

RECIPIENT NAME: Information Technology, Maryland Department of

AWARD NUMBER: NT10BIX5570135

DATE: 03/11/2013

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 12/31/2013

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 NT10BIX5570135	3. DUNS Number 961890741
4. Recipient Organization Information Technology, Maryland Department of 45 Calvert Street, Annapolis, MD 21401-1994		
5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2012	6. Is this the last Annual Report of the Award Period? <input type="radio"/> Yes <input checked="" 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 Gregory Urban Deputy State CIO	7c. Telephone (area code, number and extension) 4102607279	
	7d. Email Address gregory.urban@doit.state.md.us	
7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 03-11-2013	

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)	\$76,629	Our baseline is \$72,181. The ICBN sub recipient has averaged \$79,372 per mile. The DOIT portion of the project, which averaged \$72,559. We are confident that our trend will keep us well within budget, since most of the remaining work is aerial construction, which is less costly than our underground construction cost.
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)	40Gbps	40Gbps is the maximum advertised broadband speed.
Maximum broadband speed advertised (Last Mile)	0	N/A
Average broadband speed provided (Middle Mile)	1Gbps	1Gbps is the average broadband speed for middle mile. We offer the following speed tiers 10Mgpps, 100Mgpps, 1Gbps, 10Gbps and 40Gbps.
Average broadband speed provided (Last Mile)	0	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
Keyser's Ridge SHA 3876 National Pike Accident, MD 21520	Hut	Garrett	240230001002022
Hagerstown SHA 18320 Col. Henry K. Douglas Dr. Hagerstown, MD 21740	Hut	Washington	240430109001003
Frederick SHA 5111 Buckeystown Pike Frederick, MD 21704	Hut	Frederick	240217510031040
Civista MC 5 Garrett Ave La Plata, MD 20646	Hut	Charles	240178510025018
Leonardtwn SHA 27345 Point Lookout Road Leonardtown, MD 20650	Hut	St Mary's	240378755001016
Prince Frederick SHA 60 Hallowing Point Road Prince Frederick, MD 20678	Hut	Prince Frederick	240098607031000
Indian Head Science & Tech Park 6565 Hungerford Road Bryans Road, MD 20616	Hut	Charles	240178501021038
County Administrative Building 200 Chesapeake Blvd Elkton, MD 2192	Hut	Cecil	240150305052004
Lanham SHA 4700 Cobb Road Lanham, MD 20706	Hut	Prince George's	240338036022000
County IT Building 379 Francis Sanders Drive West Oakland, MD 21550	Hut	Garrett	240230007002154
County Administrative Building 925 Kelly Road Cumberland, MD 21502	Hut	Allegany	240010012002005

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HEAT Center 1201 Technology Drive Aberdeen, MD 21001	Hut	Harford	240253022002059
Hudson St Tower Location 16 Hudson Street Annapolis, MD 21401	Hut	Anne Arundel	240037066005000
Substation on Route 425 (Near inter. RT 425/RT 6) Nanjemoy, MD 20662	Hut	Charles	240178504003016
Hancock I-68 and Main Street Hancock, MD 21750	Hut	Washington	240078522010700
Chestertown 314 Washington Avenue Chestertown, MD 21620	Hut	Kent	240299503002041
Level 3 Gateway 1755 Meadowbrook McLean, VA 22101	Hut	Fairfax	240030109470600
Baltimore 111 Market Street Baltimore, MD 21202	Hut	Baltimore City	245100401001101

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) 8
- 2) We currently are negotiating 42 agreement with broadband wholesalers.
- 3) No request for interconnection has been denied.

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)	499	Public Housing	0
Libraries	54	Other Institutions of Higher Education	8
Medical and Healthcare Providers	4	Other Community Support Organizations	41
Public Safety Entities	263	Other Government Facilities	176
Community Colleges	25	Total Community Anchor Institutions	1,070

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 increase in broadband speed to CAIs as a result of the OMBN project is approximately 1 Gbps, or 1,000 Mbps. Nearly all CAIs encompassed by this project had, or still have, very limited broadband connectivity; typical connections prior to upgrade through the OMBN project were T1 circuits providing dedicated 1.5 Mbps. All new and planned CAI connections range from dedicated, symmetrical speeds of 100Mbps to 1 Gbps. One CAI was increased from 1.5Mbps to 100 Mbps, or 98.5Mbps increase. All the other CAIs were increased from 1.5Mbps to 1Gbps, or a 998.5Mbps increase. The overall average increase in broadband speed for OMBN is calculated at 996.9Mbps.

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:

Not providing retail services.

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. In the context of open access interconnection and non-discriminatory network management, the OMBN project is comprised of two primary components.

DOIT / MdBC – The Maryland Broadband cooperative is providing the open access requirement for the DOIT portion of the project. The MdBC is being granted 96 fibers through an IRU with DOIT. These fibers will be available along all backbone route miles constructed as part of the DOIT portion of the grant Program. MdBC does not provide active “managed” network transport services to commercial providers, and as such will not be capable of imposing bandwidth limitations (beyond the leased amount), prioritizing traffic, or otherwise controlling network traffic carried over leased fiber strands.”

ICBN – The subgrant award to ICBN is based on the provision of a minimum of 24-fiber strands for open access lease to qualified commercial providers on a non-discriminatory basis. These fibers will be available along all route miles constructed as part of the ICBN portion of the grant Program. Currently ICBN consortium members are not planning to provide active “managed” network transport services to commercial providers, and as such will not be capable of imposing bandwidth limitations, prioritizing traffic, or otherwise controlling network traffic carried over leased fiber strands.”

7b. No

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).

0-percent

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
244,024	3,828	1,466	0	100,596	55,413	82,721

10. If you wholesale dark fiber, please list your wholesale customers and the number of fiber miles you currently are leasing to those customers:

0

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
5,860	3,400	330	2,130

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).

Where One Maryland Broadband Network does not have collocation access, network providers and/or customer can access dark fiber infrastructure at outdoor fiber optic splice enclosures, which occur regularly throughout the outside fiber optic plant infrastructure.

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).

The Canton Group is an IT services company and is providing resources for grant financial administration, project management, and construction quality assurance. The Canton Group is an existing subcontractor for the Maryland Department of IT (DOIT), and has been subcontracted work by the prime contractor to DOIT to comply with State MBE goals.

IPX International system Inc. is the warehousing vendor for ICBN.

Baytek is an engineering subcontractor for DoIT

Mack Communication is an engineering subcontractor for both ICBN & DoIT

CTC is an engineering subcontractor for ICBN

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

For other BTOP projects, particularly those involving multiple government recipients and sub recipients over a large geographic area, we offer the following best practices:

- 1) Closely coordinate with your Federal Program Officer on all challenges.
- 2) Take advantage and attend all BTOP/NTIA drop-in calls and conferences, ensure that BTOP updates are shared with the compliance team ensuring compliance cohesiveness.
- 3) Reach out early to permitting authorities to creating awareness of the scale, scope and timing of project. Solicit permitting authority needs, and coordinate application submission logistics. This includes Right of Way owners, utilities pole owners and utility locators.
- 4) Mitigate some of the risk by the centralizing accounting and reporting functions thereby leveraging economies of scale for expert resources required and minimizing the risk of errors.
- 5) Meet with all stakeholders early to establish recurring touch points to leverage their support with permitting regulatory issues, and ensure a proper understanding of financial requirements and eligible uses of Federal funds.

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).