify the speed tiers that are available and the number or subscribers for each	0	While we are not yet providing any services to Anchor Institutions, the attached "Retail Services" document lists the tiers of services we plan to provide.
Residential / Households	Entities passed	0	We had not planned to pass any households in this quarter.
	Total subscribers served	0	We had not planned to provide residential services in this quarter.
	Subscribers receiving new access	0	We had not planned to provide residential services in this quarter.
	Subscribers receiving improved access	0	We had not planned to provide residential services in this quarter.
	Please identify the speed tiers that are available and the number of subscribers for each	0	While we are not yet providing any residential services, the attached "Retail Services" document lists the tiers of services we plan to provide.
Businesses	Entities passed	0	We had not planned to pass any businesses in this quarter.
	Total subscribers served	0	We had not planned to provide any services to businesses in this quarter.
	Subscribers receiving new access	0	We had not planned to provide any services to businesses in this quarter.
	Subscribers receiving improved access	0	We had not planned to provide any services to businesses in this quarter.
	Please identify the speed tiers that are available and the number of subscribers for each	0	While we are not yet providing any services to businesses, the attached "Retail Services" document lists the tiers of services we plan to provide.

7. Please describe any special offerings you may provide (600 words or less).

All of our customers will have at least 100 Mbps symmetric Intranet connectivity to each other, and to all local Anchor Institutions. While Internet connectivity will be sold in tiers of bandwidth, UC2B Intranet connectivity will be limited only by the port speed of the customer's Optical Network Terminal (ONT). We plan to provide that local Intranet connectivity for customers with both 100 Mbps and 1 Gbps ONTs. This is very similar to the model deployed by Lafayette, Louisiana in their fiber-to-the-premise system.

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).

In the first quarter of 2011, we will determine the "winner" of our fiber-to-the-premise (FTTP) electronics Request for Proposals (RFP), and the contract resulting from that RFP will go before the University of Illinois Board of Trustees for approval in late March.

We will receive the Design Documents from our engineering firm - Shive-Hattery - from which we will get a good indication of whether or not we have enough money in our budget to build the project as proposed within the total time allotted. Thus far, the preliminary indications have been positive on both counts, but should there be budget issues, in consultation with NTIA we will find ways of cutting costs so that we can execute our project but still stay within our approved budget. In terms of time, there is a good chance that late start of our activities necessitated by the Environmental Assessment and the winter weather in Central Illinois may prevent us from reaching the 67% milestone on 1/31/2012 However,we believe we will have no problem making our 100% completion deadline of 1/31/2013. We will continue to make a best effort to meet the 67% milestone.

The Design Documents will probably reflect some minor changes from the route that we submitted for our Environmental Assessment (EA). This will require filing an amended EA in the next quarter. The approval process for that amended EA can happen in parallel with other local activities. There are no significant differences between the areas that have already been approved for UC2B construction and the areas that the engineers are considering for some alternate routes, so we do not anticipate a lengthy approval process for the amended EA.

All railroad and highway use permits should be filled in the next quarter, and the process of identifying where we may need private easements in areas that are outside the city boundaries of Urbana and Champaign should be finalized. As is discussed in our annual report, the required processes for acquiring private easements for right-of-way use are time consuming. They will be started in the next quarter, but may not be concluded until the third or fourth quarter of 2011.

The next quarter will also mark the beginning of our efforts to organize the door-to-door canvass of the 4,650 households and 200 businesses in our fiber-to-the-premise construction areas. While the actual canvass will not begin until the weather gets nicer in the second quarter of 2011, the hiring and organizational work will need to begin several months before the first canvasser knocks on a door.

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	8	Baseline plan was 15%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that we would have spent 15% of our project budget by the end of the 5th quarter. Based on actual expenditures, it will take until the 4th quarter of 2011 to get back on target, and even that may be difficult. For this category and others below, we were too optimistic that we could move a project of this magnitude through the established processes of the University and two cities as fast as we projected in our revised baseline plan. As mentioned elsewhere, the weatherman has not done us any favors either.
2b.	Environmental Assessment	100	Completed
2c.	Network Design	75	Baseline plan was 100%.At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the engineering would be complete by the end of the 4th quarter. This will be completed in the second quarter of 2011.
2d.	Rights of Way	50	Baseline plan was 100%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the rights-of-way would be acquired by the end of the 4th quarter. In order to continue to make progress on the construction, an "easement free" design will initially be bid, with the paths that require private easements bid as alternates. That will allow the lengthy process of acquiring the private easements to continue in parallel with the construction bidding. We know that we will have to do some of our construction in 2012, and the areas that will require private easements for rights-of-way will

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
			be scheduled for that second year of construction. That should allow a sufficient period of time for the easement negotiation process to be successfully concluded. This milestone may not be completed for yet another year, but it will not impede the start of our construction. This will be completed in the by the 4th quarter of 2011, as securing private easements is a time consuming process.
2e.	Construction Permits and Other Approvals	50	Baseline plan was 100%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the construction permits and other approvals would be complete by the end of the 4th quarter. All permits have been applied for and Shive-Hattery will secure all needed permits prior to the release of the construction bid documents in April of 2011. This will be completed in the second quarter of 2011.
2f.	Site Preparation	0	As planned
2g.	Equipment Procurement	10	As planned- the FTTP electronics RFP will be awarded.
2h.	Network Build (all components - owned, leased, IRU, etc.)	0	As planned
2i.	Equipment Deployment	0	Baseline Plan was 10%. At the time this figure was included in the revised project baseline, we thought that we would complete our Environmental Assessment and hire our engineering firm in a shorter period of time than it actually took. We were overly optimistic in predicting that the equipment deployment would be 10% complete by the end of the next quarter. The flber-to-the-premise electronics contract will be voted on by the University of Illinois Board of Trustees at their March 23rd meeting. If they approve the contract, it is unlikely that any purchase orders will be issued before the end of the quarter. Assuming the contract is approved, in early April we will order FTTP equipment to test with. FTTP equipment for deployment will not be ordered until the 3rd quarter.
2j.	Network Testing	0	As planned
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).

Should the remaining winter months have as much snowfall as December did, that could delay the timely completion of the engineering work, which then would delay the start of construction.

In order to collect our local matching funds from the organizations that have agreed to purchase Indefeasible Rights of Use (IRU) agreements for dark fiber, we will need to be able to execute contracts for those IRUs. There are several issues pertaining to the issuance of IRUs on which NTIA has yet to make decisions. If those decisions are not forthcoming in the first quarter of 2011, that will impact our ability to collect matching funds, which impacts our ability to collect Federal funds, which could stall the project.

Additionally, the three organizations that make up the UC2B Consortium have to decide on the operational legal structure for UC2B so it can sign those IRUs. While the consortium structure has worked well for seeking grants, as well as shaping policies and practices as we have refined the design of the network, hired an engineering firm and issued our FTTP electronics RFP, an Intergovernmental Consortium is not the ideal legal structure for UC2B as it moves into operations. Attorneys for all three parties are working on this issue and are expected to have their recommendations for better operational structures next quarter. If UC2B cannot sign IRUs, that triggers the same bad consequences detailed above. Our expectations are that we will receive the information we need from NTIA and finalize UC2B's operational legal structure in the next quarter.

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	$0	$0	$0	$0	$0	$0	$0	$0	$0
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	$254,990	$0	$254,990	$0	$0	$0	$254,990	$0	$254,990
e. Other architectural and engineering fees	$0	$0	$0	$0	$0	$0	$0	$0	$0
f. Project inspection fees	$783,992	$0	$783,992	$0	$0	$0	$0	$0	$0
g. Site work	$33,500	$0	$33,500	$0	$0	$0	$0	$0	$0
h. Demolition and removal	$74,880	$0	$74,880	$0	$0	$0	$0	$0	$0
i. Construction	$23,499,307	$6,852,149	$16,647,158	$144,944	$52,678	$92,266	$2,144,944	$825,000	$1,319,944
j. Equipment	$4,722,756	$0	$4,722,756	$0	$0	$0	$0	$0	$0
k. Miscellaneous	$17,500	$0	$17,500	$8,993	$0	$8,993	$8,993	$0	$8,993
l. SUBTOTAL (add a through k)	$29,386,925	$6,852,149	$22,534,776	$153,937	$52,678	$101,259	$2,408,927	$825,000	$1,583,927
m. Contingencies									
n. TOTALS (sum of l and m)	$29,386,925	$6,852,149	$22,534,776	$153,937	$52,678	$101,259	$2,408,927	$825,000	$1,583,927

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