

RECIPIENT NAME:University of Wisconsin System

AWARD NUMBER: NT10BIX5570115

DATE: 03/17/2014

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 6/30/2015

ANNUAL 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 NT10BIX5570115	3. DUNS Number 080490584
4. Recipient Organization University of Wisconsin System 432 N Lake St, Room 104 , Madison, WI 53706		
5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2013	6. Is this the last Annual Report of the Award Period? <input checked="" type="radio"/> Yes <input type="radio"/> 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 Mark Dorn UW Extension/Controller	7c. Telephone (area code, number and extension) 6082625975	7d. Email Address mark.dorn@uwex.edu
7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 03-17-2014	

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)	50,220	Average cost in Baseline Plan was 52,916.
Average cost per household passed (Last Mile)	142	Average cost in Baseline Plan was 167.
Average cost per subscriber (Last Mile)	31,232	Average cost in Baseline Plan was 941. The Baseline Plan assumed 331 residential and 220 business subscribers over a two year growth period. However, actual services were limited to 14 residential subscribers since services did not become available until the last quarter of the project.
Maximum broadband speed advertised (Middle Mile)	40Gb	Baseline Plan was 10Gb. Actual connections for Community Anchor Institutions included one subscriber at 40Gb, 2 subscribers at 20Gb and 12 subscribers at 10Gb. New technology and demands exceeded expectations set three years prior.
Maximum broadband speed advertised (Last Mile)	20Mb	Baseline Plan was 10,000 Mb. Of the 14 actual subscribers connected, eight of them are at 20 Mb. The variance is due to a new understanding of this category since initial application: the baseline value falsely included wholesale backbone circuit sizes. Those wholesale links are excluded in this calculation, leaving just business and residences in last mile service areas.
Average broadband speed provided (Middle Mile)	1874Mb	The baseline plan was 513 Mb. Most new connections are 1Gb. The speeds range from 10 Mb to 40Gb. We calculated the average of all 172 Community Anchor Institutions currently receiving services. The variance is due to more users with high speed connections (10Gb, 20Gb and 40Gb) than initially anticipated.
Average broadband speed provided (Last Mile)	17Mb	Of the 14 actual subscribers connected, eight of them are at 20 Mb, three are at 15Mb and three are at 10Mb. The variance from baseline is due to a new understanding of this category since initial application: the baseline value incorrectly included wholesale backbone circuit sizes. Those wholesale links are excluded here, leaving just business and residences in last mile service areas.

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
See addendum	See addendum	See addendum	See addendum

Add Facility

Remove Facility

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)

1. No interconnection agreements were signed this year.
 2. No negotiations are currently underway.
 3. No interconnection agreements were denied this year.

Peering and Transit Agreements (600 words or less)

No activity has occurred regarding peering and transit agreements this year.

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)	32	Public Housing	2
Libraries	5	Other Institutions of Higher Education	11
Medical and Healthcare Providers	26	Other Community Support Organizations	16
Public Safety Entities	20	Other Government Facilities	50
Community Colleges	10	Total Community Anchor Institutions	172

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).

The average broadband speed for 20 UPGRADED connections increased from 734Mb to 4,300 Mb - institutions previously had 20-2,000Mb connections that increased to 1,000 - 20,000Mb. The increase was calculated for each individual site and then averaged together.

The average broadband speed for 152 NEW connections increased from 0 speed to 1.17Gb - institutions considered "new" are institutions never before served by sub recipient. The new connections are typically 1 or 2Gb, with five at 10Gb and one at 40Gb. The increase was calculated for each site and averaged together.

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:

Our last mile service provider is offering High-Speed Internet access delivered via cable modem and fiber architecture to residential customers with speed range from 10-20Mb and price range of \$36.95 - \$56.95 per month. Business customers offerings include high - Speed Cable Modems with a low speed of 10Mb at \$89.95 per month to highest Point-to-Point speed of 1,000 Mb for \$2,450 per month.

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)?

Services provided by this project predominantly include simple, large bandwidth connectivity over fiber and using Ethernet equipment owned and operated by the connected institutions. Expected service rates will be limited only by hardware capacity. All traffic will be allowed to each institution which has the right to filter, limit, or block as needed for that institution.

No rate limits, content filtering, or connectivity restrictions will be applied by UW-Extension or other outside party. All policies will allow open access, interconnection and promote nondiscrimination. UW-Extension network management policies are available on our Web site:<http://broadband.uwex.edu>.

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).

NA

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

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54,792	11,002	0	43,790	0	0	0
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10. If you wholesale dark fiber, please list your wholesale customers and the number of fiber miles you currently are leasing to those customers:
As sub recipient, Packerland Broadband has access to dark fiber and will provide wholesale services to third party providers. Currently they are leasing 409 miles of fiber to one provider and 331 miles to another provider.

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).
We are building no new collocation space with grant funds. Existing facilities will be used for interconnection, typically utilizing existing racks in data centers located at technical college and university where other network providers and/or customers may install equipment. We do not anticipate the need for providing actual floor space for customer or provider owned racks. Additional interconnect at a basic fiber-splice level will be available in buried communications vaults throughout the network footprint.

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).
0 - none of our subcontractors are small businesses.

14. Please describe any best practices/lessons learned that can be shared with other similar BTOP projects (900 words or less).
It is advisable to include environmental experts early and throughout all phases of project construction. If these experts are not available in-house, find qualified consultants to ensure compliance with all requirements. There are more agencies involved than might initially seem likely and the requirements are often more stringent for federally-funded projects than might otherwise be the case in privately-funded projects. It may take multiple experts to cover all requirements, such as those experienced in archeological, historical, wetlands and waterways, and threatened and endangered species.

Another best practice and lesson learned is the value of our key partnerships. Our project was created through collaboration with many entities that had similar missions and clearly shared the goals of the endeavor. The partnership built off the strengths of each individual organization, bringing together the technical, construction experience and community engagement skill sets needed for completion. Given the scope and complexities inherent in this project, the partnership has proven to be invaluable. Our partners have been engaged, informed and remained steadfast in making the numerous adjustments required to complete the project successfully.

15. Using the Excel spreadsheet template titled "Annual PPR CCI Addendum", please provide an updated list of Community Anchor Institutions (CAIs) that you have connected and plan to connect to your network.

16. Using the Excel spreadsheet template titled "Annual PPR CCI Addendum", please provide a list of community pairs that are receiving new or improved broadband service as a result of BTOP grant funds.

17. Please provide up-to-date network route maps in a single file, in a Google Earth compatible format (e.g., KMZ file).