

RECIPIENT NAME:De Kalb, County of (Inc.)

AWARD NUMBER: NT10BIX5570030

DATE: 12/16/2013

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 6/30/2015

## ANNUAL PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

### General Information

<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b> Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b> NT10BIX5570030	<b>3. DUNS Number</b> 029980307
<b>4. Recipient Organization</b>  De Kalb, County of (Inc.) 200 N. Main Street, Ste. 120, Sycamore, IL 60178-1431		
<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  12-31-2013	<b>6. Is this the last Annual Report of the Award Period?</b>  <input checked="" type="radio"/> Yes <input type="radio"/> No	
<b>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.</b>		
<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Ed Harvey	<b>7c. Telephone (area code, number and extension)</b>  8158957125	
	<b>7d. Email Address</b>  eharvey@dekalbcounty.org	
<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  12-16-2013	

**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)	\$90,077	597,196 feet of new construction completed as of end of 2013 at a cost of \$10,201,061. This is the same cost provided in our application and baseline report.
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)	10Gbps	Available within networks, rings and dark fiber.
Maximum broadband speed advertised (Last Mile)	0	N/A
Average broadband speed provided (Middle Mile)	897Mbps	Of 78 total connections, 64 are lit, 3 are connected via dark fiber and 11 did not elect service as of this time. Of the 64 lit connections, 57 are at 1Gb, 1 is at 100 Mbps and 6 are at 50 Mbps. $([57*1000] + [6*50] + [1*100])/64=897Mbps$ .
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
N/A	N/A	N/A	N/A

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. Three entered into during 2013. 2. None are currently being negotiated 3. We have not denied any interconnection requests.

**Peering and Transit Agreements (600 words or less)**

No peering agreements entered into during 2013.  
 Transit Agreements: 1. One entered into during 2013. 2. None in current negotiations. 3. We have not denied any interconnection agreements.

**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)	38	Public Housing	1
Libraries	13	Other Institutions of Higher Education	4
Medical and Healthcare Providers	8	Other Community Support Organizations	1
Public Safety Entities	7	Other Government Facilities	24
Community Colleges	1	Total Community Anchor Institutions	97

**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 speed increase for the lit connections is 843Mbps. This was calculated by obtaining the pre-project broadband speeds for each Community Anchor Institution and subtracting that speed from the new, post-project connection speed. The result was totaled and averaged. New connections and dark fiber connections were omitted from the calculations.

**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:**

None

**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)?**

a) Network policies are based on port speed system with use protocols PPB-TE and IEEE 802.1Q with IP for prioritizing network traffic. The DeKalb County Network is a layer 2 designed network providing for Metro Ethernet connectivity. Three classes of priorities have been defined in the network based on off-ELAN classes of traffic. The three levels of traffic are 1) E-911 Services, 2) ISP Services and 3) Cloud (intranet) Traffic. The highest level of priority is given to the E-911 services with the next level to ISP services and the lowest to the intranet cloud traffic. The system is open to all lawful content and types of traffic.  
b) We have not 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.

**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).**

None

**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
18,132	1,574	8,354	8,204	0	0	0

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

DeKalb Fiber Optics, LLC is being provided, via IRU, with 68 strands of fiber throughout the newly constructed network for economic development purposes. This amounts to 8,354 of the strand miles built by the project. This number is less than we reported last year. When we audited the entire build in preparing the 2013 annual report we discovered we erroneously counted fiber in pin point duct for service lateral as 144 fibers when, in fact, only 12 fibers were installed in pin point for the most part and none of the fibers in the pin

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point has been allocated to DeKalb Fiber Optic, LLC for economic development. This adjustment also lowered the Total Strand-mile metric as compared to last year.

Of the 68 fibers allocated to DFO:

- 2 strands has been subleased across the majority of the network to a carrier providing LTE upgrades in fiber-to-the-cell resulting in expanded mobile broadband access.
- a number of financial institutions, especially in rural areas of the county, have leased fiber to provide increased connectivity to existing and new facilities.
- broadband services to agricultural businesses throughout the region is being rolled out by DFO and its providers. Speeds are in excess of 300 Mbps.
- broadband services to residential areas, especially in rural areas of the county, is being improved as DFO has provided increased connectivity to cable tv providers.

**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).**

The project has access to collocation rack space in four telephone central offices and has a presence in Northern Illinois University Network Operations Center and at Northern Illinois University Central Telephone Office. In addition, interconnection can be provided at any of the 291 hand holes through which owed and leased fiber passes. The project also has interconnection agreements with the Northwest Illinois BTOP project (iFiber) for two additional interconnection points, extending interconnection potential for the DATA project to network providers and/or customers at locations throughout the six northwest Illinois counties as well as the DeKalb County area.

**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).**

None by the recipient. Sub-awards have been made by the Contractor, DeKalb Fiber Optics, to two Women's Business Enterprises: 1) B and C Distribution dba R-BOC Representatives and 2) KGP Communications, Inc.

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

The County engaged an independent engineer to verify all footages billed by the contractor for the project and to confirm the placement of all hand holes.

The project used duct containing multiple sub-ducts, allowing for additional cable to be installed in the future if needed with minimal ground disturbance.

**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).**