

ASSURANCES - CONSTRUCTION PROGRAMS

OMB Approval No. 4040-0009
Expiration Date 07/30/2010

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.

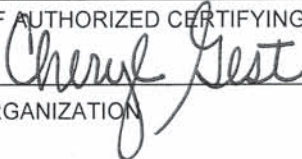
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-1 33, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

*SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 	*TITLE Cheryl E. Gest Managing Officer, Pre-Award Research & Sponsored Programs
*APPLICANT ORGANIZATION Board of Regents of the University of Wisconsin System	*DATE SUBMITTED 8/12/09

Income Statement

1. Using UW-Madison/WisDOT agreement on "North ring"
2. UW-Madison pays City of Madison for fiber operations & maintenance (variable based on # of pairs in use) and provides NOC, technical support and billing service on existing systems to not-for-profit entities; Mad City Broadband provides NOC/technical support to business customers
3. UW-Madison pays for collocation space at Network222 (aggregation node) as part of their MadIX peering exchange service; no collocation lease costs

Balance Sheet

DSO	30 days, all revenue
DPO	30 Days, specific line items
Inventory Growth Rate	

Cash Flows

Statement of Cash Flows

	Historical		Forecast Period				
			Year 1	Year 2	Year 3	Year 4	Year 5
Beginning Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CASH FLOWS FROM OPERATING ACTIVITIES:							
Net Income	-	-	(77,287)	(69,097)	(10,128)	26,872	56,872
<i>Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities</i>							
Add: Depreciation	-	-	91,037	215,897	324,128	324,128	324,128
Add: Amortization	-	-	-	-	-	-	-
<i>Changes in Current Assets and Liabilities:</i>							
Marketable Securities	-	-	-	-	-	-	-
Accounts Receivable	-	-	(22,600)	(16,600)	(11,000)	(2,000)	(1,000)
Inventory	-	-	-	-	-	-	-
Prepayments	-	-	-	-	-	-	-
Other Current Assets	-	-	-	-	-	-	-
Accounts Payable	-	-	21,450	-	-	-	-
Other Current Liabilities	-	-	-	-	-	-	-
Net Cash Provided (Used) by Operations	\$ -	\$ -	\$ 12,600	\$ 130,200	\$ 303,000	\$ 349,000	\$ 380,000
CASH FLOWS FROM FINANCING ACTIVITIES:							
Notes Receivable	-	-	-	-	-	-	-
Notes Payable	-	-	-	-	-	-	-
Principal Payments	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Additional Paid-in Capital	-	-	7,116,780	3,280,327	-	-	-
Additions to Patronage Capital Credits	-	-	-	-	-	-	-
Payment of Dividends	-	-	-	-	-	-	-
Net Cash Provided by Financing Activities	\$ -	\$ -	\$ 7,116,780	\$ 3,280,327	\$ -	\$ -	\$ -
CASH FLOWS FROM INVESTING ACTIVITIES:							
Capital Expenditures	-	-	6,586,780	3,280,327	-	-	-
Amortizable Asset (Net of Amortization)	-	-	-	-	-	-	-
Long-Term Investments	-	-	-	-	-	-	-
Net Cash Used by Investing Activities	\$ -	\$ -	\$ 6,586,780	\$ 3,280,327	\$ -	\$ -	\$ -
Net Increase (Decrease) in Cash	\$ -	\$ -	\$ 542,600	\$ 130,200	\$ 303,000	\$ 349,000	\$ 380,000
Ending Cash	\$ -	\$ -	\$ 542,600	\$ 672,800	\$ 975,800	\$ 1,324,800	\$ 1,704,800

MUFN notes that we are not able to provide historical financial statements for the organization as the consortium is in formation now.

We provided UW-Madison financial statements in response to question 47 though we are unable to provide UW-Madison pro-forma financial statements for five years.

As an alternative, we present MUFN information as if it were a stand-alone entity in order to show that the consortium will in fact be sustainable well into the future if given the opportunity.

We are open to answer any questions in regards to these statements.

Balance Sheet

Assets	Historical		Forecast Period				
			Year 1	Year 2	Year 3	Year 4	Year 5
Current Assets							
Cash	\$	-	\$ 542,600	\$ 672,800	\$ 975,800	\$ 1,324,800	\$ 1,704,800
Marketable Securities	\$	-	-	-	-	-	-
Accounts Receivable	\$	-	\$ 22,600	\$ 39,200	\$ 50,200	\$ 52,200	\$ 53,200
Notes Receivable	\$	-	-	-	-	-	-
Inventory	\$	-	-	-	-	-	-
Prepayments	\$	-	-	-	-	-	-
Other Current Assets	\$	-	-	-	-	-	-
Total Current Assets	\$	-	\$ 565,200	\$ 712,000	\$ 1,026,000	\$ 1,377,000	\$ 1,758,000
Non-Current Assets							
Long-Term Investments	\$	-	-	-	-	-	-
Amortizable Asset (Net of Amortization)	\$	-	-	-	-	-	-
Plant in Service	\$	-	\$ 6,586,780	\$ 9,867,107	\$ 9,867,107	\$ 9,867,107	\$ 9,867,107
Less: Accumulated Depreciation	\$	-	\$ (91,037)	\$ (306,935)	\$ (631,063)	\$ (955,190)	\$ (1,279,318)
Net Plant	\$	-	-	-	-	-	-
Other	\$	-	-	-	-	-	-
Total Non-Current Assets	\$	-	\$ 6,495,743	\$ 9,560,172	\$ 9,236,044	\$ 8,911,917	\$ 8,587,789
Total Assets	\$	-	\$ 7,060,943	\$ 10,272,172	\$ 10,262,044	\$ 10,288,917	\$ 10,345,789
Liabilities and Owners' Equity							
Liabilities							
Current Liabilities							
Accounts Payable	\$	-	\$ 21,450	\$ 21,450	\$ 21,450	\$ 21,450	\$ 21,450
Notes Payable	\$	-	-	-	-	-	-
Current Portion - Total RUS Debt	\$	-	-	-	-	-	-
Current Portion - Other Debt	\$	-	-	-	-	-	-
Other Current Liabilities	\$	-	-	-	-	-	-
Total Current Liabilities	\$	-	\$ 21,450	\$ 21,450	\$ 21,450	\$ 21,450	\$ 21,450
Long-Term Liabilities							
Existing RUS Debt	\$	-	-	-	-	-	-
Proposed RUS Debt	\$	-	-	-	-	-	-
Existing non-RUS Debt	\$	-	-	-	-	-	-
Total Long-Term Liabilities	\$	-	-	-	-	-	-
Total Liabilities	\$	-	-	-	-	-	-
Owner's Equity							
Capital Stock	\$	-	-	-	-	-	-
Additional Paid-In Capital	\$	-	\$ 7,116,780	\$ 10,397,107	\$ 10,397,107	\$ 10,397,107	\$ 10,397,107
Patronage Capital Credits	\$	-	-	-	-	-	-
Retained Earnings	\$	-	\$ (77,287)	\$ (146,385)	\$ (156,513)	\$ (129,640)	\$ (72,768)
Total Equity	\$	-	\$ 7,039,493	\$ 10,250,722	\$ 10,240,594	\$ 10,267,467	\$ 10,324,339
Total Liabilities and Owner's Equity	\$	-	\$ 7,060,943	\$ 10,272,172	\$ 10,262,044	\$ 10,288,917	\$ 10,345,789

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Income Statement

	Historical		Forecast Period									
			Year 1	Year 2	Year 3	Year 4	Year 5					
Revenues												
Network Services Revenues:												
Local Voice Service	\$	-	\$	-	\$	-	\$	-				
Broadband Data	\$	-	\$	-	\$	-	\$	-				
Video Services	\$	-	\$	-	\$	-	\$	-				
Network Access Service Revenues	\$	-	\$	181,400	\$	416,800	\$	571,400	\$	608,400	\$	638,400
Universal Service Fund	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Toll Service/Long Distance Voice	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Installation Revenues	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Other Operating Revenues	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Other Revenues	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Uncollectible Revenues	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Revenues	\$	-	\$	181,400	\$	416,800	\$	571,400	\$	608,400	\$	638,400
Expenses												
Backhaul	\$	-	\$	7,650	\$	10,200	\$	10,200	\$	10,200	\$	10,200
Network Maintenance/Monitoring	\$	-	\$	160,000	\$	259,800	\$	247,200	\$	247,200	\$	247,200
Utilities	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Leasing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Sales/Marketing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Care	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Billing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Corporate G&A	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Other Operating Expense	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total	\$	-	\$	167,650	\$	270,000	\$	257,400	\$	257,400	\$	257,400
EBITDA	\$	-	\$	13,750	\$	146,800	\$	314,000	\$	351,000	\$	381,000
Depreciation	\$	-	\$	91,037	\$	215,897	\$	324,128	\$	324,128	\$	324,128
Amortization	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Earnings Before Interest and Taxes	\$	-	\$	(77,287)	\$	(69,097)	\$	(10,128)	\$	26,872	\$	56,872
Interest Expense - New RUS Debt	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Interest Expense - Existing RUS Debt	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Interest Expense - Other	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Income Before Taxes	\$	-	\$	(77,287)	\$	(69,097)	\$	(10,128)	\$	26,872	\$	56,872
Property Tax	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Income Taxes	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Net Income	\$	-	\$	(77,287)	\$	(69,097)	\$	(10,128)	\$	26,872	\$	56,872

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We are open to answer any questions in regards to these statements.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known:	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: _____ _____ Congressional District, if known: _____	
6. Federal Department/Agency: _____	7. Federal Program Name/Description: CFDA Number, if applicable: _____	
8. Federal Action Number, if known: _____	9. Award Amount, if known: \$ _____	
10. a. Name and Address of Lobbying Registrant (if individual, last name, first name, MI): _____	b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): <div style="text-align: center; font-size: 2em; font-weight: bold;">N/A</div>	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

**Broadband Infrastructure Application
Submission to RUS (BIP) and NTIA (BTOP)**

Certification Requirements BTOP

**U.S. Department of Commerce
Broadband Technology Opportunities Program**

(i) I certify that I am authorized to submit this grant application on behalf of the eligible entity(ies) listed on this application, that I have examined this application, that all of the information and responses in this application, including certifications, and forms submitted, all of which are part of this grant application, are material representations of fact and true and correct to the best of my knowledge, that the entity(ies) that is requesting grant funding pursuant to this application and any subgrantees and subcontractors will comply with the terms, conditions, purposes, and federal requirements of the grant program; that no kickbacks were paid to anyone; and that a false, fictitious, or fraudulent statements or claims on this application are grounds for denial or termination of a grant award, and/or possible punishment by a fine or imprisonment as provided in 18 U.S.C. § 1001 and civil violations of the False Claims Act.

(ii) I certify that the entity(ies) I represent have and will comply with all applicable federal, state, and local laws, rules, regulations, ordinances, codes, orders and programmatic rules and requirements relating to the project. I acknowledge that failure to do so may result in rejection or deobligation of the grant or loan award. I acknowledge that failure to comply with all federal and program rules could result in civil or criminal prosecution by the appropriate law enforcement authorities.

(iii) If requesting BTOP funding, I certify that the entity(ies) I represent has and will comply with all applicable administrative and federal statutory, regulatory, and policy requirements set forth in the DOC Pre-Award Notification, published in the Federal Register on February 11, 2008 (73 FR 7696), as amended; DOC Financial Assistance Standard Terms and Conditions (Mar. 8, 2009); DOC American Recovery and Reinvestment Act Award Terms (April 9, 2009); and any Special Award Terms and Conditions that are included by the Grants Officer in the award."

8/12/09

(Date)

Cheryl Gest

(Authorized Representative's Signature)
Cheryl E. Gest
Managing Officer, Pre-Award
Research & Sponsored Programs

Name:

Title: **Board of Regents of the**
University of Wisconsin System

**Broadband Infrastructure Application
Submission to RUS (BIP) and NTIA (BTOP)**

Equal Opportunity and Nondiscrimination Certification

**U.S. Department of Agriculture
Broadband Initiatives Program**

All loans and grants made under the Broadband Initiatives Program are subject to the nondiscrimination provisions of Title VI of the Civil Rights Act of 1964, as amended, (7 C.F.R. Part 15); Section 504 of the Rehabilitation Act of 1973, as amended, (29 U.S.C. 901 *et seq.*; 7 C.F.R. Part 15b); and the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101 *et seq.*; 45 C.F.R. Part 90), and Executive Order 11375, Amending Executive Order 11246, Relating to Equal Employment Opportunity (3 C.F.R. 1966, 1970).

All recipients of financial assistance from Rural Development, the prospective primary participant commits to carry out Rural Development's established policy to comply with the requirements of the above laws and executive orders to the effect that no person in the United States shall, " on the basis of race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under the Broadband Initiatives Program.

We Board of Regents of the (the Applicant) hereby certify
University of Wisconsin System
that, as a prospective recipient under the said Broadband Initiatives Program, we will comply with the above referenced laws and executive orders.

8/12/09
(Date)

Cheryl E. Gest
(Authorized Representative's Signature)

Cheryl E. Gest
Name: Managing Officer, Pre-Award
Research & Sponsored Programs
Title:

CERTIFICATION REGARDING LOBBYING

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

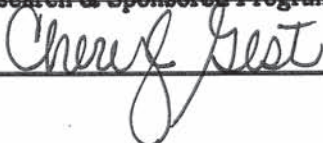
Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

NAME OF APPLICANT Board of Regents of the University of Wisconsin System	AWARD NUMBER AND/OR PROJECT NAME
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE Cheryl E. Gest Managing Officer, Pre-Award Research & Sponsored Programs	
SIGNATURE 	DATE 8/12/09

ASSURANCES - CONSTRUCTION PROGRAMS

OMB Approval No. 4040-0009
Expiration Date 07/30/2010

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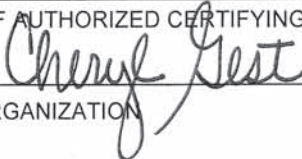
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-1 33, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

*SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 	*TITLE Cheryl E. Gest Managing Officer, Pre-Award Research & Sponsored Programs
*APPLICANT ORGANIZATION Board of Regents of the University of Wisconsin System	*DATE SUBMITTED 8/12/09

ATTACHMENT H - Broadband Subscriber Estimates Summary

(Including Grant and Non-Grant Areas)

	Year 0	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Household Subscribers																					
[Redacted]																					
Business Subscribers																					
[Redacted]																					
Strategic Institutions																					
[Redacted]																					

ATTACHMENT H - Penetration Rates

Penetration Rates	Year 1	Year 2	Year 3	Year 4	Year 5
[Redacted Content]					

Attachment H - Subscriber Forecasts

MUFN Middle Mile reasoned basis for subscriber forecasts

MUFN has listed household and business subscriber data provided by Xicom d/b/a Mad City Broadband given an agreement by Mad City Broadband to use MUFN infrastructure for their middle mile needs. (See NTIA BTOP last mile proposal Madison Broadband Initiative (MBI) for details on take rate).

MUFN also has agreement to directly connect 100 community anchor institutions directly to our backbone. We show these additions during the 2 years of construction. We have also included 99 community anchor institutions that last mile project MBI (who will use the MUFN backbone) will connect via wi-fi or fiber in addition to the 100 directly connected to the MUFN backbone.

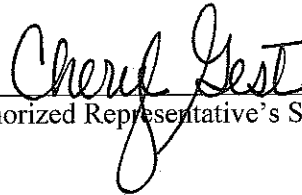
Certification Requirements for BTOP

U.S. Department of Commerce
Broadband Technology Opportunities Program

I certify that I am the duly authorized representative of the applicant organization, and that I have been authorized to submit the attached application on its behalf. A copy of the applicant organization's authorization for me to submit this application as its official representative is on file in the applicant's office, and I am identified as the applicant organization's Authorized Organization Representative (AOR) in the Central Contractor Registration database. By signing this certification, I certify that the statements contained in the application are true, complete, and accurate to the best of my knowledge, and that if an award is made, the applicant organization will comply with all applicable award terms and conditions.

August 20, 2009

(Date)



(Authorized Representative's Signature)

Cheryl Gest
Name: _____

Managing Officer, Research and Sponsored Programs
University of Wisconsin- Madison
Title: _____



Budget Narrative

Applicant Name: Board of Regents of the University of WI System

EasyGrants Number: 3576

Organization Type (from Question 1D on BTOP application): State or State Agency

Proposed Period of Performance: 2 years

Total Project Costs: \$8,859,615

Total Federal Grant Request: \$5,106,373

Total Matching Funds (Cash): \$530,000

Total Matching Funds (In-Kind): \$3,223,242

Total Matching Funds (Cash + In-Kind): \$3,753,242

Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 42.4%

1. Administrative and legal expenses

- List breakout of position(s), time commitment(s) such as hours or level-of-effort, and salary information/rates with a detailed explanation, and additional information as needed.

As directed by NTIA, UW-Madison has removed all expenses listed here in a previous submission. We now have included direct labor costs as part of the construction described in item #9 below and have only applied fringe benefit costs (per existing NICRA) to these project participants.

2. Land, structure, rights-of-way, appraisals, etc.

There are no land, structure, rights-of-way or appraisal costs associated with the MUFN proposal. All right-of-way has been obtained from participating Anchor Institution collaborators. Furthermore, we are using existing Anchor Institution facilities for collocation purposes such that no additional land or structure acquisitions are required.



3. Relocation expenses and payment

There are no relocation expenses associated with the MUFN proposal.

4. Architectural and engineering fees

The MUFN project proposes use of two (2) outside contractors for project management and temporary engineering support to augment resources identified in item #9 below. Specifically, we propose hiring a 65% FTE (full-time equivalent) project manager to coordinate activities associated with the MUFN project. We calculate this 2 year request as follows: $(65\% * 2080\text{hr/yr} * \$100/\text{hr}) * 2 \text{ years} = \$135,200 * 2 = \$270,400$.

We note the University of Wisconsin considers 2080 hours as the amount of hours in a year and 65% of that as the maximum billable hours allowed after vacation and non-billable time is included. We have access to a State of Wisconsin competitively bid contract for project management professional services (included in our due diligence submission as BTOP-MUFN-iNOC_Contract Information for Intelligent Transportation System.pdf) to use a telecommunications company called iNOC for project management services at \$100/hr.

Separately, our proposal includes adding a temporary engineer contractor to augment existing staff during two busy periods in our project plan over the course of two years of fiber construction and installation. Specifically, we expect significantly high engineering activity to take place during the 3/1 – 5/31/2010 period as well as 11/1/2010 – 2/28/2011 periods. We seek an additional resource to assist us in submitting permit requests (e.g. right-of-way permits, temporary excavation permits) to local municipalities as well as extra engineering design support should our plan require design changes prior to beginning excavation activities in April 2010 and 2011.

We note given Wisconsin winter weather, it is important for our project plan that excavation activities begin promptly in April in order to complete activities before a typical underground freeze begins in December. While its not impossible to perform construction activities in winter, construction costs escalate and productivity declines. This additional temporary engineering resource will ensure we make our construction start date.

Calculation for this temporary engineering resource was performed as follows:

$$520 \text{ hours/yr} * \$150/\text{hr} * 2\text{yrs} = \$156,000$$

We intend to use this person for two (2) periods identified above. We also note the \$150/hr fee is based on a competitively bid contract for professional engineering services with Strand Associates, Inc.

Additionally, UW-Madison Research and Sponsored Programs believes our established NICRA indirect cost rate of 26% is eligible to be applied to the two (2) contractors itemized above. We have added 26% to the total architectural and engineering fees costs $(\$270,400 + \$156,000) * 1.26 = \$537,264$. We note that we have worked with campus partners to reduce indirect project costs from our first submission to this one and have not reduced our funding match which is common in other federal grant programs when indirect cost are permitted but restricted in their application. We also note that these costs will help the MUFN project comply with grant reporting requirements which we believe are an eligible cost.

These costs are identified on the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab (cells F105 and F102 respectively), Professional Services section and on tab Adjusted SF-424C in cell B9 (Architectural and Engineering fees).



5. Other architectural and engineering fees

There are no other architectural or engineering fees associated with the MUFN project.

6. Project inspection fees

MUFN project inspections will be performed by UW-Madison personnel identified in #9 below in conjunction with City of Madison Traffic Engineering Department personnel. No additional project inspection fees are requested or necessary as part of the MUFN project.

7. Site work

MUFN proposes make-ready site work at one (1) location, 525 Science Drive, in order to bring this facility to a production-ready state. This includes buildout of an 11'x19' room to local building code (walls, fire suppression) at a cost of \$3500, installation of three (3) 19" 2-post racks bolted to the floor at total cost of \$1500 and installation of a fiber guide (support) system to route fiber to top of rack as well as electrical outlets for each rack at cost of \$5000. These costs were derived from contracts the building manager, Oakbrook Corporation, holds with local electrical contractors.

525 Science Drive is at the intersection of several backbone fiber optic cables. We expect this facility to be a "wire serving center" where MUFN users can interconnect between cables as well as bring their own local cables to connect onto one or more of the existing backbone cables. We anticipate some optical gear may need to be collocated here depending on individual network designs. Existing building HVAC and generator systems have sufficient capacity for this facility.

These costs are reflected in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Other Upfront Costs, Site Preparation section (cells F135-F137) and on tab Adjusted SF-424C in cell B12 (Site Work).

8. Demolition and removal

There is no demolition and removal activities associated with the MUFN project.

9. Construction

MUFN has been collaborating with a fiber construction entity called Cable Constructors, Inc (CCI). on this proposal and has several other firms on contract (Intercon, Holtger Brothers, Michaels). We intend to outsource to CCI and likely one or more of the other three (3) listed contractors for conduit and fiber construction and installation activities. These activities include furnishing and installing a total of 35.25 miles conduit consisting of 12.25 miles of new 3" backbone HDPE conduit and 23.04 miles of 1.25" HDPE conduit for laterals to anchor institution locations. It also includes installation of 34.05 miles of backbone fiber (32.25 miles in existing or new conduit and 1.8 miles of aerial fiber) and 23.04 miles of fiber installed in lateral conduit to anchor institutions (see table below for backbone details and further details below table).



**Metropolitan Unified Fiber Network (MUFN)
Backbone Conduit/Fiber Install Details
8/1/2009**

Service Area	New conduit	Existing conduit	New fiber (in miles)	Fiber cable
	(in miles)	(in miles)		size (# strands)
University Ave (Map ID #1)	1.5	5.75	1.5	96
Mineral Point Rd (Map ID #2)	2.5	10	12.5	144
East Washington Blvd (Map ID #3)	2.5	6.25	8.75	144
Northport Area (Map ID #4)	3.5	0.5	4	96
Monona Drive (Map ID #5)*	2.25	3.25*	7.3	144
S. Park St. (Map ID #6)	0	16	0	mix (48/96/144c t FOC)
Total existing/new conduit/fiber	12.25	41.75	34.05	N/A

* 1.8 miles of new fiber to be aerial installation

Fiber construction contractor activities include: furnishing, excavating and installing new outside HDPE conduit; furnishing and installing fiber in existing (in-kind match contribution) and newly installed conduit; furnishing and installing materials (e.g. fiber termination panel) for inside plant fiber at 97 anchor institution locations; fiber fusion splicing; restoration of any disturbed areas; and assisting University of Wisconsin engineers with documentation including as-built drawings and fiber splicing diagrams.

As detailed in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Outside Plant section, the mileage noted above is stated in lineal feet and multiplied by unit costs (\$/foot) as provided by CCI using a State of Wisconsin Department of Transportation competitively bid fiber contract. We note 9.75 miles (51480') (\$1,606,176 as specified on the Detailed of Project Cost Tab cell F28) of the 12.25 miles of backbone conduit will be excavated via directional bore while 2.5 miles (13200') (\$276,144 as specified on the Detailed of Project Cost Tab cell F29) of the 12.25 miles of backbone conduit will be installed by a trenching method of conduit installation. For lateral conduit installation, we estimate all 23.04 miles (121678') (\$1,524,625.34 as specified on the Detailed of Project Cost Tab cell F30) will be installed via directional boring techniques. Additionally, we note the City of Madison is requiring the MUFN project to match their existing 3" conduit standard for the 12.25 miles of backbone conduit which costs more to install than 1.25 HDPE conduit.

Fiber installation activities include installation of 23.04 miles (121678') of fiber (\$435,607.24 as specified on the Detailed of Project Cost Tab cell F26) for lateral connections from the backbone to 97 anchor institution locations multiplied by the cost to furnish and install provided by CCI from competitive bid. The backbone fiber consists of installing 32.25 miles of fiber (170280') (\$773,071.20 as specified on the Detailed of Project Cost Tab cell F25) in underground conduit (12.25 miles of fiber in new conduit and 20 miles of in-kind contribution conduit with no existing fiber) and 1.8 miles (9504') (\$70,709.76 as specified on the Detailed of Project Cost Tab cell F27) of aerial fiber lashed to existing telephone poles. We will detail below in our description of our in-kind match that 5.75 miles of conduit filled with 96 count fiber optic cable is also included in the MUFN in-kind match as part of our proposal. We also note that the 16 miles of conduit and fiber identified in service area #6 is not included in our in-kind match but is listed in the table above as we will connect laterals to it.

The MUFN project cash match is \$530,000. The University of Wisconsin – Madison has committed to funding this entire balance and is being reimbursed in part by anchor institution participants over the course of 10 years. Additional information about this reimbursement can be found in our original proposal response to BTOP question #51 as well as in our response to the Supplemental Information Request question #11.



In addition to the \$530,000 cash match, the MUFN project, by way of strategic partner (the City of Madison Traffic Engineering Department), has included \$3,223,242 in in-kind matching contribution. We note we submitted a letter from the City confirming this contribution as part of the due diligence process.

This in-kind contribution, as detailed in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Outside Plant section, includes 25.75 miles (135960') of 3" conduit and 5.75 miles (30360') of an existing 96 count fiber optic cable already installed.

Existing conduit (25.75 miles) was valued by CCI using existing, competitively bid (non-Bacon-Davis wage) rates (\$22.89/foot for 3" conduit (\$3,112,124.40 as specified in the Detailed of Project Cost Tab cell F43) and \$3.66/foot for 5.75 miles of 96 count fiber optic cable (\$111,117.60 as specified in the Detailed of Project Cost Tab cell F44).

These costs are identified in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Outside Plant cables, conduits and Other (in-kind match) sections and in total on the tab Adjusted SF-424C in cell B14 (Construction).

Direct labor costs:

As directed by NTIA, UW-Madison has significantly reduced the total indirect cost (\$1,366,169 originally) to (\$271,011) for the MUFN project by only including direct labor and fringe benefit costs associated with construction and installation of broadband. Please see details position, time commitments, salary information and scope of work for the UW-Madison employees MUFN intends to use to successfully complete our proposal within 2 years below. We note these costs are identified in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Other Outside Plant costs section (cells F45-F52) and on tab Adjusted SF-424C in cell B14 (Construction).



Position	Project Time Commitment (hrs)	Salary Rate/hr	Fringe Benefits (per NICRA)	Total Rate (salary+fringe)	Total Cost (Commitment * Total Rate)
Senior Wide-Area Network (WAN) Engineer (Academic Staff) ¹	1352	\$ 45.09	\$ 17.36	\$ 62.45	\$ 84,432.40
Senior Wide-Area Network (WAN) Engineer (Academic Staff) ²	676	\$ 45.00	\$ 17.33	\$ 62.33	\$ 42,135.08
Senior Wide-Area Network (WAN) Engineer (Academic Staff) ³	676.0	\$ 39.50	\$ 15.21	\$ 54.71	\$ 36,983.96
Senior Wide-Area Network (WAN) Engineer (Classified Staff) ⁴	676	\$ 48.02	\$ 24.25	\$ 72.27	\$ 48,854.52
Project Manager/Senior WAN Engineer (Classified Staff) ⁵	473.2	\$ 46.22	\$ 23.34	\$ 69.56	\$ 32,915.79
Field Service Technician (Classified Staff) ⁶	240	23.71	\$ 11.97	\$ 35.68	\$ 8,563.20
Field Service Technician (Classified Staff) ⁶	240	23.71	\$ 11.97	\$ 35.68	\$ 8,563.20
Field Service Technician (Classified Staff) ⁶	240	23.71	\$ 11.97	\$ 35.68	\$ 8,563.20
Total indirect costs					\$ 271,011

Notes/explanation

1. Full FTE, 2080 total hours/yr, 65% of total hours is full time maximum (other 35% are vacation or other non-billable activities), salary is actual rate for specific employee, per UW NICRA, fringe benefit is 38.5% of salary for academic staff; this person will be working on:all aspects of project including: design, permitting, site preparations non-contractor furnished material ordering, inspections of contractors, network acceptance, and documentation
2. .5 FTE, 2080 total hours/yr, 65% of total hours is full time maximum (other 35% are vacation or other non-billable activities), 1/2 time on MUFN project, salary is actual rate for specific employee, per UW NICRA, fringe benefit is 38.5% of salary for academic staff; this person will be working on:all aspects of project including: design, permitting, site preparations, non-contractor furnished material ordering, inspections of contractors, network acceptance, and documentation
3. .5 FTE, 2080 total hours/yr, 65% of total hours is full time maximum (other 35% are vacation or other non-billable activities), 1/2 time on MUFN project, salary is actual rate for specific employee, per UW NICRA, fringe benefit is 38.5% of salary for academic staff; this person will be working on:all aspects of project including: design permitting, site preparations, non-contractor furnished material ordering, inspections of contractors, network acceptance, and documentation
4. .5 FTE, 2080 total hours/yr, 65% of total hours is full time maximum (other 35% are vacation or other non-billable activities), 1/2 time on MUFN project, salary is actual rate for specific employee, per UW NICRA, fringe benefit is 50.5% of salary for classified staff; this person will be working on:all aspects of project including design, permitting, site preparations, non-contractor furnished material ordering, inspections of contractors, network acceptance, and documentation
5. .35 FTE, 2080 total hours/yr, 65% of total hours is full time maximum (other 35% are vacation or other non-billable activities), 35% time on MUFN project, salary is actual rate for specific employee, per UW NICRA, fringe benefit is 50.5% of salary for classified staff; this person will be working on:project management activities, design and special agreements with property holders
6. 120hr/yr, 2yr project, salary is actual rate for specific employee, per UW NICRA, fringe benefit is 50.5% of salary for classified staff; this person will be working on inside fiber path site surveys and inspection of inside path installation activities

10. Equipment

The MUFN proposal includes purchase and installation of two (2) passive DWDM (dense wave division multiplexing) rings (North and South rings) on the East side of the City of Madison and City of Monona. The DWDM rings will enable MUFN subscribers to have reliable connections to the ISP of their choice located in the downtown Madison area by means of redundant connectivity.

We note that MUFN elected to use an existing pair of fiber we have access to rather than propose to install a significantly more expensive new cable.

Below is the list of equipment, number of units, unit cost MUFN proposes to buy and have University of Wisconsin technicians identified in #1 above install. The network design and buildings where equipment will be located can be found in our response to the BTOP application question #30.

The DWDM filters (North Ring) costs are \$58,493 and are listed in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Network & Access Equipment, Transport section (cell D15) and in total on the tab Adjusted SF-424C in cell B15 (Equipment)



JDSU North Ring Passive

JDSU Part #	Part Description	# Units	List Price	Total List	Disc. Price
MDX-MN0204	MDX-MN02042RU PASSIVE SHELF HOLDS 4 LGX	3	462	1,386.00	\$970.20
MDX-08MD1001B	DWDM OADM 1-8	2	4,500	9,000.00	\$6,300.00
MDX-08MD1001B	DWDM OADM 9-16	2	4,500	9,000.00	\$6,300.00
MDX-04MD1001B	DWDM OADM 17-20	2	3,229	6,457.50	\$4,520.25
21108981-001	100GHZ 20 CHANNEL C BAND 1RU UNIVERSAL	2	5,145	10,290.00	\$7,203.00
Total (passive)					\$25,293.45
WRT-SFPL3T24SC-042	4 SFPs per Circuit	16	2,000.00	32,000.00	\$32,000.00
Fiber Jumpers	Singlemode Duplex UPC	24	50.00	1,200.00	\$1,200.00
Total (optics)					\$33,200.00
Total Price					\$58,493.45

The DWDM filters (South Ring) costs are \$73,271 and are listed in the corresponding budget spreadsheet titled BTOP-MUFN-3576_MM_Infra Budget Package-RESPONSE-v2-wIndirect.xlsx, Detailed of Project Cost tab, Network & Access Equipment, Transport section (cell D16) and in total on the tab Adjusted SF-424C in cell B15 (Equipment)

JDSU South Ring Passive

JDSU Part #	Part Description	# Units	List Price	Total List	Disc. Price
MDX-MN0204	MDX-MN02042RU PASSIVE SHELF HOLDS 4 LGX	5	462	2,310.00	\$1,617.00
MDX-08MD1001B	DWDM OADM 1-4	4	3,229	12,915.00	\$9,040.50
MDX-08MD1001B	DWDM OADM 5-8	2	3,229	6,457.50	\$4,520.25
MDX-04MD1001B	DWDM OADM 9-12	2	3,229	6,457.50	\$4,520.25
MDX-04MD1001B	DWDM OADM 13-16	2	3,229	6,457.50	\$4,520.25
21108981-001	100GHZ 20 CHANNEL C BAND 1RU UNIVERSAL	2	5,145	10,290.00	\$7,203.00
Total (passive)					\$31,421.25
JDSU Part #	Part Description	# Units	List Price	Total List	Disc. Price
WRT-SFPL3T24SC-042	4 SFPs per Circuit	20	2,000.00	40,000.00	\$40,000.00
Singlemode Duplex UPC	Jumpers 4 per circuit (36) 3 per set of muxes (14)	37	50.00	1,850.00	\$1,850.00
Total (optics)					\$41,850.00
Total Price					\$73,271.25

11. Miscellaneous

There is no miscellaneous activities associated with the MUFN project.

Addendum

- If indirect costs (i.e., indirect, overhead, general and administrative, facilities and administration, etc.) and/or fringe benefits are included in the budget, please provide a copy of your existing Negotiated Indirect Cost Recovery Agreement (NICRA), if available. If the NICRA is applied accordingly in the budget, there is no need to justify the costs. If a NICRA is not available or is not consistent with the rates/calculations in the budget, please provide an explanation of how the amounts



were calculated. Please clearly list the manner in which indirect costs are calculated in the budget.

UW-Madison's current NICRA is included in our submission for NTIA review. Per the NICRA and as directed by NTIA, we have applied fringe benefits to UW-Madison direct labor involved in the construction and installation of fiber. We have also applied UW-Madison's NICRA established 26% indirect cost rate (UW's lowest, off-campus project rate) only to costs in Architectural and Engineering Fees section associated with those individuals we expect to contract with to actively work on construction and installation of fiber.