

**QUARTERLY 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
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**4. Recipient Organization**

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>  09-30-2013	<b>6. Is this the last Report of the Award Period?</b>  <input type="radio"/> Yes <input checked="" type="radio"/> No
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**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>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>  11-14-2013
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**Project Indicators (This Quarter)**

**1. Please describe significant project accomplishments completed during this quarter (600 words or less).**

All approved build was completed in 2013-Q3 including prospective and retroactive route changes. Total network as of the end of Q3-13 (and project total) is 143.67 miles. Northern Illinois University Broadband Development Group completed engineering for Community Anchor Institutions that were connected to the network in the last quarter of the project. The seven remaining Community Anchors were connected in 2013-Q3 making 78 total for the project. All school districts in DeKalb County are connected to the network as well as one school district in LaSalle County and one school in Kane County. All backbone equipment was lit previously. The community anchors now have broadband speeds available at up to 1Gbps which, prior to the project, was not available to those community anchors located outside the DeKalb-Sycamore area. In addition, anchors are experiencing lower broadband costs because of increased competition brought about by availability of fiber connections to their individual locations and multiple providers on the DATA network. DeKalb County has contracted with five providers on the network, bringing increased competition and services to all anchors. Three of these last mile provider agreements were finalized in the last quarter of the award. Employed 0.78 full time equivalent individuals in the construction and administration of the project. At peak construction on the project, as many as 30 individuals were employed for construction, engineering, and administrative services. As the system is operated, individuals are employed for locating and maintenance, engineering, network operations, new connections and administration of the network. The project is a significant economic development asset for the county. Already 12 business, 3 cell phone carriers and one cable provider have connected to the system at speeds not formerly available in their locations. The county continues to market the network. The network map is being added to the county's GISWeb application which will make the details of the network available to everyone via the county's website. The DeKalb County Economic Development Corporation (DCEDC) aggressively promotes the county's fiber assets to prospective businesses through its presentations and meetings. With more than 400 potential interconnection points, additional connections are facilitated in all areas of the county. The county has designed the system to be financially self-sustaining with user fees paying for all operational and equipment replacement costs. The reliability of the system is supported by network operations center services provided by Northern Illinois University Network Operations Center that continually monitors the network for proper performance and also provides help desk services to the users. In addition, DeKalb Fiber Optics LLC provides locating, maintenance and relocation services for the network. The project worked closely with the county Emergency Services Telephone Board (E-911) to provide fiber backhaul connections to eleven tower and radio broadcast sites throughout the county, benefitting all emergency service providers. These fiber links provide better reliability at a lower cost compared to the copper backhaul links that were replaced. The project also linked the 911 dispatch centers in DeKalb County with the county public safety building. An interconnection with Lee County will facilitate disaster preparedness and enhanced E-911. The project is co-located at four telephone offices throughout the county, These co-locations provide DATA customers with access to providers on a regional level. These sites are also the locations for much of the backbone operation equipment, providing a high level of security, increased redundancy and motor generator backup. Finally, the project worked closely with the Northern Illinois University BTOP project (iFiber). Some of the benefits of this relationship are marketing of dark fiber routes through both projects and creation of a 10Gb redundant ring circling both projects.

**2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).**

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2a.	Overall Project	100	Baseline predicted 100% at this point. The project was behind schedule early due to problems getting the indefeasible right to use agreement and locating, maintenance and repair agreements with DeKalb Fiber Optic, LLC in place. Since January, 2011, project has been moving well showing completion percentages of 20, 29, 47, 62, 70, 75, 83, 92, 93 and 94% for the previous nine quarters. The network is 100% complete. The equipment purchase from the Northern Illinois University project was completed in 2013-Q3. When funds are withdrawn during the closeout period, project will finish with at 98% of authorized budget.
2b.	Environmental Assessment	100	Completed for original project scope and for additional route changes.
2c.	Network Design	100	Previously completed within budget.
2d.	Rights of Way	100	Baseline predicted 100% at this point. The project was behind schedule early due to problems getting the indefeasible right to use and the locating, maintenance and repair agreements with DeKalb Fiber Optics, LLC in place. All rights-of-way and municipal utility agreement issues needed for the project have been received. All in-kind duct and fiber provided by DeKalb Fiber Optics has been received.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2e.	Construction Permits and Other Approvals	100	Baseline predicted 100% at this point. The project was behind schedule early due to problems getting the infeasible right to use and the locating, maintenance and repair agreements with DeKalb Fiber Optics, LLC in place.
2f.	Site Preparation	0	N/A
2g.	Equipment Procurement	100	Baseline predicted 100%. The project was behind schedule early due to problems getting the infeasible right to use and the locating, maintenance and repair agreements in place with DeKalb Fiber Optics, LLC. All community anchor premise equipment has been received and paid. Backbone equipment, fiber back haul equipment, wireless access points and fire walls for libraries have been received and paid. 10Gig "ring" modules have been received and paid. The purchase of redundant ring equipment was completed in 2013-Q3 but funds will not be withdrawn until 2013-Q4. When funds for this purchase are withdrawn, equipment procurement will be complete.
2h.	Network Build (all components - owned, leased, IRU, etc)	100	Baseline predicted 100%. The project was behind schedule early due to problems getting the infeasible right to use and the locating, maintenance and repair agreements in place with DeKalb Fiber Optics, LLC. All leased fiber is 100 complete. All components of the network are complete.
2i.	Equipment Deployment	100	Baseline predicted 100%. The project was behind schedule early due to problems getting the infeasible right to use and the locating, maintenance and repair agreements in place with DeKalb Fiber Optics, LLC. Community anchor equipment deployment for locations authorized by the prospective route changes is now complete. Backbone equipment deployment is complete. Fiber back haul equipment deployment is complete
2j.	Network Testing	100	Baseline predicted 100%.The project was behind schedule early due to problems getting the infeasible right to use and the locating, maintenance and repair agreements in place with DeKalb Fiber Optics, LLC. Testing is complete for the network.
2k.	Other (please specify):	0	N/A

3. To the extent not covered above, please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).  
None

4. Please report the following information regarding network build progress. Write "0" in the Total column and "N/A" in the Narrative column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	132	Baseline predicted 130. The project was behind schedule early due to problems getting the infeasible right to use and the locating, maintenance and repair agreements in place with DeKalb Fiber Optics, LLC. Approved network was completed in December, 2012 (thirteen additional months from baseline).
New network miles leased	12	Acquired 12 strands over 12 miles from Northern Illinois University. Completes leased fiber in project.

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Existing network miles upgraded	0	N/A
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	132	Total for the project. Increase from previous quarter reflects additional build in Q3-13 and adjustment made due to correction to reflect final audited network constructed.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	428	Baseline predicted 366 total interconnection points. Total reported here is total for the project. Differences from baseline projection resulted from some network build removed from project (Knolls, agricultural businesses, etc.), which decreased the total and additional interconnection points not anticipated in baseline such as additional contributed duct and fiber by DeKalb Fiber Optics LLC and the interconnection points acquired with the lease of 12 miles of fiber from Northern Illinois University. .

For questions 5 and 6 please include information relating to agreements that you are negotiating or have entered into, or that your sub recipient, contractor or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

Indicators	
Number of signed agreements with broadband wholesalers or last mile providers	5
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	0
Average term of signed agreements (in quarters)	17

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: DeKalb County has an agreement in place with DeKalb Fiber Optics for the construction, operation and economic expansion of the system. DeKalb Fiber Optics has one signed agreement with TBC Net. Recipient is not a party to this agreement. DeKalb County has agreements with Syndeo Networks, Inc., Illini Cloud, LLC, State of Illinois Department of Central Management Services (ICN) and Northern Illinois University (NIUNet) to provide last mile services on the network.

5c. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your product (100 words or less). Wholesale services description:

Provided by DeKalb Fiber Optics to Commercial Customers:

- 100 Mb VLAN: \$300/ month
- 1 Gb VLAN: \$600/ month
- Wholesale Bandwidth: \$20/ Mb/ Month
- Consumer Access: \$90/ Month for best effort up to 1Gbps (averaging 300 Mbps).
- Dark Fiber: \$750/ strand/ mile/ year

Provided by DeKalb County to Community Anchors:

- Full participant: Dark Fiber, 1Gb transport to Illinois Century Network: \$7,000/ location/ year
- Subscriber Services: Transport to ISP: 100 Mb: \$2,800/ year; 50 Mb (shared): \$1,050/ year

5d. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a sub recipient, contractor, and/or subcontractor, and describe with specificity the portion of your network this this third party operates (600 words or less).

Fiber Physical Layer: DeKalb Fiber Optics, LLC, vendor, Dan Halverson, (dan@admin.tbc.net). DeKalb Fiber Optics is operating 68 fibers for economic development as well as providing locating, maintenance and repair functions for all 144 fibers being constructed. Electronics, network operations and community anchor engineering: Northern Illinois University, vendor, Herb Kuryliw, hkuryliw@niu.edu.

6. Please provide the data according to the type of subscriber. Write "0" in the Total column and "N/A" in the Narrative column if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (300 words or less).

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
<b>Broadband Wholesalers or Last Mile Providers</b>	Providers with signed agreements receiving new access	0	None; No providers receiving new access are anticipated.
	Providers with signed agreements receiving improved access	4	Syndeo Networks, Inc., IlliniCloud, NIUNet and Illinois Century Network.
	Providers with signed agreements receiving access to dark fiber	1	DeKalb Fiber Optics, LLC.
	Please identify the speed tiers that are available and the number of subscribers for each	5	All connections provided by DeKalb Fiber Optics, LLC are expected to be over a 1Gb interface. Syndeo Networks, Inc. is offering speeds of up to 100Gbps to the internet. ICN offers a variety of services including bandwidth up to 1000 Mbs, NIU Net offers bandwidth in tiers as small as 100Mbs pooled to 1 Gbs dedicated. IlliniCloud provides a variety of cloud services primarily to school districts.
<b>Community Anchor Institutions (including Government institutions)</b>	Total subscribers served	78	Baseline predicted 111; seven new connections in 2013-Q3. The actual number of community anchor institutions connected is less than the baseline for several reasons: 1) the baseline counted libraries in schools separately from the schools, 2) some facilities closed or relocated in the period from grant application to construction, 3) agricultural business connections were shifted from community anchors to being served by the fibers allocated to DeKalb Fiber Optics for economic development 4) 911 towers were removed from community anchor listing and 5) several locations were removed from the list of community anchors because the manner in which they were connected did not meet the NTIA connection definition.
	Subscribers receiving new access	3	Baseline predicted 70 with a predicted total of 111 CAI's. The approved number of CAI's was revised to 78. In the interim period after the grant metrics we submitted and the network was constructed, most of the CAI's for which "new" service was originally predicted were able to obtain broadband connections.
	Subscribers receiving improved access	75	Baseline predicted 41.
	Please identify the speed tiers that are available and the number or subscribers for each	78	51@ 1Gb; 6@50Mb; 2@100Mb; 5 dark fiber only and 14 are not subscribers at this time.
<b>Residential / Households</b>	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
<b>Businesses</b>	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A

**7. Please describe any special offerings you may provide (600 words or less).**  
Project is providing fiber backhaul for DeKalb County E-911 system and co-location in four telephone central offices.

**8a. Have your network management practices changed over the last quarter?**  Yes  No

**8b. If so, please describe the changes (300 words or less).**  
N/A

**9. Community Anchor Institutions:**  
Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported for the most recent reporting quarter only (NOT cumulatively). Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (300 words or less).

Institution Name	Service Area (town or county)	Type of Anchor Institution (as defined in your baseline)	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
Hinckley Public Library	Hinckley	Libraries	No	Connection to ISP and Library Cloud
Somonauk Public Library	Somonauk	Libraries	No	Connection to ISP and Library Cloud
Somonauk Village Hall	Somonauk	Other Government Facilities	No	Future ISP and Municipal Cloud
Earlville Library	Earlville	Libraries	No	Future ISP and Library Cloud
Northern Illinois University Broadcast Center	DeKalb	Other Institutions of Higher Learning	No	Dark Fiber to Wellness and Literacy Center
Flewellyn Library	Shabbona	Libraries	No	Future ISP and Library Cloud
DeKalb Library	DeKalb	Libraries	No	Connection to ISP, Library Cloud, NIU Library and DeKalb School District #428 Library

**Project Indicators (Next Quarter)**

**1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).**  
Withdraw funds for redundant ring equipment. Complete closeout documentation and withdraw funds to pay for their preparation.

**2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Planned Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the next reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).**

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2a.	Overall Project	100	Includes allowance for payment for redundant ring equipment, close out document preparation administrative and map preparation costs. Project will be complete with 2% of total budget remaining,
2b.	Environmental Assessment	100	Complete
2c.	Network Design	100	Complete
2d.	Rights of Way	100	Complete

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

AWARD NUMBER: NT10BIX5570030

DATE: 11/14/2013

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 6/30/2015

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2e.	Construction Permits and Other Approvals	100	Complete
2f.	Site Preparation	0	N/A
2g.	Equipment Procurement	100	Includes allowance to pay for redundant ring equipment in Q4-13.
2h.	Network Build (all components - owned, leased, IRU, etc.)	100	Complete
2i.	Equipment Deployment	100	Complete
2j.	Network Testing	100	Complete
2k.	Other (please specify):	0	N/A

3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).  
None.

**Infrastructure Budget Execution Details**

**Activity Based Expenditures (Infrastructure)**

1. Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter.

Budget for Entire Project				Actuals from Project Inception through End of Current Reporting Period			Anticipated Actuals from Project Inception through End of Next Reporting Period		
Cost Classification	Total Cost (plan)	Matching Funds (plan)	Federal Funds (plan)	Total Cost	Matching Funds	Federal Funds	Total Costs	Matching Funds	Federal Funds
a. Administrative and legal expenses	\$155,848	\$13,868	\$141,980	\$142,042	\$13,868	\$128,174	\$162,000	\$13,868	\$148,132
b. Land, structures, right-of-ways, appraisals, etc.	\$1,791,989	\$1,185,828	\$606,161	\$1,791,989	\$1,185,828	\$606,161	\$1,791,989	\$1,185,828	\$606,161
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$567,733	\$291,481	\$276,252	\$527,332	\$289,080	\$238,252	\$527,332	\$289,080	\$238,252
e. Other architectural and engineering fees	\$62,074	\$17,843	\$44,231	\$57,074	\$17,843	\$39,231	\$62,074	\$17,843	\$44,231
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$10,386,598	\$951,231	\$9,435,367	\$10,265,436	\$951,231	\$9,314,205	\$10,265,436	\$951,231	\$9,314,205
j. Equipment	\$1,865,962	\$505,789	\$1,360,173	\$1,187,992	\$447,277	\$740,715	\$1,652,992	\$447,277	\$1,205,715
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>l. SUBTOTAL (add a through k)</b>	\$14,830,204	\$2,966,040	\$11,864,164	\$13,971,865	\$2,905,127	\$11,066,738	\$14,461,823	\$2,905,127	\$11,556,696
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>n. TOTALS (sum of l and m)</b>	\$14,830,204	\$2,966,040	\$11,864,164	\$13,971,865	\$2,905,127	\$11,066,738	\$14,461,823	\$2,905,127	\$11,556,696

2. Program Income: Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period.

a. Application Budget Program Income: \$0	b. Program Income to Date: \$0
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