Project Business Case/Charter

State of North Dakota

Project Name: Broadband Mapping

Project Short Name: BB Mapping

Agency: Information Technology Department

Business Unit/Program Area: Telecommunications

Project Sponsor: Duane Schell

Project Manager: Dirk Huggett

Date: 1/5/2010

Version: 1.0 (Final)

PROJECT DESCRIPTION

Project History

A. *The Recovery Act:* Section 6001(l) of the Recovery Act requires the Assistant Secretary (of the US Dept of Commerce) to develop and maintain a comprehensive, interactive, and searchable nationwide inventory map of existing broadband service capability and availability in the United States that depicts the geographic extent to which broadband service capability is deployed and available from a commercial or public provider throughout each State. The Recovery Act requires the Assistant Secretary to make the national broadband map accessible by the public on an NTIA (National Telecommunications and Information Administration) Web site no later than February 17, 2011. The Recovery Act authorizes NTIA to expend up to $350 million pursuant to the BDIA (Broadband Data Improvement Act) and for the purposes of developing and maintaining a broadband inventory map. Implementation of the BDIA is useful to fulfill Congress' intent to develop a national broadband map as expressed and funded under the Recovery Act.

B. *The Broadband Data Improvement Act(BDIA):* The BDIA is intended to improve data on the deployment and adoption of broadband service to assist in the extension of broadband technology across all regions of the United States.4 Section 106 of the BDIA directs the US Secretary of Commerce to establish the State Broadband Data Program and to award grants to eligible entities to develop and implement statewide initiatives to identify and track the adoption and availability of broadband services within each State. In effecting this purpose, the BDIA provides several eligible uses for grant funds, including uses related to the gathering of broadband-related data at the State level and the development of statewide broadband maps.

C. *The State Broadband Data Program:* In keeping with the Recovery Act's direction that NTIA develop and maintain a comprehensive and interactive national broadband map and the requirements of the BDIA, NTIA has established this grant program. Awardees under this Program will receive grants to fund their collection of broadband-related data as well as funding for planning programs at the State level. Awardees will use the broadband-related data that they collect to develop statewide broadband maps, which will be linked to a Department of Commerce Web page. In addition, the awardees will submit all of their collected data to NTIA for use by NTIA and the Federal Communications Commission (FCC) in developing and maintaining the national broadband map, which will be displayed on an NTIA Web page before February 17, 2011.

Business Need

A map of coverage and level of broadband access over the entire state would provide significant value for a number of state agencies. It could help the Information Technology Department support the Governor's strategic initiatives such as local economic development and wireless initiatives in public safety and provide an additional tool for the Department of Commerce to bring in new businesses to the state.

If the state doesn't develop a broadband map, NTIA and the FCC will be required to develop one to meet their Federal mandate and could charge the state for 20% of the cost of the project they will have to do in order to meet their mandate.

The state also has a need to develop a plan to expand broadband coverage in unserved and underserved areas. This plan is a requirement to access future Federal grant funding for that expansion. A broadband map would be a critical supporting document for that plan and to creating an overall broadband deployment strategy.

Solution Statement

We intend to hire a 3rd party to collect the broadband information and develop a web map application to use on the state's GIS infrastructure pending approval of a grant application we have submitted.

Consistency/Fit with Organization's Mission

ITD's Mission Statement is "To provide leadership and knowledge to assist our customers in achieving their mission though the innovative use of information technology." This project will provide important data regarding broadband coverage across the state to agencies and leadership that will help them develop strategies to better serve the citizens of North Dakota.

PROJECT SCOPE

This project will collect the core data (availability of broadband services), format it as mandated by the federal government, and develop a web map application to provide access to the data.

In Scope:

- Collection of broadband data
- Format data
- Perform a survey to research areas with little data and to confirm data submitted by broadband providers
- Develop web map application
- Model broadband infrastructure and coverage
- Provide an "anchor institution" infrastructure assessment
- Provide final data to NTIA in required format

Out of Scope

- Create a plan for future needs and deployment of broadband for unserved and underserved communities.

BUSINESS ANALYSIS

Business Need/Problem: The state needs to produce a broadband map that meets Federal requirements

Objective 1: Collect and store required data

Measurement: 80% of the providers will provide broadband availability data

Anticipated Benefit(s): Meets Federal expectations, provides the ability to meet other objectives;

Objective 2: Provide the public access to the data via a web interface

Measurement 1: A web application to access this data is available on the state infrastructure to the citizens (Y/N)

Measurement 2: Any citizen can access 100% of the data within the limits of non-disclosure agreements

Anticipated Benefit(s): Citizens can identify what access is available at their address (75% coverage). Businesses looking for potential sites will be able to identify broadband access levels at various sites across North Dakota.

Objective 3: Model data to align with GIS standards

Measurement 1: Data is available by address with a 75% coverage

Measurement 2: Data is available by provider

Measurement 3: Data is available by service area

Anticipated Benefit(s): Allows access to dataset in multiple dimensions using multiple toolsets

Objective 4: Make the data available in the state GIS infrastructure

Measurement 1: Data provided passes 100% of the functional tests to move onto state servers (Y/N)

Measurement 2: Data can be accessed by standard state toolsets (Y/N)

Anticipated Benefit(s): Value of the GIS infrastructure is increased due to the addition of this dataset. Allows the state to develop a statewide plan to expand broadband availability in unserved and underserved areas.

* Objective 5: Provide ability to update data on a regular basis

Measurement: There is a toolset to allow providers to update information (Y/N)

Measurement: There is a process in place to notify the providers to update the data, how to use the provided toolset, a communications plan to encourage updates, and how to perform the actual update to the data & models.

Anticipated Benefit(s): Current requirements are for the data to be maintained for 2 years. It is expected that additional years may be added as funding becomes available.

* The actual success of the designed process to update the data won't be measured until 2011

Objective 6: Provide NTIA with required data

Measurement: Data meets Federal requirements and NTIA accepts upload (Y/N)

Anticipated Benefit(s): Avoid penalties for not providing data and have direct access to data and updates.

COST ANALYSIS

NOTE: This table contains the costs for the whole grant, not just this project. This project is the first section.

	Appropriated	Reallocated	Total
Project (Broadband Mapping) Costs			
Tetra Tech	$760,828		$760,828
Tetra Tech Travel	$45,900		$45,900
Equipment	$9,759	$41,105	$50,864
GIS Infrastructure		$222,601	$222,601
Project/Program Management	$77,594	$-	$77,594
Staff-ITD	$-	$107,938	$107,938
Project Development	$56,430	$-	$56,430
Travel – ITD	$2,254	$2,364	$4,618
LPO Charge	$7,500		$7,500
Supplies	$564	$7,554	$8,117
Miscellaneous	$6,399	$6,240	$12,638
Risk Contingency			$-
Sub-Total	**$967,228**	**$387,800**	**$1,355,028**

Management Reserve			
Sub-Total	**$967,228**	**$387,800**	**$1,355,028**
Project 2 (Broadband Planning) Costs			
Personnel	$271,392	$-	$271,392
Travel	$30,840	$-	$30,840
Equipment	$6,168	$-	$6,168
Supplies	$-	$-	$-
Contractual	$-	$-	$-
Other	$-	$-	$-
LPO Charge	$-	$2,500	$2,500
Miscellaneous	$-	$-	$-
Risk Contingency			$-
Sub-Total	**$308,400**	**$2,500**	**$310,900**
Management Reserve			
Sub-Total	**$308,400**	**$2,500**	**$310,900**
Maintenance Costs			
Development Personnel	$94,050	$-	$94,050
Program Personnel	$129,324	$179,896	$309,220
Travel	$3,757	$3,939	$7,697
Equipment	$16,266	$68,508	$84,773
Supplies	$939	$12,590	$13,529
Contractual	$83,125	$871,001	$954,126
Other	$10,664	$10,399	$21,064
Sub-Total	**$338,125**	**$1,146,333**	**$1,484,458**
Grant Total	**$1,613,753**	**$1,536,633**	**$3,150,386**

There are a number of benefits that can come from the successful conclusion of this project.

- First is cost avoidance. If the state does not perform the project, the Federal Government will be required to do it and could charge the state up to 20% of the costs to gather this information. Federal grant dollars will primarily fund this project and it leverages state infrastructure and personnel as the matching funds. Any charge would likely be "hard" dollars out the door.
- The Department of Commerce can use this broadband coverage data to help entice businesses to North Dakota with the potential of millions of dollars in economic development.
- State leadership can use the broadband coverage information to plan how to expand coverage to unserved and underserved areas and receive additional Federal grant dollars to implement that expansion to ensure North Dakota citizens have access to broadband at an affordable rate.

RISK ANALYSIS

Risks of Performing the Project:

Risk: Poor response rate from Telcos

Impact: Lower quality data and/or a less accurate map

Mitigation: Perform Trace-Route exercise; Leverage contacts in the Legislature, Governor's Office, CIO and Dakota Carrier Network to influence Telco leadership to respond; Survey

Risk: Because the vendor is unable to convert data to correct format, the state can't load data to the state's GIS system.

Impact: Unable to meet Federal deadlines resulting in reduced funding or penalties

Impact: Unable to provide adequate data for leadership during the planning cycle for the 2011-13 biennium

Mitigation: Payment based upon acceptance meeting federal requirements

Mitigation: Ensure GIS Manager is involved throughout the project

Risk: Vendor is unable to deliver quality product on schedule for budget allocated

Impact: Unable to meet Federal deadlines resulting in reduced funding or penalties

Mitigation: Try to build schedule delivery in the contract

Impact: Not enough funding available to complete project

Mitigation: Negotiate a deliverables-based fixed-price contract with vendor

Impact: NTIA rejects data because it doesn't meet minimum quality standards

Mitigation: Add final acceptance criteria that NTIA accepts data

Risks of not Performing the Project:

If the state does not perform this project, federal entities may do the project themselves and either charge the state for the costs or charge the state to access data.

RESOURCE ANALYSIS

The project manager anticipates that planning of this project will take two weeks. The following depicts the resources required for planning. The project manager anticipates that these resources will also be the primary resources to perform the project. It also includes the total amount of anticipated hours that will be required from the resource for the planning time period.

Planning Start Date: 1/11/2009	**Planning End Date:** 1/22/2009	
Resource, Role	**% Time Expected**	**Hours Required**
Duane Schell, Project Sponsor	8%	6
Dirk Huggett, Project Manager	50%	40
Brandy Peterson, Project Coordinator/Procurement Officer	25%	20
Bob Nutsch	10%	8

PROJECT AUTHORITY

Constraints:

The priority of constraints is as follows:

- Scope
- Quality
- Budget
- Schedule

NTIA and FCC must have a national broadband map in place by February 2011. This project delivers data for the Federal effort.

There are no other known constraints on the project.

Assumptions:

- State receives NTIA grant
- NTIA accepts revised schedule timelines

Roles/Responsibilities

Role	*Name, Position*	*Formal Review*	*Informal Review*	*Provide Information*	*Supply Resources*	*Assist*	*Perform*
Executive Sponsor	Duane Schell, ITD, Telecomm Director	X	X	X	X		X
Executive Steering Committee	Duane Schell, ESC Chair	X					
	Lisa Feldner, ITD, State CIO	X					
	Mike Ressler, ITD, Deputy State CIO	X					
	Dan Sipes, ITD, Administration Director	X					
	David Crothers, ND Assoc of Telecommunications Cooperatives, Executive Director	X					
	Brian Kalk, PSC, Commissioner	X					
	Mike Lynk, DES, Director of State Radio	X					
	Laura Willard, DOC, Associate Project Manager	X					
Project Manager	Dirk Huggett, ITD, IT Business Analyst						X
Project Coordinator	Brandy Peterson, ITD, Admin Staff Officer		X	X		X	X
Subject Matter Experts (SMEs)	Bob Nutsch		X	X			X
	Brandy Peterson, ITD, Admin Staff Officer						X

Authority/Escalation

Authority to proceed with this charter is granted to the Project Manager, Dirk Huggett. Any diversion from the aforementioned scope which would materially impact the overall scope, or incur cost, must be approved by the Project Sponsor.

The Project Manager is authorized to utilize the resources necessary to plan the project based on the information above and will be required to receive sign-off on the project plan prior to execution.

APPROVAL

Project Charter Approval

Project Sponsor Name: Duane Schell Action: Approve: ☒ Reject: ☐

Comments:

Project Sponsor Signature: Duane Schell Date: 1-6-10