ANNUAL 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 Annual 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
	7d. Email Address
Director of Networking	smeltzer@illinois.edu

7b. Signature of Certifying Official	7e. Date Report Submitted (MM/DD/YYYY):
Submitted Electronically	02-22-2011

OVERALL PROJECT PERFORMANCE INDICATORS

1. Please provide the following average cost figures for your project. Please review the instructions to determine how to calculate these figures. Write "0" in the second column and "N/A" in the third column if your project does not yet have this information. Depending on whether your project contains Middle Mile and/or Last Mile components, some metrics may not apply. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Cost Indicator	Average Cost / Speed	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Average cost per new mile (Middle Mile)	0	N/A
Average cost per household passed (Last Mile)	0	N/A
Average cost per subscriber (Last Mile)	0	N/A
Maximum broadband speed advertised (Middle Mile)	0	While we have not started delivering services yet, in our proposal and in all of our discussions with NTIA and the public we have said that we would have 10 Gbps Middle Mile connections available.
Maximum broadband speed advertised (Last Mile)	0	While we have not started delivering services yet, in our proposal and in all of our discussions with NTIA and the public we have said that we would have 1 Gbps Last Mile connections available.
Average broadband speed provided (Middle Mile)	0	N/A - While we have no data yet, we expect the vast majority of our Middle Mile customers to have 1 Gbps connections so this numbers should be slightly more than 1 Gbps.
Average broadband speed provided (Last Mile)	0	N/A - While we have no data yet, we expect the vast majority of our Last Mile customers to have 100 Mbps connections, so this number should be slightly more than 100 Mbps.

2. Please provide each facility name and type, the county where the facility is located, and census tract information for any facilities funded by your project during this annual reporting period. Report only facilities for which construction has been completed.

Facility Identifier / Name	Facility Type	County	Census Tracts
No Construction Completed Yet	N/A	N/A	N/A

<div style="text-align:center">Add Facility   Remove Facility</div>

3. Please identify (1) the total number of interconnection, peering, and/or transit agreements entered into during this annual reporting period; (2) the total number of agreements of each type that you are currently negotiating; and (3) whether you have denied any request for interconnection and if so, why. If you have not entered into any agreements, please write "N/A."

Interconnection Agreements (600 words or less)

N/A

Peering and Transit Agreements (600 words or less)

N/A

CAPACITY, UTILIZATION, AND CAPABILITY INDICATORS

4. Community Anchor Institutions: In the chart below, please provide information on the types of community anchor institutions capable of receiving service (i.e., anchor institutions connected to your network plus those passed by your network) as a result of BTOP funds.

Type of Community Anchor Institution	Total Number Within Service Area	Type of Community Anchor Institution	Total Number Within Service Area
Schools (K-12)	0	**Public Housing**	0
Libraries	0	**Other Institutions of Higher Education**	0
Medical and Healthcare Providers	0	**Other Community Support Organizations**	0
Public Safety Entities	0	**Other Government Facilities**	0
Community Colleges	0	**Total Community Anchor Institutions**	

5. Please indicate the average increase in broadband speed provided to the community anchor institution customers as a result of your project, including a description of how this increase was calculated (600 words or less).

N/A - We have not delivered any services yet. When we do, we believe it will be a substantial increase for each Anchor Institution. We will track before and after bandwidths for each Anchor Institution, and can report the average percentages of those increases.

6. What retail services are being provided by this project? Please describe below. (600 words or less). As an attachment to this report, please provide pricing plans (in $ per month) associated with each retail service. Retail services description:

UC2B has not provided any retail services yet. The proposed retail services are detailed on the attached PDF file. In short, we will offer a base local symmetric Intranet connection that is as fast as the equipment will go - either 100 Mbps or 1 Gbps. In addition to that there are 5 tiers of symmetric Internet connectivity that start at $19.99 a month for a 5 Mbps Internet connection with a 100 Mbps Intranet connection and range up to $85.99 a month for a 40 Mbps Internet Connection with a 1 Gbps Intranet connection. Depending on the competitive landscape, those Internet bandwidth tiers may be adjusted upwards at the same price levels before we actually roll out services to our first service areas in the fall of 2011. Our issues with securing rights-of-way will not impact our ability to deliver services to some areas in the fall of 2011. Retail services across all eleven Census Block Groups will not be available until 2012.

7a. What network management policies (e.g., bandwidth limitations, traffic prioritization) are in place for the services provided by your project? 7b. Have you ever limited or blocked consumers from accessing any lawful content, service, service provider, or application, or prevented any consumers from attaching any legal device to the network? If so, please explain why (300 words or less)?
We plan to provide QOS for all services that need it - such as VoIP and IPTV, but beyond that, no other prioritization of any traffic based on content, source or destination. The only bandwidth limitations will be through the tiers of Internet bandwidth that a customer subscribes to. We have not delivered any traffic yet, and therefore could not have blocked any, but we have pledged to never block any lawful content. Our management policies are on-line at: www.uc2b.net.

8. If applicable, please provide the total number and the percentage of subscribers who have dropped the broadband service provided through this project (total number of households and/or businesses and the "churn rate") and the subscribers' reasons for discontinuing their service (600 words or less).
N/A - No customers to churn yet.

9. Please provide the following information regarding the number of fiber strand-miles:

Total Number of Strand-miles	Total Number of Active Fiber Strand-miles Used by Recipient	Total Number of Leased Fiber Strand-miles	Total Number of Dark Fiber Strand-miles	Total Number of Strand-miles Being Built		
				Active	**Leased**	**Dark**
36,259	0	0	0	8,379	5,464	22,416

10. If you wholesale dark fiber, please list your wholesale customers and the number of fiber miles you currently are leasing to those customers:
We agreed to provide dark fiber IRU's to the organizations that provided our local matching funds. The value of those IRU's determined each organization's "contribution". No lease or IRU agreements have been signed yet, but the number of proposed strand miles for each organization is in the attached PDF file.

11. Please provide the following information regarding the facility collocation capacity:

Total Facility (total square feet for all facilities)	Number of Square Feet Used by Recipient	Number of Square Feet Leased	Number of Square Feet Available

0	0	0	0

12. If you do not own collocation space, please describe how and where other network providers and/or customers interconnect with your network (600 words or less).

UC2B will make 1/4th of a standard 7-foot telco rack available to each IRU holder for co-location in each of our two core nodes, so that they can co-locate equipment that connects to their fiber strands on our seven rings. We will have in excess of 350 splice points on our rings throughout the community, and any provider/customer will be able to diversely connect to our core network architecture from any of those ring spice points. The rings eliminate the need for any large central co-location facility.

13. To the extent that you have made any subcontracts or sub grants, please provide the number of subcontracts or sub grants that have been made to socially and economically disadvantaged small business (SDB) concerns as defined by section 8(a) of the Small Business Act, 15 U.S.C. 647, as modified by NTIA's adoption of an alternative small business size standard for use in BTOP. Please also provide the names of these SDB entities (150 words or less).

We have made no sub-awards at this time. We plan to make two sub awards - one to the City of Urbana and one to the City of Champaign that will cover the costs of the backbone rings and fiber-to-the-curb construction in their respective communities. Each city will hire the contractors that will be working in that city on the UC2B project. No direct subcontracts or grants to SDB's are anticipated, but we fully expect SDB's to participate as primary or sub contractors on our fiber construction. The two cities have agreed to adopt the University's goal of 15% Minority and Female Business Enterprise (MAFBE) participation on this construction.

14. Please describe any best practices/lessons learned that can be shared with other similar BTOP projects (900 words or less).

Lesson # 1: It is never too early to understand all of your easement challenges. While more than 90% of our project is within the city boundaries of Urbana and Champaign, some of our proposed backbone fiber routes extend beyond those cities' limits. In those unincorporated areas, it is not uncommon for a property owner to own the right-of-way all the way to the center of the road. Often the same applies to the other side of the road.

To legally install underground fiber in the right-of-way along that road requires an easement from one or the other property owners. Each of our participating cities has its own easement negotiation process and the Federal government has a required process that must be followed as well for federally funded projects. None of those processes are are designed to be completed within the short time periods that are required by the BTOP grants.

Our engineering firm will be creating construction bid documents based on a contracted, "easement-free" design, that only builds on city-owned right-of-way. Then we will have several alternates in those bid documents that can be activated if we are able to negotiate the private easements. From the perspective of public safety and economic development, the full design that requires the private easements is a preferable design, but if the acquisition of easements can not be completed in the time available, we will be forced to build the less desirable design.

Lesson # 2: Communicate early and often and then again. We have a diverse group of people working toward the same goals on this project. Given the differing backgrounds, levels of understanding, experience, time, etc, it's a challenge to maintain an open, relevant dialog. UC2B is comprised of a major research University, and two cities that formed the Urbana-Champaign Big Broadband (UC2B) intergovernmental consortium. The University and the cities appointed the members of the UC2B Policy Board to represent their interests on the project. The Policy Board members appointed the members of the UC2B Technical Committee to advise them on technical issues.

At any one time it is fair to say that not every Policy Board member nor every Technical Committee member fully understands every detail of the project. These are volunteer positions and often the people appointed to fill them already had over-subscribed professional and personal lives before they became involved with UC2B. There need to be recurring regular communications with these committee members to keep them on the same page.

This is further complicated by the fact that there are elected and appointed officials in both cities as well as University administrators who also want to be in the loop. This project would benefit from someone working full-time just to keep all of these stakeholders informed, because out of necessity this project is moving at the speed of light (no pun intended), while cities and universities are more accustomed to and more comfortable with a more considered pace. Keeping stakeholders informed is made more complicated by the Illinois Open Meetings Act, which pretty much outlaws discussions between UC2B committee members outside of pubic meetings.

If there is a silver bullet for communications, we have not found it yet. The staff managing the grant is typically so busy with the day-to-day activities and planning that must be done to remain on schedule that there is little time or energy left over to tell people what they are doing. We did not budget for a "communications officer", but if there ever is a BTOP2 opportunity, that would be money well spent for any project.

We do have a marketing and outreach subcommittee and they are doing a good job of planning for communications with the community about the value of Big Broadband and why families and business should subscribe, but probably nothing short of hiring someone whose primary responsibility is to communicate to our administrative stakeholders for the next two years will provide the level

of information within the time frames that are desired. In the meanwhile those of us managing the grant must tell our story early and often and not worry about repeating ourselves.