

QUARTERLY 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 NT10BIX5570045	3. DUNS Number 161202122
4. Recipient Organization University of Wisconsin System Research & Sponsored Programs 21 N. Park St., Ste. 6401, Madison, WI 53715-1218		
5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2012	6. Is this the last Report of the Award Period? <div style="text-align: center;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </div>	
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 Dawn-Marie M. Roberts	7c. Telephone (area code, number and extension) 6082620152	7d. Email Address droberts4@rsp.wisc.edu
7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 02-14-2013	

Project Indicators (This Quarter)

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

During the fourth quarter of 2012, UW completed conduit and fiber installations and splicing for 8 community anchor institution (CAI) in Phase 3 (Monona Drive service area) and 1 CAI in Phase 1 (East Washington Ave service area) resulting in a total of 89 CAI connections and 56 miles of fiber being completed and ready for production service.

We received approval on 10/22/12 and have completed 2 route changes; Watts Rd change in the Mineral Point Rd service area (phase 2) and Monona Drive (Phase 3) route change. In addition, we received approval to begin a phase 4 route change comprised of an additional 18.25 miles of fiber approved on 12/6/12 and have issued PO to Intercon Construction to furnish and install the fiber.

With the above work, MUFN has completed 5 of 6 service areas (East Washington Ave, Mineral Point Rd, Northport, Monona Drive and S. Park St) with a small amount of work remaining in the University Ave service area.

MUFN has also awarded a DC power system RFP agreement to Tabur Systems to provide Alpha Technologies, Inc power equipment for an optical system. We ordered, received and installed the equipment during the quarter. We also awarded an optical network RFP to TorreyPoint Group to provide ADVA optical hardware. We ordered, received and began hardware installation during period.

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	74	Did not receive/remit payment for several significant invoices (e.g. optical equipment, site prep, fiber database consulting) in late 4Q2012 as expected due to snowstorm, other late shipments and late completion of work just before or between holidays. Expect to meet baseline in January.
2b.	Environmental Assessment	100	All environmental assessment work is complete.
2c.	Network Design	100	All network design activities are complete.
2d.	Rights of Way	100	All right-of-way acquisition activities are complete.
2e.	Construction Permits and Other Approvals	100	All construction permits and other approval activities are complete.
2f.	Site Preparation	100	All site preparation activities are complete.
2g.	Equipment Procurement	100	All equipment procurement activities are complete.
2h.	Network Build (all components - owned, leased, IRU, etc)	86	MUFN Phase 4 route change approval in early Dec. resulted in 18.25 miles to build (late start). MUFN is behind our baseline due to a snowstorm delaying December construction and delays finalizing the MUFN Consortium Agreement. Will be close to or meet baseline (100%) in late January pending weather to complete phase 4.
2i.	Equipment Deployment	67	Two of two passive optical systems deployed; 7 of 12 active optical system nodes deployed. Received hardware 1 week later than planned (12/27/12) due to snowstorm 12/20-12/21 and Xmas Holiday (University closed 12/22-12/25). Will meet baseline by 1/16/13.
2j.	Network Testing	86	We will not catch up to baseline until January 2013 due to late start on phase 4 route change; resulting in more backbone testing.
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).

A significant snowstorm hit Wisconsin the week before Xmas resulting in 1 week delays in fiber construction (e.g. clearing snow, inactivity). MUFN received approval to proceed with phase 4 on 12/6/13. We submitted a phase 4 grant extension request on 12/20/13 and hope to receive approval in January to ensure we meet phase 4 plans. Fiber for phase 4 will be received approximately 1/14/13. Finally, we submitted a request to add a subrecipient (MUFN Consortium, Unincorporated Association). We hope this will be approved before the end of January so UW can allocate conduit, fiber and the optical network to the consortium before the end of the

grant period.

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	56	We are near our baseline but weather caused us to miss completing our planned activities. Due to dropping 5 sites and even adding in additional route change miles, we can not hit our baseline of 57.05 miles. Also, we received approval for MUFN Phase 4 in 4Q2012 and have a late start to completing this by 1/31/13.
New network miles leased	0	NTIA has determined that the segment associated with the UW Hospitals and Clinics lease will be counted as Existing Network Miles Upgraded once the agreement is signed and the grant-funded equipment is used to light the miles. No new miles will be leased.
Existing network miles upgraded	0	MUFN plans to light via grant-funded optical equipment in-kind fiber (5.75 miles) and leased fiber from WisDOT (20.25 miles) and UW Hospitals and Clinics (11 miles) in 1Q2013.
Existing network miles leased	0	NTIA has determined that the segment associated with the existing WisDOT lease will be counted as Existing Network Miles Upgraded once the grant-funded equipment is used to light the miles.
Number of miles of new fiber (aerial or underground)	56	MUFN will finish original plan in January 2013, completing MUFN phases 1-3 by 1/11/13. We will likely struggle to complete phase 4 by 1/31/13 due to a late start and delays obtaining fiber materials.
Number of new wireless links	0	N/A
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	99	We are under our planned 104 in 2Q2012 due to a delay in obtaining our EA FONSI which pushed the project back 1 yr. Also, we have 5 CAIs (also interconnect points) that were requested be dropped from the project due to budget cuts (dropping our interconnection points to 99).

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	2
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	6
Average term of signed agreements (in quarters)	50

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: SupraNet (formerly Citywide d/b/a Mad City Broadband), Wisconsin Independent Network (aka WINs)

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:

MUFN wholesale services offered by the project include point-to-point dark fiber and point-to-point wavelength services (where fiber

IRUs permit). See attached document (BTOP-MUFN-PricingPlan.pdf)

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 third party operates (600 words or less).

The City of Madison in collaboration with UW and SupraNet (formerly Citywide d/b/a Mad City Broadband) will operate the network together. UW and the City have formalized and finalized the relationships. SupraNet's contact information: 8000 Excelsior Drive, Madison, WI 53717, Bryan Chang 608-836-0282; UW-Madison's contact information: Pat Christian, 1210 W. Dayton St., Madison, WI 53706, 608-265-9699.

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)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	0	Optical network not completed yet but will be available for use by 1/16/13.
	Providers with signed agreements receiving improved access	0	Optical network not completed yet but will be available for use by 1/16/13.
	Providers with signed agreements receiving access to dark fiber	0	Two (2) commercial providers have not started using fiber (yet) but will in near future.
	Please identify the speed tiers that are available and the number of subscribers for each	0	Dark fiber; users can pick their own baseband speed/signaling type (i.e. ethernet) or light fiber via wave-division multiplexing
Community Anchor Institutions (including Government institutions)	Total subscribers served	89	Below 98 CAIs due to 5 dropped locations (at institution request due to facility closures); also not counting 2 CAIs per NTIA request; snowstorm and road construction issues delayed completion of 2 CAIs in 4Q2012 as expected. Will meet baseline in January 2013
	Subscribers receiving new access	12	Below 14 CAIs per NTIA request to not count 2 locations as CAIs
	Subscribers receiving improved access	77	Below 84 CAIs due to 5 dropped locations (at institution request due to facility closures); snowstorm and road construction issues in University Ave PFSA delayed completion of 2 CAIs in 4Q2012 as expected. Will meet baseline in January 2013
	Please identify the speed tiers that are available and the number of subscribers for each	0	MUFN is a dark fiber project - most subscribers lighting dark fiber at minimum 1Gbps if not 10Gbps.
Residential / Households	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
Businesses	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

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	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).
N/A

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
Madison City - Water #8	Monona Dr	Public Safety Entity	Yes	City of Madison is using this link for video surveillance of the facility, collection of SCATA data, voice-over-IP phone service in the facility and data access for technicians who are servicing equipment and need Internet access to perform their work
Dane County - Atwood Ave Shelter	Monona Dr	Other Community Support Org	Yes	Dane County will use a 1Gbps link for voice, video and data services (Internet, private network, monitoring of facility by sheriffs office)
Dane County - FenOak	Monona Dr	Other Gov Facility	Yes	Dane County will use a 1Gbps link for voice, video and data services (Internet, private network, monitoring of facility by sheriffs office)
DaneNet - United Way Bldg	Monona Dr	Other Community Support Org	No	United Way will use a 1Gbps link for voice, video and data services (Internet, private network, data linkage with community support agencies it funds)
Madison Metropolitan School District (MMSD) - Allis Elementary	Monona Dr	Schools (K-12)	Yes	Madison Metro SD elementary school will use 1Gbps link for voice, video and data services (Internet, private network, virtual curriculum (video) fieldtrips and more)
Madison Metropolitan School District (MMSD) - Lowell Elementary	Monona Dr	Schools (K-12)	Yes	Madison Metro SD elementary school will use 1Gbps link for voice, video and data services (Internet, private network, virtual curriculum (video) fieldtrips and more)
Monona Grove School District - High School	Monona Dr	Schools (K-12)	Yes	Monona Grove SD will use 1Gbps link for voice, video and data services (Internet, private network, virtual curriculum (video) fieldtrips, monitoring HVAC & other systems remotely for efficiency purposes)
State Lab of Hygiene - DATCP	Monona Dr	Medical and Healthcare Provider	Yes	The State Lab of Hygiene will use a 1Gbps link for data and video services (Internet, private line) including interconnecting to public health offices at county/large City level across State for epidemiology, training and information sharing)
UWHealth - East Towne Clinic	East Washington Ave	Medical and Healthcare Provider	Yes	UW-Health will utilize 1Gbps link for voice, video and data services (e.g. Internet, eHealth record systems)

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).
MUFN expects to: complete DC power and optical network installation; complete fiber construction to 3 remaining CAls (including one added in "Phase 4" route change request); complete Phase 4 route change of 18.25 miles; execute and "stand up" the MUFN

Consortium, Unincorporated Association; execute subrecipient amendment between UW and City of Madison, (with NTIA approval) allocate conduit, fiber and optical network to MUFN Consortium. We anticipate having 3 broadband wholesaler provider agreements by the end of 1Q2013.

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	Anticipate completion by 1/31/13 though MUFN has requested an extension from NTIA due to potential delays from Wisconsin winter weather.
2b.	Environmental Assessment	100	Completed in 4Q2012
2c.	Network Design	100	Completed in 4Q2012
2d.	Rights of Way	100	Completed in 4Q2012
2e.	Construction Permits and Other Approvals	100	Completed in 4Q2012
2f.	Site Preparation	100	Completed in 4Q2012
2g.	Equipment Procurement	100	Completed in 4Q2012
2h.	Network Build (all components - owned, leased, IRU, etc.)	100	Anticipate completion by 1/31/13
2i.	Equipment Deployment	100	Expect completion by 1/16/13
2j.	Network Testing	100	Anticipate completion by 1/31/13
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).

MUFN anticipates potential struggles with weather in 1Q2013. As a result, we hope NTIA will approve our extension request to ensure if we hit any bad weather we can finish Phase 4 route changes. We also seek approval of adding MUFN Consortium, Unincorporated Association as a grant subrecipient in order to alleviate issues created by the State of Wisconsin legislature in 2011 (Act 32).

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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b. Land, structures, right-of-ways, appraisals, etc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$339,821	\$0	\$339,821	\$179,549	\$0	\$179,549	\$253,550	\$0	\$253,550
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$10,000	\$0	\$10,000	\$0	\$0	\$0	\$10,000	\$0	\$10,000
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$6,834,082	\$3,753,242	\$3,080,840	\$6,355,835	\$3,574,330	\$2,781,505	\$6,920,353	\$3,753,242	\$3,167,111
j. Equipment	\$1,625,712	\$0	\$1,625,712	\$0	\$0	\$0	\$1,625,712	\$0	\$1,625,712
k. Miscellaneous	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$50,000	\$0	\$50,000
l. SUBTOTAL (add a through k)	\$8,859,615	\$3,753,242	\$5,106,373	\$6,535,384	\$3,574,330	\$2,961,054	\$8,859,615	\$3,753,242	\$5,106,373
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$8,859,615	\$3,753,242	\$5,106,373	\$6,535,384	\$3,574,330	\$2,961,054	\$8,859,615	\$3,753,242	\$5,106,373

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: \$298,000 b. Program Income to Date: \$0