

RECIPIENT NAME:Executive Office State of West Virginia

AWARD NUMBER: NT10BIX5570031

DATE: 07/07/2014

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 NT10BIX5570031 | 3. DUNS Number 809594377 |
| 4. Recipient Organization Executive Office State of West Virginia 1900 Kanawha Blvd East, Charleston, WV 25305-0009 | | |
| 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 Jimmy Gianato | 7c. Telephone (area code, number and extension) 3045585380 | |
| | 7d. Email Address jimmy.j.gianato@wv.gov | |
| 7b. Signature of Certifying Official Submitted Electronically | 7e. Date Report Submitted (MM/DD/YYYY): 07-07-2014 | |

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) | \$57,881/\$62,338 | There are 2 calculations for cost per mile. If we remove all FBO and Legal/Audit fees, the cost for building 675 miles of fiber equated to \$57,881 per mile. If we include those "non construction" components that include customer premise FBO work, along with Legal and Audit fees, the cost per mile equated to \$62,338. Federal regulations dictating Davis-Bacon wages added \$7.5 million to the overall cost. Below is a breakdown of our analysis. Restated Totals 1. Remove FBO, Audit & Legal BTOP Invoiced Cost \$42,078,450 FBO \$2,435,316 Audit & Legal \$573,371 X - FBO & Audit \$39,069,763 Miles 675 \$/Mile \$57,881.13 |
| Average cost per household passed (Last Mile) | N/A | N/A |
| Average cost per subscriber (Last Mile) | N/A | N/A |
| Maximum broadband speed advertised (Middle Mile) | 10Gig | The link connecting NRAO/WVU will be provisioned and capable of providing speeds up to 10 Gigabits per second to meet the demands of data transfer between those 2 facilities. |
| Maximum broadband speed advertised (Last Mile) | N/A | N/A |
| Average broadband speed provided (Middle Mile) | 100Meg | Frontier has provisioned and installed over 300 Metro-E circuits for BTOP CAIs since the inception of the BTOP program. The average rate of those circuits is approximately 100 Megabits per second. |
| Average broadband speed provided (Last Mile) | N/A | N/A |

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 |
|----------------------------|---------------|----------|---------------|
| ADDENDUM | ADDENDUM | ADDENDUM | 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)

Frontier has been contacted by seven carriers seeking information on BTOP facilities, and has entered into detailed negotiations with one carrier. However, there are currently no finalized, signed interconnection agreements.

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) | 718 | Public Housing | 0 |
| Libraries | 176 | Other Institutions of Higher Education | 19 |
| Medical and Healthcare Providers | 392 | Other Community Support Organizations | 20 |
| Public Safety Entities | 863 | Other Government Facilities | 1 |
| Community Colleges | 17 | Total Community Anchor Institutions | 2,206 |

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).

Copper facilities have been at the heart of telecommunications for many years. It's a testament to the ingenuity of telco engineers that its data capacity has been pushed to DSL2 speeds up to 45 Mbps on an average, but copper is rapidly reaching its maximum potential. But where copper stops, fiber starts. Fiber gives you a "truer bandwidth" connection. If you buy a 10Mbit/s EPL connection, for example, 10Mbit/s is exactly what you'll get, 24/7. It doesn't matter how far away from the exchange you are, or how busy the network becomes - you'll be getting a reliable approximate 10Mbit/s in both directions. Based on upgrading data communication lines with fiber as part of our BTOP initiative, we can now achieve data speeds of 100 Megabit Ethernet, Gigabit Ethernet, and even 10 Gigabit Ethernet if required.

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:

This WV BTOP grant does not provide any retail services. The fiber is placed at the Community Anchor Institute with termination points and interconnect points established for the customer to order services from multiple potential vendors. The BTOP fiber is classified as "dark fiber". It is up to the individual CAI location as to the service provider they wish to use, as well as the type of service they wish to order. As stated above, over 300 CAIs have upgraded to MetroE services since the inception of this project.

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)?

7A. There are no bandwidth limitations with this project. As for traffic priority, standard Class of Service (CoS) and Quality of Service (QoS) policies are applied.

7b. N/A

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).

This project does not provide broadband services. However, as stated above, over 300 CAIs have upgraded to MetroE services since the inception of this project.

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 |
| | | | | | | |

| | | | | | | |
|--------|--------|---|--------|--------|---|--------|
| 95,225 | 38,090 | 0 | 57,135 | 38,090 | 0 | 57,135 |
|--------|--------|---|--------|--------|---|--------|

10. If you wholesale dark fiber, please list your wholesale customers and the number of fiber miles you currently are leasing to those customers:
Dark fiber is available to other carriers at wholesale rates. However, as stated above, there are currently no finalized, signed interconnection agreements.

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).
Frontier Communications does own collocation space. Potential providers can apply for collocation space at the respective Central Office as well connect directly into the BTOP fiber at the existing A to Z locations as defined in the Interconnection Agreement.

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 two sub grants. One is with Frontier Communications, the other is with Lewis County Commission.

14. Please describe any best practices/lessons learned that can be shared with other similar BTOP projects (900 words or less).
Best practices for this grant remain as stated last year, which is noted below.

Key learnings for this project have come from the needs of public communication. When dealing with public entities such as K12 and others it has been determined that it is best to provide weekly status reports and long term schedules for fiber roll out. With the development of consistent weekly reporting much of the publics desire for status updates has been satisfied. Additional communication (Monthly Meetings) with CAI points of contact has been a best practice allowing all key questions to be addressed in a group forum and allow CAIs to feel connected to the project and lets them know they are a priority.

In retrospect, it would be a positive for all similar grants to begin "outreach" programs at receipt of grant funding. After grant award, the "outreach" should be on-going. A proactive program would serve to minimize many misunderstandings associated with grant actions.

We utilized a Point of Contact (POC) approach to disseminate information to the end user. It would have been better had we had more direct approach at the user level at intervals, but maintaining the overall POC approach.

The magnitude of the grant, including total funding, differences of major efforts contained within the grant, and varying entities associated would have been better served had we utilized at all levels a single data-base.

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).