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About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

Application for Endard Assists	OF 404										
Application for Federal Assista	Nance SF-424 Version	02									
* 1. Type of Submission:	* 2. Type of Application: * If Revision, select appropriate letter(s):										
Preapplication	New										
Application	Continuation * Other (Specify)										
Changed/Corrected Application	Revision										
* 3. Date Received:	4. Applicant Identifier:										
08/26/2009											
5a. Federal Entity Identifier:	* 5b. Federal Award Identifier:										
State Use Only:											
6. Date Received by State:	7. State Application Identifier:										
8. APPLICANT INFORMATION:											
* a. Legal Name: State of North	Dakota, Information Technology Department	$\overline{\exists}$									
* b. Employer/Taxpayer Identification Num	nber (EIN/TIN): * c. Organizational DUNS:	_									
45-0309764	073131823										
d. Address:											
* Street1: 600 East Boule	oward Aug										
Street2:	evalu Ave										
* C:t-:											
* City: Bismarck											
County: Burleigh		,									
* State:	ND: North Dakota										
Province:											
* Country:	USA: UNITED STATES										
* Zip / Postal Code: 58505-0100											
e. Organizational Unit:											
Department Name:	Division Name:										
Information Technology Dept											
f. Name and contact information of pe	erson to be contacted on matters involving this application:	\dashv									
Prefix: Dr.	* First Name: Lisa	寸									
Middle Name: M.		-									
* Last Name: Feldner		¬									
Suffix:		ᄀᅟᆝ									
Title: Chief Information Office	r	\dashv									
Organizational Affiliation:											
* Telephone Number: 701-328-3190	Fax Number: 701-328-0301	ᅱ									
*Email: lfeldner@nd.gov		\exists									

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About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

Application for Federal Assistance SF-424	Version 02
9. Type of Applicant 1: Select Applicant Type:	· ·
A: State Government	7
Type of Applicant 2: Select Applicant Type:	-
Type of Applicant 3: Select Applicant Type:	_
* Other (specify):	
* 10. Name of Federal Agency:	
Department of Commerce	
11. Catalog of Federal Domestic Assistance Number:	
CFDA Title:	
* 12. Funding Opportunity Number:	
0660-ZA29	
* Title:	
Recovery Act - State Broadband Data and Development Grant Program	i
13. Competition Identification Number:	
Title:	İ
14. Areas Affected by Project (Cities, Counties, States, etc.):	
All cities, counties, and tribal entities in the State will be included in the creation of a	
comprehensive statewide broadband map.	
A.F. Description Title of Augliands D. L. (
* 15. Descriptive Title of Applicant's Project: North Dakota Broadband Mapping Project	
and the second s	
Attach supporting documents as specified in agency instructions.	
Add Attachments Delete Attachments View Attachments	

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About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

								Ехріганс	on Date: 01/31/2009
Application	n for Federal Assistan	ce SF-424							Version 02
16. Congress	ional Districts Of:								
* a. Applicant	ND-001			* b.	. Program/Pr	oject	ND-all		
Attach an addi	tional list of Program/Project	Congressional Districts if n	eeded.						-
		Add Attachment	Delete Atta	achment	View Att	tachme	ent		
17. Proposed	Project:								
* a. Start Date:	10/01/2009				* b. End	Date:	02/01/20	11	
18. Estimated	Funding (\$):								
* a. Federal		3,715,400.00			 -				
* b. Applicant		0.00							
* c. State		1,627,733.00							
* d. Local		0.00							
* e. Other		0.00							
* f. Program In	come	0.00							
* g. TOTAL		5,343,133.00							
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* 20. Is the Ap	plicant Delinquent On An	y Federal Debt? (If "Yes	', provide ex	cplanation.)				
Yes	⊠ No	Explanation							
herein are trucomply with a subject me to	** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency								
Authorized Re	presentative:					-			
Prefix:	Dr.	* First Nam	ne: Lisa				-		
Middle Name:	м.	<u> </u>							
* Last Name:	Feldner				•				7
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* Title: Cr	nief Information Off	icer			·				•
* Telephone Nu	mber: 701-328-3190			Fax Numi	ber: 701-3	28-03	301		
* Email: lfel	dner@nd.gov			1		-			
* Signature of A	uthorized Representative:	Mike Ressler		* Date S	Signed: 08	3/26/200	9		7

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Standard Form 424 (Revised 10/2005) Prescribed by OMB Circular A-102

About

OMB Number: 4040-0004 Expiration Date: 01/31/2009

Application for Federal Assistance SF-424	Version 02						
* Applicant Federal Debt Delinquency Explanation							
The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.							
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North Dakota Broadband Mapping Project Abstract

The State of North Dakota seeks funding from the National Telecommunications and Information Administration (NTIA) to conduct a comprehensive assessment of broadband availability and demand in North Dakota. The Information Technology Department (ITD) of the State of North Dakota is the designated entity, by the Governor, to receive the federal funds and lead this project. The State intends to issue a Request for Proposals and issue an award to the proposal which best addresses the approach and scope specified in this proposal. The State of North Dakota expects to complete this project in accordance with the requirements and will work closely with the NTIA to ensure that the project achieves the goals and purposes of the NOFA in a timely manner.

The process the State proposes to use in developing a comprehensive broadband map is to conduct carrier surveys, consistent with the requirements of the NOFA as well as to perform certain verification procedures to enhance the accuracy of the data collected. The data collected will be distinguishable by technology type, speeds, and whether the service is mobile or fixed. In addition, the state will examine consumer demand for broadband use and adoption.

The State's map will be updateable and will be designed in a manner that builds upon the goals and objectives identified in the State of North Dakota's broadband plan, *Statewide Technology Access for Government and Education Network (STAGEnet, June 2009)* to create an effective roadmap to move North Dakota forward and become a technology leader.

In 1999, North Dakota created the Statewide Technology Access for Government and Education network (STAGEnet). STAGEnet provides broadband connectivity, internet access, voice, video, and other networking services to state agencies, colleges and universities, local governments, and K-12 public schools. STAGEnet is a successful example of a public/private partnership with a consortium of rural telecommunications companies.

In order to further its strategic broadband plan and to assist in addressing the stated inequities, the State of North Dakota seeks to assess and map the current state of broadband availability and supply in North Dakota. This initiative will require vision, planning, management, technical expertise, and financial resources. The State will seek proposals from qualified firms to assist in data collection and verification, the development of a repeatable process for updating the data, and the presentation of the data to NTIA and the public as defined in the NOFA.

EXECUTIVE SUMMARY

The Narrative should begin with an introduction that serves as an Executive Summary of the project. It should be a brief, straightforward statement of what the application proposes to accomplish.

The State of North Dakota seeks \$3,715,400 million from the National Telecommunications and Information Administration (NTIA) to conduct a comprehensive assessment of broadband availability and demand in North Dakota. This proposal outlines the approach, scope, and budget for the mapping assessment. The Information Technology Department (ITD) of the State of North Dakota is the designated entity, by the Governor, to receive the federal funds and lead this project. The State intends to issue a Request for Proposals and issue an award to the proposal which best addresses the approach and scope specified in this proposal. The State of North Dakota expects to complete this project in accordance with the requirements and will work closely with the NTIA to ensure that the project achieves the goals and purposes of the NOFA in a timely manner.

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Letter of State Designation. Governor John Hoeven has duly authorized the Information Technology Department, a state agency, as the state's designee, and affirms that the applicant is the single eligible entity in the state that has been designated by the state to receive a grant under this Program.

PROGRAM NARRATIVE

The Narrative should also include a description of all *unserved and underserved areas* in their state as defined herein, to the extent they are known, and a prioritization for the allocation of grant funds within that state for projects in or affecting the State. Any exhibits, maps, timelines, or spreadsheets should be placed within the appropriate section of the narrative.

In 1999, North Dakota created the Statewide Technology Access for Government and Education network (STAGEnet). STAGEnet provides broadband connectivity, internet access, voice, video, and other networking services to state agencies, colleges and universities, local governments, and

K-12 public schools. STAGEnet is a successful example of a public/private partnership with a consortium of rural telecommunications companies.

The mission of STAGEnet is to provide a secure, reliable, and cost-effective network with the scale and flexibility to support the convergence of data, voice, and video to meet and surpass the business objectives of government and education. This implementation of e-government and e-education brings a wealth of new opportunities to city and rural residents alike by providing a win-win situation to the State, schools, and citizens.

The State of North Dakota strives to keep pace with the industry's technological advances to address the business requirements of STAGEnet's consumers. However, that ability was compromised during the 2009 network upgrade when it was discovered that sufficient bandwidth upgrades were not available for some STAGEnet entities in multiple areas of the state. Although the State of North Dakota has an inventory of existing network connectivity of STAGEnet consumers, it does not have a comprehensive inventory of the existing broadband service capability and availability of the STAGEnet telecommunications providers. This resulted in an inequitable distribution of STAGEnet services to its consumers.

In order to further its strategic broadband plan and to assist in addressing the stated inequities, the State of North Dakota seeks to assess and map the current state of broadband availability and supply in North Dakota. This initiative will require vision, planning, management, technical expertise, and financial resources. The State will seek proposals from qualified firms to assist in data collection and verification, the development of a repeatable process for updating the data, and the presentation of the data to NTIA and the public as defined in the NOFA.

Unserved and Underserved Areas. Under the State of North Dakota's broadband plan, Statewide Technology Access for Government and Education Network (STAGEnet, June 2009), the State has identified a number of broadband goals and priorities, including: increasing bandwidth, expanding network connectivity, and serving the "unserved" and "underserved" through mobile communications. To date, the State has not conducted any formal assessment of broadband availability and therefore has no objective data or source of information that can identify what constitutes "unserved" or "underserved" as defined in the NOFA.

Under this proposal, the State, together with North Dakota State University, seek funding to support a public/private partnership with a contractor to conduct carrier surveys and verification procedures to develop reliable and updateable mapping of unserved and underserved areas. Further, as a rural state, mobile voice and broadband service play an important role in the safety and security of our citizens and the State realizes the need to distinguish between fixed and mobile access. These distinctions will be part of our mapping assessment.

1) Data

a) Data Gathering

Applicants must provide a comprehensive description of how the applicant plans to obtain all data required under the *Technical Appendix* from commercial or public providers, as applicable (such description should identify general or specific methods, or legal authorities upon which applicants will rely to obtain the required data). Applicants should refer to specific data elements in the Technical Appendix when appropriate as part of their narrative.

The data-gathering component of any Broadband Mapping effort is heavily reliant on obtaining of data from service providers. We will engage providers with a Non Disclosure Agreement, survey the providers, and then normalize the data. We also plan to supplement the provider data with third-party data from reliable industry sources.

We intend to work very closely with the provider community beginning with the negotiated design of a relevant Non-Disclosure Agreement. The NDA will be balanced to help us obtain and display information useful to consumers while protecting proprietary data.

Our goal with regard to provider data is to obtain and present a realistic and informative view of broadband inventory and service areas:

- Without compromising the locations of key infrastructure with concern for public safety, and
- Without compromising the proprietary business data of service providers.

The state's mapping efforts in North Dakota will be geared around the collection of data consistent with the Technical Appendix. The specific data elements that will be requested from providers include:

- Broadband Service Availability in Provider's Service Area
- Availability by service address for service associated with specific addresses (typically wire-line providers)
- Availability by shapefile wireless services not provided to a specific address
- Residential broadband average revenue per end user and weighted average speed by county in provider's service area
- Last mile connection points for broadband infrastructure in provider's service area (e.g., DSLAMs, fiber nodes, towers, etc.)
- Middle mile and backbone interconnection points for broadband infrastructure in provider's service area

b) Accuracy and Verification

Applicants must provide a description of what methods the applicant intends to employ to verify data accuracy.

We will request, through RFP, a process to identify both broadband coverage serving area boundaries and the equipment location and type that support each boundary. This will help the State judge if there is broadband equipment already available to serve the reported coverage area.

We will also request the addresses of current broadband available locations from the providers and ask for the locations to be mapped against the provided coverage in order to determine if significant differences exist between coverage areas and service locations.

We will request providers to provide internal 'line' qualification testing of selected addresses in sample areas to verify coverage and service attribute.

We will request both a rural and urban sampling and determination of serviced addresses or serviced points relative to the presence of provisioning equipment, as well as additional verification methods.

The results of the verification steps will lead to follow-up requests with the providers to clarify and clear up any noted significant issue. Any issues not addressed by a provider will be noted in the output to the NTIA.

c) Accessibility

Applicants must provide a description of how the states broadband data will be publicly accessible, clearly presented, and easily understood by the public, government and the research community. Applicants must also describe the applicant's proposed state-level map.

Our objective is to develop a geographic inventory of broadband service areas and the associated infrastructure used to support broadband services relative to Census Geographies and compliant with technical requirements. The NDA, in part, will guide what data and how the data can be shared with state agencies. At a minimum, the state will have access to broadband maps at a technology and speed level for selected geographies. These maps will not only show served areas, but will also call out underserved and unserved areas (as defined within the NOFA). The association of the provider's name with any information will be the decision of the provider. Once we complete a sampling across all provider data, we intend to make available a uniform data set for mapping and analysis.

The State will coordinate the process by which all of the collected data is transmitted to the NTIA for the use by the NTIA and the FCC in developing and maintaining the national broadband map in accordance with the deadlines established by the NTIA. The contractor must provide a work plan that meets the deadlines set by the NTIA.

d) Security and Confidentiality

Applicants must provide a description of what methods the applicant intends to employ to ensure both transparency of process and protection of collected data, including Confidential Information as defined herein.

The State will require that NDAs be established with all information providers to the project to protect their data and to define how the data can be shared with the State and the public. To the extent allowable by provider and consumer confidentiality, we will request that the data be delivered in the spatial data formats requested by NTIA and as described below.

- Explicit description of X,Y within desired projected coordinate system
- Delivery in ESRI file geodatabase format
- And, as possible, conforming the FGDC address standard

2) Project Feasibility

a) Applicant Capabilities

Applicants must provide a detailed budget narrative providing detailed description of proposed project costs (including a detailed description of any proposed expenditures for the purchase of computer hardware, software, other information systems or the compensation of information technology personnel that will be used to collect and store all required data) and describing any proposed sources of in-kind match. The budget narrative must provide sufficient explanation of each budget category in order to establish the need for the funds in each category, and the basis for figures used. The budget narrative must be accompanied by a spreadsheet supporting how the budget request was calculated. Applicants that include requests for Broadband Planning activities within their application must provide a separate budget narrative and spreadsheet for the planning portion of their request. All applicants must demonstrate that they have the ability to secure the funding necessary to meet the required 20 percent non-federal matching contribution.

The State of North Dakota intends to issue a Request for Proposals (RFP) for the most comprehensive proposal that adopts the approach specified in this application. At this time our budget is a high level estimate of what we think it will cost to perform the required responsibilities. The selection of a contractor will help us refine in greater detail the specifics of what each activity will cost. See budget estimates in the attached budget narrative.

b) Applicant Capacity, Knowledge and Experience

Applicants must provide a description of applicant qualifications, including knowledge and experience of the applicant and the associated project personnel with conducting projects of similar scope and scale, including dealing with broadband or telecommunications technology, overseeing the projects that collect broadband or telecommunications-related data, or Geographic Information System (GIS) data.

Governor Hoeven has designated the North Dakota Information Technology Department as the single eligible entity to receive funding under this NOFA. The Information Technology Department (ITD) is responsible for all wide area network services planning, selection, and implementation for all state agencies, including institutions under the control of the State Board of Higher Education, counties, cities, and school districts. ITD is also responsible for computer support services, software development, statewide communications services, standards for



providing information to other state agencies and the public through the internet, technology planning, process redesign and quality assurance.

In addition, ITD hosts and maintains the State's Geographical Information System infrastructure for all state agencies. The North Dakota GIS Hub is comprised of geospatial data storage, data services, and application interfaces, making it ideal for storing and distributing data resulting from the broadband mapping project. State agencies use the data services and interactive mapping on the GIS Hub to make over 200 geospatial datasets available to all levels of government, the private sector, the public, and projects such as broadband mapping.

The State will partner with North Dakota State University (NDSU) Department of Geosciences to perform third party data verification. NDSU is one of North Dakota's two research institutions. With more than 13,000 students, NDSU is listed in the top 100 of several National Science Foundation (NSF) annual research expenditure rankings in the areas of chemistry, physical sciences, agricultural sciences and social sciences. The U.S. Department of Commerce Economic Development Administration awarded NDSU's Research & Technology Park the national Excellence in Technology-Led Economic Development Award in 2006.

NDSU's Department of Geosciences, a component of the College of Science and Mathematics, is recognized for world-class research in Climate Change and Environmental Quality. Faculty research has been published in Nature, PNAS, Computers and Geosciences, and Geology among other high profile journals. As of August 2009, the Department has 5 tenure-track faculty and two instructors. The Department offers a B.S. degree in Geology, a minor in Geography, a minor in Environmental Geology and was a force in the establishment of M.S. and Ph.D. graduate programs in Environmental and Conservation Sciences (ECS) in 2002. In addition to maintaining a thriving undergraduate degree program, Department of Geoscience faculty are primary advisors to numerous students in the ECS, Biology, Civil Engineering, and Physics graduate programs. The Department of Geosciences and North Dakota State University have worked together to make significant gains in research capacity.

The State's RFP (for contracted services) will require extensive knowledge and experience in mapping as well as skills and resources necessary to assist North Dakota in obtaining an effective broadband map meeting NTIA requirements. Our RFP will seek skills and experience in obtaining data, GIS mapping, assessing demand, and developing strategies to stimulate demand.

Both the ITD and NDSU will utilize the appropriate resources within their respective entities. Appendix A includes a bio of the key personnel working on the project.

3) Expedient Data Delivery

Applicants must provide a timeline for major project goals, including anticipated dates of data delivery. This timeline should be ambitious and designed to facilitate the delivery of all data required by the *Technical Appendix*. NTIA will have a preference for the provision of a substantially complete set of availability data by November 1, 2009. Applicants that cannot

provide a substantially complete set of availability data by November 1, 2009, may propose to provide an alternative data set by that date. Applicants must demonstrate that they have the ability to complete the project requirements within the proposed timeline, including the requirements to provide a substantially complete set of all broadband mapping data on or before February 1, 2010 and to complete such data collection by March 1, 2010. All data provided in the first collection should be accurate as of June 30, 2009.

The State will complete our data collection and mapping deliverables to meet the three deliverable benchmarks as identified in the NOFA. The State will provide incentives for provider participation to share their data in formats comparable to Technical Appendix A. The State will create a list of all service providers (telco, cable, wireless, broadband over power line, and WISP) and ask if they can supply address level data for all subscribers in NOFA compliant format. If some providers do not provide adequate data request responses, we will fall back on using third party data and sampling methods to estimate a provider's presence. The State will also make a significant effort to locate those customers living in non-addressed portions of the State, with our goal being to have all data completed by January 2010, consistent with Technical Appendix A.

4) Process for Repeated Data Updating

Applicants must provide a description of what methods the applicant intends to use to provide for repeated updating of data on at least a semi-annual basis continuing for at least five (5) years after the date of the initial collection.

The State's mapping and planning process relies strongly on the engagement with, and collaboration by, local agencies, authorities and stakeholders from North Dakota. The contractor will formalize collaboration with the provider community through NDAs and surveys during the mapping of infrastructure process. The process will include all the criteria of the initial data gathering, accuracy and verification processes, and will ensure a repeatable process that is acceptable to all entities. By utilizing the existing relationships established through STAGEnet, along with the assistance of the contractor, a sustainable solution will be created.

The State understands the importance of continually maintaining the data and therefore is proposing to hire a full time GIS analyst. The hiring process will commence on notification of a successful award in this funding cycle. This individual will work in the telecommunications division at ITD and work closely with the contractor, NDSU, the ND Geographical Information Systems community, the STAGEnet community, and the service providers.

5) Planning and Collaboration

Applicants must provide a description of how the applicant intends to collaborate with state-level agencies and local authorities in carrying out the mapping effort. Applicants that include a planning component must provide a description and justification on how well the proposed planning process will address one or more of the projects identified earlier in the BDIA.

NTIA: State Broadband Data and Development (Mapping Applications)

The State will implement a comprehensive, inclusive and transparent planning and collaboration approach to ensure that deployed broadband infrastructure and services will be adopted and utilized to achieve North Dakota's social and economic development priorities. The State recognizes that mapping and deployment of broadband infrastructure is an important step to achieve goals such as improving access to quality jobs, health care, education, library information access, or public safety.

This application seeks funding to solve four problem areas that inhibit North Dakota from expanding broadband adoption and utilization:

- 1. Limited information exchange and lack of needed collaboration to expand broadband adoption and use to advance North Dakota's priority social and economic development goals in all regions of the state.
- 2. Lack of valid and reliable data regarding North Dakota broadband service needs and barriers preventing expanded adoption.
- 3. Inability to accurately articulate levels of current and future demand for broadband services for businesses, households and community anchor institutions.
- 4. Absence of coordinated regional leadership to plan and implement local sustainable adoption efforts.

Development of a comprehensive plan for addressing these four problem areas will be identified in the scope of work for the RFP.

Appendix A

Biographical Information

Lisa Feldner, Ph. D., Chief Information Officer

Information Technology Dept. State of North Dakota 600 E Boulevard Ave, Dept 1120 Bismarck ND 58505 701-328-3193 Ifeldner@nd.gov

EDUCATION

2003 PhD, University of ND, Educational Leadership
1990 MS, Minot State University, Mathematics
1986 BS, Minot State University, Computer Science
1986 BS, Minot State University, Business Education

POSITIONS

2006-present Chief Information Officer, State of North Dakota									
	Governor Hoeven, the Chief Information Officer (CIO) oversees								
technology activities in state and local government, K-12, higher education, and									
manages a staff of over 300 employees and an annual budget of over \$60 million.									
	Governor's Cabinet, State of North Dakota								
2006 - present	Chair, ND Criminal Justice Information Sharing Board								
2006 - present	Member, ND Geological Information Systems								
2006 - present	Member, ConnectND Executive Board								
2007 - present	Chair, ND Statewide Longitudinal Data System Committee								
2009 - present	Chair, ND Health Information Technology Advisory Committee								
2006 - present	Member, National Association of State Chief Information Officers								
2007 - present	Member, NASCIO Health IT Working Group								
2001 - present	Member & Past Chair, ND Education Technology Council								
2001 - 2006	Member, Technical Committee of ND State Network								
2000 - present	Member & Former Chair, North Dakota Association of Technology Leaders								
2000 - present	Member, North Dakota Council of Educational Leaders								
2000 - 2006	Superintendent's Cabinet, Bismarck Public Schools								
1995 - 2006	Leadership Team, Bismarck Public Schools								
1991 - 2005	Founder & Director, Teaching and Technology Conference								
1991 - 2006	Director of Technology, Bismarck Public Schools								
1989 - 1991	Assistant Technology Coordinator, Minot Public Schools								

Bonita (Bonnie) Neas

Vice President for Information Technology

Division of Information Technology

NDSU Dept. 4500

204 IACC

P.O. Box 6050

Fargo, ND 58108-6050

(701) 231-8640

e-mail: <u>bonnie.neas@ndsu.edu</u> <u>URL: www.ndsu.edu/vpit</u>

EDUCATION

1989 MBA, North Dakota State University
1982 B.A., Mayville State University

POSITIONS

2007-	Vice President for IT, NDSU
2007-	President's Cabinet, NDSU
2006 - 2007	Deputy CIO for ConnectND (ND's ERP system), ND University System
2004 - 2006	Associate VP for Federal Government Relations in the Division of Research,
Creative Acti	vities and Technology Transfer.
2005 - 2008	EDUCAUSE Cyberinfrastructure Steering Committee
2002 - 2005	EDUCAUSE Evolving Technologies Committee; Chair, 2004-2005
2004 - 2008	EDUCAUSE Broadband Policy Group Steering Committee
2003-	Northern Tier Network Executive Committee Member (ND representative); Co-
Chair 2003-20	005
2003 - 2004	Internet2 OSAND Board
2003 - 2007	Director of the Center for High Performance Computing, NDSU
2003 - 2004	Internet2 Board of Trustees
2003 - 2004	Internet2 Audit Committee
2003 - 2004	EDUCAUSE Midwest Regional Conference Program Committee
2002 - 2005	EDUCAUSE Net@EDU Advisory Committee
2002 - 2006	Policy Committee, NDSU
2000 - 2004	Assistant Vice President for Federal Government Relations
1999 - 2000	EDUCAUSE Annual Conference Committee
1999 - 2004	Chair, Great Plains Network Executive Council
1997 - 2004	Internet2 Networking Planning and Policy Advisory Council; Chair 2003-2004
1996 - 2005	Great Plains Network Executive Council
1993 - 2000	Director of Information Technology Services, NDSU

NTIA: State Broadband Data and Development (Mapping Applications)

1993-	President's Council, NDSU
1990 - 1992	Assistant to the President, NDSU
1984 - 1990	Manager of User Services, Computer Center, NDSU
1982 - 1984	Computer Center Director, Mayville State University

PUBLICATIONS

- Bartel, Charles, John Bojonny, Emilio DiLorenzo, James Duncan, Leslie Hitch, Alan McCord, John Meerts, Pablo Molina, Bonita Neas, Michael Roy. "Surveying the Digital Landscape". EDUCAUSE Review. November/December 2004. 78-92.
- B. Decker, B. Neas. "Research Universities and the Central IT Organization: Rebuilding the Partnership," EDUCAUSE Review, May/June 2003.

OTHER ACCOMPLISHMENTS

- Principal Investigator (PI) or Project Leader (PL) for following grants and contracts:
 - PL: Northern Tier Network—North Dakota (NTN-ND): \$3.25M, Department of Defense, Defense Research and Engineering Network
 - PL: Northern Tier Network—North Dakota: State of ND, \$2,773,800 (match of federal).
 - PI: Northern Tier Network Consortium Plan for the Member States of Idaho, Montana, North Dakota and South Dakota: NSF Shared Cyberinfrastructure (SCI), SCI 0549090: \$200,000
 - o PI: Center for High Performance Computing: US General Services Administration, \$1,490,250
 - Center for High Performance Computing: ND EPSCoR, \$222,329
 - PI: Sendit (K-12 Network management); ND Department of Public Instruction,
 \$2,854,698
 - PI: Dakota Link High Performance Network Connection in Support of Meritorious Research; NSF ANI-9810225: \$2,370978
 - PI: First Virtual Conference on Genomics and Bioinformatics; NSF ANI 0139651: \$57.552.
- Awarded by ND Governor, the Information Technology Council of North Dakota's "Outstanding Achievement in Education" in 2006. The award recognized the contributions to enhance research and education in the state through the advancement of information technology over a thirty year period.
- Testified about rural networking issues before the U.S. Senate's Commerce, Science, and Transportation Appropriation Committee and U.S. President's Information Technology Advisory Committee (PITAC).
- NSF/CISE Year 2000 Committee of Visitors panel that performed a three-year review of the ANIR program.
- 1990-2003, served yearly on numerous NSF/CISE/ANIR review panels including NMI program.
- Featured in The Chronicle of Higher Education: http://chronicle.com/free/v47/i17/17a04301.htm

Peter G Oduor

Assistant Professor (Geosciences Department)
North Dakota State University
227 Stevens Hall
Fargo, ND 58105-5517
701-231-7145
Peter Oduor@ndsu.edu

EDUCATION:

1993 B.Ed. (Sci) Mathematics and Physics, Egerton University

2001 MS Geology, Bowling Green State University

2004 Ph. D., Geological Engineering, University of Missouri-Rolla

POSITIONS:

2005 - Assistant Professor (Geosciences Department) North Dakota State University
2004-2005 Visiting Assistant Professor (Geosciences / Civil Engineering) North Dakota
State Univerity

2004 Post-doctoral fellow, University of Missouri – Rolla

Graduate Research Assistant / Instructor, University of Missouri-Rolla
 Graduate Research Assistant / Instructor, Bowling Green State University

FUNDED PROPOSALS

- **Peter G. Oduor** (PI), F. Casey, North Dakota Agricultural Experiment Station (NDAES), Seed research on microbial-induced attenuation of nitrates in a biofilm, \$10,000, Date submitted: 8/30/2005, Project Dates (January 1, 2006 August 31, 2006)
- Peter G. Oduor (PI), P. Gibbs, North Dakota Agricultural Experiment Station (NDAES), Seed research on bioimaging of stressed Methanobrevibacter Ruminantium spp. at water-sediment interface, intra- and inter-sediment matrices, \$10,000, Date submitted: 8/30/2006, Project Dates (October 15, 2006 August 31, 2007)
- Peter G. Oduor (PI), T. Berg, L. Kotchman, North Dakota Forest Service (NDFS / USDA), Delineating potential forest stewardship area using weighted overlays and suitability analyses, \$38,000, Date submitted: 5/15/2006, Project Dates (June 01, 2006 January 31, 2007)
- Peter G. Oduor (PI), T. Berg, L. Kotchman, North Dakota Forest Service (NDFS / USDA), Georegistration of past and current stewardship plans using CLUs, updating stewardship geodatabase and related web portal development in support of NDSAP, \$44,500, Date submitted: 5/07/2007, Project Dates (May

- 29, 2007 August 31, 2008)
- Peter G. Oduor (PI), Nakamura A., North Dakota Forest Service (NDFS / USDA), Easement studies of economic impact of FSP in Red River Basin, \$22,000, Project Dates (August 23, 2007 August 20, 2009)
- Francis X. Casey, Thomas Desutter, **Peter G. Oduor**, Eakalak Khan, National Science Foundation, Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), *Effects of Animal Manure Storage and Disposal on the Fate and Transport of Manure-Borne Hormones*, \$440,377, Project Dates (August 29, 2007 August 31, 2010).
- Peter G. Oduor (PI), North Dakota Forest Service (NDFS / USDA), ArcGIS Server Design & Configuration for Forestry Resource Management Applications, \$34,000, Date submitted: 01/08/2008, Project Dates (August 31, 2008 August 31, 2010)
- Peter G. Oduor (PI), G. Padmanabhan, ND Department of Health/EPA, Geospatial Database Design, Vulnerability Modeling & Sediment Load Quantification for the Spring Creek and Upper James River Watershed, ND Using AnnAGNPS, \$51,748, Project Dates (September 15, 2008 September 30, 2010).
- Peter G. Oduor, North Dakota Forest Service (NDFS / USDA), Designing an Integrated Decision and Planning Support System for Forest Resource Assessment & Strategy, \$64,765, Project Dates (Jan 01, 2009 Jan 1, 2011).
- Peter Oduor (PI) & Michael Kangas (National Association of State Foresters),
 2009 NASF State Assessment Project, (Geosciences portion \$8,644), Project
 Dates (March 01, 2009 February 28, 2010).

PUBLICATIONS

- Peter G. Oduor and T.M. Whitworth, Transient modeling of hyperfiltration effects, Mathematical Geology, Volume 36, Number 6, August 2004, Pages 743-758.
- **Peter G. Oduor** and T.M. Whitworth, Mechanistic interpretation of ionic azo dye flux decline through compacted Na-montmorillonite membrane, Journal of Membrane Science, Volume 265, Issues 1-2, November 2005, Pages 85-93.
- Peter G. Oduor, F.X. Casey and A. Podoll, Modeling of concentration polarization layer evolution and breakthrough concentrations in dead-end hyperfiltration, Journal of Membrane Science, Volume 285, Issues 1-2, November 2006, Pages 376-384.
- **Peter G. Oduor**, P. Gibbs, X. Santos, A. Podoll, Concentration polarization layer width approximations for an organo-macromolecule tracer at ultra-high hydraulic gradients, Desalination 239 (2009), Pages 175-190.
- **Peter G. Oduor**, X. Santos, J. Abwawo, and J. Dunham, Permselective membrane fouling during azo-dye wastewater treatment, Clean; Soil Air Water Journal, Volume 36, Issue 2, February 2008, Pages 171 179.
- Casey, F.X.M., **P. Oduor**, H. Hakk, G. L. Larsen, and T.M. DeSutter, 2008. Transport of 17β-Estradiol and Testosterone in a Field Lysimeter. Soil Sci. 173, Pages 456-467.

- **Peter G. Oduor**, X. T. Santos, F. X. Casey, Solute Exclusionary Properties of Porous Shale Wafers, J. of Porous Media, Volume 12, Number 6, Pages 501 518, (2009).
- Lyndon M. Pease, **P. Oduor**, G. Padmanabhan, Estimating Sediment, Nitrogen, and Phosphorous Loads from Pipestem Creek Watershed, North Dakota, Using AnnAGNPS, Computers and Geosciences (In Press).
- Peter G. Oduor, L. Kotchman, G. Ale, and J. Vinje, 2009, North Dakota Redesigns Forest Inventory, Assessment Programs Using GIS, ArcNews, Vol. 30, No. 4, Page 33.
- **Peter G. Oduor**, L. Kotchman, T. Berg, G. Ale, X. Santos, J. Vinje, K. Leidholm, Using GIS to inventory existing and identify potential forest stewardship areas, ESRI publications. (Invited book chapter).
- Michelle L. Petersen, Wayne E. Thogmartin, Greg M. Forcey, Peter Oduor, George M. Linz, and William J. Bleier, Varying observation scale for modeling breeding blackbird abundance in the prairie pothole region of North Dakota, AUK (In Review).
- Eunsu Lee, K. Farahmand, **P. Oduor**, Importance of segment-level transportation dynamics for origin-destination container movement routes, Transportation Research Part E: Logistics and Transportation Review Journal (In Review).
- Peter G. Oduor, X. Santos, K. Forward, N. Sharp, C. Bue, F. Casey, J. Abwawo, Semi-empirically derived petrophysical and thermodynamical coefficients of permselective shales Implications on ore mineralization, Journal of Membrane Science, (In Press), Accepted Manuscript, Available online 22 July 2009 (doi:10.1016/j.memsci.2009.07.023) (PII: S0376-7388(09)00545-6).
- Navaratnam Leelaruban, Adnan Akyuz, Peter Oduor, G. Padmanabhan, Geospatial Analyses of Drought Impact and Severity in North Dakota, USA Using Remote Sensing and GIS, (In Review) (18th Conference on Applied Climatology Proceedings, 17–21 January 2010, Atlanta, GA).

NTIA: State Broadband Data and Development (Mapping Applications)

Duane M Schell CPA

Director, Telecommunication Division Information Technology Dept. State of North Dakota 600 E Boulevard Ave, Dept 1120 Bismarck ND 58505 701-328-1002 dschell@nd.gov

EDUCATION

1991 BS, University of Mary

POSITIONS

2009 -	Director, Telecommunications Division, ITD, State of ND
2007 - 2009	Manager, Business Communications Technology, ITD, State of ND
2004 - 2007	Computer Systems Manager, ITD, State of ND
2001 - 2004	Systems Administrator, ITD, State of ND
1997 - 2001	Director, Management Information Systems, Dept of Public Instruction, State of
ND	
1996 - 1997	Systems Administrator, Dept of Public Instruction, State of ND
1995 - 2001	Owner, IT Consulting
1994 - 1996	IT Coordinator, Housing Finance Agency, State of ND
1991 - 1994	Auditor, Tax Dept, State of ND

NTIA: State Broadband Data and Development (Mapping Applications)

Bob Nutsch

GIS Manager
State of North Dakota
600 East Boulevard Ave, Dept 112
Bismarck, ND 58505
701-328-3212
bnutsch@nd.gov

EDUCATION

1989 M.S. Geology, University of Idaho1984 B.S. Geology, University of Idaho

POSITIONS

2001-present	GIS Manager, Information Technology Department, State of North Dakota,
Bismarck, ND	
2000 - 2001	North American Product Manager, Maptek, Lakewood, CO
1996 - 2000	Technical Services Manager, Maptek, Lakewood, CO
1992 - 1996	Technical Support, Maptek, Lakewood, CO
1990 - 1992	Technical Systems Geologist, Homestake Mining Company, Golden, CO
1986 - 1990	Exploration Geologist, Homestake Mining Company, Lead, SD

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

	Grant Program Function or Activity	Catalog of Federal Domestic Assistance	Estimated Unob	oligated Funds						
	(a)	Number (b)	Federal (c)	Non-Federal (d)		Federal (e)		Non-Federal (f)		Total
1.	Program Management	11.558	\$	\$	\$	625,000.00	\$	214,500.00	\$	(g) 839,500.00
2.	Data Acquisition					1,380,000.00				1,380,000.00
3.	Data Management / Reporting					885,400.00		1,413,233.00		2,298,633.00
4.	Broadband Analysis and Maintenance					825,000.00				825,000.00
5.	Totals		\$	\$] \$	3,715,400.00	\$ [1,627,733.00	\$	5,343,133.00

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	Τ			GRANT PROGRAM.	FUN	ICTION OR ACTIVITY	_	·	Т	Total
•	(1)			2)	(3))	(4)	1	(5)
		Program Management		Data Acquisition		Data Management / Reporting		Broadband Analysis and Maintenance		`,
a. Personnel	\$	565,755.00]\$	·	\$	273,065.00	\$]	838,820.00
b. Fringe Benefits		190,781.00			-	99,415.00			+	
5. I mige Denemb	+				 	99,415.00			1	290,196.00
c. Travel		18,936.00				4,800.00]	23,736.00
d. Equipment		7,890.00				234,987.00				242,877.00
e. Supplies		6,237.00				18,264.00				24,501.00
f. Contractual				1,380,000.00		1,658,602.00		825,000.00		3,863,602.00
g. Construction										
h. Other		49,901.00				9,500.00			-	59,401.00
i. Total Direct Charges (sum of 6a-6h)		839,500.00		1,380,000.00		2,298,633.00		825,000.00	\$	5,343,133.00
j. Indirect Charges									\$	
k. TOTALS (sum of 6i and 6j)	\$	839,500.00	\$	1,380,000.00	\$	2,298,633.00	\$	825,000.00	\$	5,343,133.00
7. Program Income	\$	0.00	\$	0.00	\$	0.00	\$	0.00	\$	

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		SECTION	С	- NON-FEDERAL RESC	UR	RCES				
	(a) Grant Program		(b) Applicant			(c) State		(d) Other Sources		(e)TOTALS
8.	Program Management		\$	0.00	\$	214,500.00	\$		\$[214,500.00
9.	Data Acquisition			0.00		0.00				0.00
10.	Data Management / Reporting			0.00		1,413,233.00]			1,413,233.00
11.	Broadband Analysis and Maintenance			0.00		0.00				0.00
12.	TOTAL (sum of lines 8-11)		\$		\$	1,627,733.00	\$		\$	1,627,733.00
		SECTION	D	- FORECASTED CASH	NE	EDS	11 .		<u> `_</u> _	
		Total for 1st Year		1st Quarter		2nd Quarter	Τ	3rd Quarter		4th Quarter
13.	Federal	\$ 1,504,080.00	\$	376,020.00	\$[376,020.00	\$	376,020.00	\$[376,020.00
14.	Non-Federal	\$ 768,237.00		192,060.00		192,059.00		192,059.00	Ī	192,059.00
15. ⁻	FOTAL (sum of lines 13 and 14)	\$ 2,272,317.00	\$	568,080.00	\$[568,079.00	\$	568,079.00	\$	568,079.00
	SECTION E - BUD	GET ESTIMATES OF FE	DE	RAL FUNDS NEEDED	FO	R BALANCE OF THE	PF	ROJECT		
	(a) Grant Program					FUTURE FUNDING				
			<u> </u>	(b)First	_	(c) Second		(d) Third		(e) Fourth
16.	Program Management		\$	189,080.00	\$	189,080.00	\$	189,080.00	\$	189,080.00
17.	Data Acquisition			265,000.00		210,000.00		210,000.00		210,000.00
18.	Data Management / Reporting			100,000.00		55,000.00		55,000.00		55,000.00
19.	Broadband Analysis and Maintenance			45,000.00		0.00		0.00		250,000.00
20. TOTAL (sum of lines 16 - 19)				599,080.00	\$	454,080.00	\$	454,080.00	\$	704,080.00
		SECTION F	- C	OTHER BUDGET INFOR	MA	TION	L.'			
21. [1. Direct Charges: 5,343,133 22. Indirect Charges: 0									
23. F	3. Remarks: Total grant request is for \$3,715,400 - State of ND match is \$1,627,733									

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North Dakota Broadband Mapping Project Budget Narrative

The State has developed the following narrative and spreadsheet after collaborating with GIS and information technology experts from within the state. The State is requesting a broadband mapping grant of \$3,715,400 to complete the project as defined by NTIA.

The budget is organized into four categories: Program Management, Data Acquisition, Data Management/Reporting, and Broadband Analysis/Maintenance. Personnel, fringe benefits, travel, equipment, supplies, and contractual costs are calculated over a 5-year time span. Our budget includes a full-time program coordinator who will administer this grant and be responsible for obtaining the outlined requirements.

Broadband Mapping Budget Estimate

	Budget	Grant Funds	In-Kind Funds
Program Management	\$ 839,500	\$ 625,000	\$ 214,500
Data Acquisition	\$ 1,380,000	\$ 1,380,000	\$ 0
Data Mgmt / Reporting	\$ 2,298,633	\$ 885,400	\$ 1,413,233
Broadband Analysis / Maint.	\$ <u>825,000</u>	<u>\$ 825,000</u>	\$0
Total	\$ 5,343,133	\$ 3,715,400	\$ 1,627,733

Contracted Work

Contractors will be hired to conduct the spectrum analysis, broadband assessment, broadband planning, and data validation. The work activities will include project planning, stakeholder identification, survey and questionnaires, non-disclosure agreements, demographic and geographical layering, assessment modeling, and broadband planning. We are planning on using students and staff at North Dakota State University to assist in some of these areas. The budget request for federal funds includes the following activities:

Broadband Activities	Federal Funds
Broadband Mapping / Collection / Surveying	\$ 1,380,000
Data Validation and Verification	\$ 320,000
Interactive Mapping	\$ 245,000
Broadband Assessment Modeling	\$ 165,000
Spectrum Analysis	\$ 500,000
Broadband Planning / Ongoing	\$ <u>160,000</u>
Total Contractual Request	\$2,770,000

State Matching Funds

The State intends to provide two sources of in-kind match for this grant: 1) the North Dakota GIS Hub and 2) emergency services data.

1) North Dakota GIS Hub

The North Dakota GIS Hub will play a large role in the broadband mapping project and therefore the State intends to use a portion of cost of the development and maintenance of the GIS Hub as in-kind match for this project. The North Dakota GIS Hub is an infrastructure comprised of geospatial data storage, data services, and application interfaces. The GIS Hub will be utilized in two major ways:

- a. Existing base map data on the GIS Hub will be utilized in the development of broadband maps.
- b. Data resulting from the broadband mapping project will stored on and distributed from the North Dakota GIS Hub via data services and interactive mapping.

Initial development of the GIS Hub began in 2001; maintenance and enhancement continue to expand the capabilities and the data holdings of the GIS Hub. Costs include salary, training, data storage, application development, application and service hosting, and base map data development. Incurred, budgeted, and projected costs through 2014 total \$4,566,167. Twenty-percent of this total cost is \$913,233 and will be the in-kind match. This amount is determined by:

- a. The primary purpose of the GIS Hub is to serve state agencies, the public, and the private sector and as such the majority of the GIS Hub development and maintenance cost is applicable to the primary beneficiaries.
- b. Although the broadband mapping project will benefit from all of the past training, development, application development, data development, software licensing, and other components, the broadband mapping project is directly applicable to server and web application hosting costs. This is consistent with ITD billing.
- c. Using the current 2009-2011 Biennium GIS budget as the most applicable guide in determining current and future expenses, server and web application hosting costs account for 20.6% of the total GIS Hub budget.

2) Emergency Services Datasets

The broadband mapping project will utilize the emergency services datasets which include road centerlines, address points, and high-resolution aerial photography. The 2009 ND Legislature provided funds to develop this data set for 911 and other emergency management and planning purposes. This data will be stored on and distributed from the GIS Hub.

The road centerlines and aerial photography will be valuable base map data in the broadband mapping project. The road centerlines and aerial photography can be used in the display of

broadband availability data on static and interactive maps. The address points will serve as a ready source of geocodable data for defining and verifying service areas to the address level.

The cost of the entire emergency services dataset is estimated to be \$2.1 million. Of this amount \$500,000 will be the in-kind match. This amount is determined by:

- a. Address points will be the most directly used dataset in the mapping; the other datasets are used in the display of the data.
- b. A study conducted in June 2008 concluded that developing a statewide address point data set using GPS would cost approximately \$1.2 million. The address point data developed with the emergency services dataset would utilize aerial photography, thus reducing the cost to the estimated \$500,000.



August 11, 2009

Mr. Lawrence E. Strickling
Assistant Secretary for Communications & Information
U.S. Department of Commerce
Herbert Clark Hoover Bldg.
1401 Constitution Ave NW
Washington DC 20230

Dear Mr. Strickling:

This letter hereby designates the North Dakota Information Technology Department, as the designated entity to apply for and receive federal funds under the State Broadband Data and Development Grant Program pursuant to the American Recovery and Reinvestment Act (ARRA), P.L. 111-5 and the Broadband Data Improvement Act (BDIA), Title 1 of P.L. 110-385, 122 Stat. 4096.

The BDIA indicates that states can designate one single eligible entity to conduct broadband mapping for the state. According to VI(C) of Docket No. 0660-ZA-29, applications for funding under the BDIA and ARRA require every eligible applicant to submit a letter of state designation. This letter is intended to serve that purpose for the State of North Dakota.

Inquiries or questions regarding this matter should be directed to Lisa Feldner, CIO, Information Technology Department, 701/328-1000, itd@nd.gov.

Sincerely,

John Hoeven

Covernor

38:34:58

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		
State of	North Dakota, Information Technology Department	partment	
* AWARD NUMBER		* PROJECT NAME	
		North Dakota Broadband Mapping Project	
Prefix:	* First Name:	Middle Name:	ᆗ
Dr.	Lisa	м.	
* Last Name	:	Suffix:	
Feldner			
* Title: Chi	ef Information Officer		•
* SIGNATUF	RE:	* DATE:	
Mike Ressle	er	08/26/2009	

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB 0348-0046

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

1. * Type of Federal Action:	2. * Status of Federal Action:	3. * Report Type:
a. contract	a. bid/offer/application	a. initial filing
b. grant	b. initial award	b. material change
c. cooperative agreement d. loan	c. post-award	_
e. loan guarantee		
f. loan insurance		
Name and Address of Reporting I	Entity:	
Prime SubAwardee	-itity.	
* Name		
State of North Dakota, Information T	Technology Department Street 2	
600 East Boulevard Ave		
* City Bismarck	State ND: North Dakota	Zip 58505-0100
Congressional District, if known: ND-001		
5. If Reporting Entity in No.4 is Subaw	vardee, Enter Name and Address of P	rime:
	•	
6. * Federal Department/Agency:	7. * Federal Pro	gram Name/Description:
Department Of Commerce		
C. T. A. Alexandra Manusch and Millians	CFDA Number, if applic	
8. Federal Action Number, if known:	9. Award Amou	nt, if known:
10. a. Name and Address of Lobbying	Registrant:	
Prefix *First Name N/A	Middle Name	
* I ast Name	Suffix	
N/A		
* Street 1	Street 2	
* City	State	Zip
b. Individual Performing Services (includi		
Prefix * First Name		
N/A	Middle Name	
* Last Name N/A	Suffix	
* Street 1	Street 2	
* City	State	Zip
reliance was placed by the tier above when the transacti	blic inspection. Any person who fails to file the required disc	irsuant to 31 U.S.C. 1352. This information will be reported to
* Signature: Mike Ressler		
*Name: Prefix Dr. *First Name	Lisa Middle N	ame [
* Last Name	Sut	ffix
Feldner		
Title: Chief Information Officer	Telephone No.: 701-328-3190	Date: 08/26/2009
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OMB Approval No.: 4040-0007 Expiration Date: 07/30/2010

ASSURANCES - NON-CONSTRUCTION PROGRAMS

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 (0348-0040), 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 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:

- 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 cost) to ensure proper planning, management and completion of the project described in this application.
- Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- 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.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- 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).
- Will comply with all Federal statutes relating to nondiscrimination. 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.
- 7. 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 or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- 8. Will comply, as applicable, with 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.

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- 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.
- 10. Will comply, if applicable, 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.
- 11. 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 seg.); (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).

- 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.
- 13. 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.).
- 14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
- 15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
- 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.
- 17. 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-133, "Audits of States, Local Governments, and Non-Profit Organizations."
- 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
Mike Ressler	Chief Information Officer
* APPLICANT ORGANIZATION	* DATE SUBMITTED
State of North Dakota, Information Technology Department	08/26/2009

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North Dakota
ORIGINAL

APPROVED

Combined	2	vear	hud	loot
COMBINED	•	ycai	Duu	KEL

	In-Kind	Federal	Total				In-Kind	Federal	Total
Personnel Salaries	76,827	454,794	531,621	1		Personnel Salaries	76,827	454.794	531,621
Personnel Fringe	32,926	181,496	214,422			Personnel Fringe	32,926	181,496	214,422
Travel	1,503	36,852	38,354	Travel: (ap	plicant	Travel	1,503	36,852	38,355
Equipment	626	8,673		error, \$1 n		Equipment	626	8,673	9,299
Supplies	1,879	1,503		shows)		Supplies	1,879	1,503	3,382
Hosting	0	23,520	23,520	•		Hosting	0	23,520	23,520
Rent/Other	7,139	17,063	24,202			Rent/Other	7,139	17,063	24,202
Base Map Contractor	500,000	0.	500,000			Base Map Contractor	282,538	0	282,538
GIS Infrastructure	913,233	, 0	913,233			GIS Infrastructure	0	0	202,338
BB Map Contractor	0	889,853	889,853			Broadband Map Contractor	0	889,853	889,853
Total	1,534,133	1,613,754	3.147.887			Total	403,438	1,613,754	•
	. , ,		<i>,</i> =,			10401	703,430	1,013,734	
	Vear 1			Voor 2					2,017,192

Applicant needs \$403,438 in matching funds and currently shows \$1,534,133, a difference of \$1,130,695. The Applicant shows a total of \$120,900 in match through salaries, fringe, travel, equipment, supplies and rent. We will decrease the excess match by the remainder, The current "Other line is now \$1,460,955, of which \$40,523 is federal. We currently have For purposes of match, we will only count 282,538 of the base map contracotr/GIS infrastructure. With the addition of the rent in the "other" line, we will now show (\$282,538 in the base map contractor line and 0 in GIS infrastructure..will roll up to "Other" in the final budget (hosting, rent, base map contracotr, GIS infrastructure).

	Year 1			Year 2			
	In-Kind	Federal	Total	In-Kind	Federal	Total	irand Total
Broadband Mapping B	udget						
Personnel Salaries							
Program Manager		79,584	79,584		79,584	79,584	159,168
Large Project Oversig	ht	5,250	5,250			0	5,250
Executive Overview	18,415		18,415	18,415		18,415	36,830
Administrative Suppo	19,999		19,999	19,999		19,999	39,998
System Administratio	n	3,528	3,528		3,528	3,528	
Developer/DBA		49,140	49,140		49,140	49,140	•
Personnel Salaries Tota	38,414	137,502	175,916	38,414	132,252	170,666	•
Personnel Fringe	16,463	47,572	64,035	16,463	47,572	64,035	128,070
Travel	751	3,006	3,757	751	3,006	3,757	7,514
Equipment	626	2,505	3,131			. 0	3,131
Supplies	939	751	1,691	939	751	1,691	3,382
Hosting		4,704	4,704		18,816	18,816	23,520
Rent/Other	3,569	8,532	12,101	3,569	8,532	12,101	24,202
Base Map Contractor	500,000		500,000			0	500,000
GIS Infrastructure	913,233		913,233			0	913,233
Broadband Map Contra	ictor	806,728	806,728		83,125	83,125	889,853
Total Mapping	1,473,997	1,011,300	2,485,296	60,137	294,054	354,191	2,839,487
Total Fed						,	1,305,354

Year 1 Year 2 **BroadBand Planning** In-Kind Federal Total In-Kind Federal **Total irand Total** Personnel Salaries 92,520 92,520 92,520 92,520 185,040 Personnel Fringe 43,176 43,176 43,176 43,176 86,352 Travel 15,420 15,420 15,420 15,420 30,840 Equipment 3,084 3,084 3,084 3,084 6,168 Supplies 0 0 **Total Planning**

0 154,200

154,200 308,400

0 154,200 154,200

1,613,754