

U.S. DEPARTMENT OF COMMERCE

Performance Progress Report

2. Award Or Grant Number
46-50-M09053

4. Report Date (MM/DD/YYYY)
04-16-2012

1. Recipient Name
South Dakota Bureau of Information & Telecommunications

6. Designated Entity On Behalf Of:
State of SD/BIT

3. Street Address
700 Governor's Drive,

8. Final Report? Yes No
9. Report Frequency
 Quarterly
 Semi Annual
 Annual
 Final

5. City, State, Zip Code
Pierre, SD 57501-2291

7. Project / Grant Period
Start Date: (MM/DD/YYYY)
12-20-2009

7a. End Date: (MM/DD/YYYY)
12-19-2014

7b. Reporting Period End Date:
03-31-2012

9a. If Other, please describe:
N/A

10. Broadband Mapping 10a. Provider Table

Number of Providers Identified	Number of Providers Contacted	Number of Agreements Reached for Data Sharing	Number of Partial Data Sets Received	Number of Complete Data Sets	Number of Data Sets Verified
49	49	36	0	47	47

10b. Are you submitting the required PROVIDER DATA by using the Excel spreadsheet provided by the SBDD grants office? Yes No
10c. Have you encountered challenges with any providers that indicate they may refuse to participate in this project? Yes No
10d. If so, describe the discussions to date with each of these providers and the current status

N/A

10e. If you are collecting data through other means (e.g. data extraction, extrapolation, etc), please describe your progress to date and the relevant activities to be undertaken in the future

N/A

10f. Please describe the verification activities you plan to implement

Verification activities in progress. See 10h.

10g. Have you initiated verification activities? Yes No

10h. If yes, please describe the status of your activities

1. Collecting data from our hosted speedtest.sd.gov site, FCC Consumer Broadband Test, and several individuals performing "drive-testing", as well as data from licensed data sets from Ookla for Android and iOS devices.
2. Driven over ~44,000 miles testing cellular signal and speeds, collecting over 23,000 cellular speed tests and 1.7 million cellular signal tests.
3. Gathered over 18,300 Speed tests from our portal at SpeedTest.sd.gov.
4. We have a combined total of over 109,000 speed tests from wireless /cellular and wireline services.
5. Continue to utilize internal government resources for data collection and verification (Statewide I/T newsletter, state I/T organization, others to come.)
6. Sent a press release announcing the speedtest.sd.gov site.
7. Collected 415 WiFi hot spots from the public and will continue to improve.
8. Researched and contacted FCC Form 477 filers for inclusion in Data Collection activities, and will continue to do so in new submissions.
9. In the final stages of migrating our provider verification portal to South Dakota data center and servers.
10. We will re-evaluate the success of using our K12 and Higher Education contacts to determine whether using them has been effective for our speed test efforts.

10i. If verification activities have not been initiated please provide a projected time line for beginning and completing such activities

Verification activities have begun.

Staffing

10j. How many jobs have been created or retained as a result of this project?

5.21 FTE

10k. Is the project currently fully staffed? Yes No

10l. If no, please explain how any lack of staffing may impact the project's time line and when the project will be fully staffed

N/A

10m. When fully staffed, how many full-time equivalent (FTE) jobs do you expect to create or retain as a result of this project?

3 FTE

10n. Staffing Table

Job Title	FTE %	Date of Hire
Broadband Capacity Builder	100	12/20/2009
Technology Planning Assistant	100	06/01/2011
Network Architect	45	12/20/2009
Project Manager	33	12/20/2009
Technology Planning Manager	100	12/20/2009
Interns	51	06/01/2011
Broadband Administration	71	12/20/2009
Finance	21	12/20/2009

Sub Contracts

10o. Subcontracts Table

Name of Subcontractor	Purpose of Subcontract	RFP Issued (Y/N)	Contract Executed (Y/N)	Start Date	End Date	Federal Funds	In-Kind Funds
Broadmap, LLC	GIS Mapping	Y	Y	12/01/2010	12/28/2014	1,326,407	252,000
Dakota State University	Broadband Planning	N	Y	09/20/2010	12/28/2014	446,815	0
SD Public Broadcasting	Broadband Planning/ Marketing	N	Y	01/03/2011	12/28/2014	101,885	18,195
Bureau of Information & Telecommunications	Broadband Planning	N	N	01/01/2011	12/28/2014	115,000	0

Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$1,675,592 10q. How much Remains? \$4,053,823

10r. How much matching funds have been expended as of the end of last quarter? \$1,195,626 10s. How much Remains? \$236,715

10t. Budget Worksheet

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	\$1,740,143	\$495,000	\$2,235,143	\$330,838	\$267,316	\$598,154
Personnel Fringe Benefits	\$565,231	\$85,000	\$650,231	\$54,979	\$68,936	\$123,915
Travel	\$143,254	\$20,000	\$163,254	\$18,679	\$0	\$18,679
Equipment	\$790,680	\$357,522	\$1,148,202	\$109,673	\$0	\$109,673
Materials / Supplies	\$5,000	\$0	\$5,000	\$3,526	\$0	\$3,526
Subcontracts Total	\$1,990,107	\$0	\$1,990,107	\$1,049,526	\$270,195	\$1,319,721
Subcontract #1	\$1,326,407	\$0	\$1,326,407	\$891,095	\$252,000	\$1,143,095
Subcontract #2	\$446,815	\$0	\$446,815	\$13,388	\$0	\$13,388
Subcontract #3	\$101,885	\$0	\$101,885	\$35,843	\$18,195	\$54,038
Subcontract #4	\$115,000	\$0	\$115,000	\$109,200	\$0	\$109,200
Subcontract #5	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$495,000	\$474,819	\$969,819	\$108,371	\$589,179	\$697,550
Total Direct Costs	\$5,729,415	\$1,432,341	\$7,161,756	\$1,675,592	\$1,195,626	\$2,871,218
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$5,729,415	\$1,432,341	\$7,161,756	\$1,675,592	\$1,195,626	\$2,871,218
% Of Total	80	20	100	58	42	100

Hardware / Software

10u. Has the project team purchased the software / hardware described in the application? Yes No

10v. If yes, please list

1st Quarter 2012:

\$1,528 - Hewlett Packard - B85609 Notebook computer

\$220.50 - Software House - Acrobat Pro

\$4,840 - Syntech - 1,000 2GB Flash Drives

4th Quarter 2011:

\$495 - Ookla - Custom Speed Test License

\$113.54 - 2 USB Drives

\$504.00 - 3 CONTRIBUTE CS5 WIN FULL LICENSE

3rd Quarter 2011:

\$1,026.71- I-pad and accessories-AT&T- 8/12/11

2nd Quarter 2011:

\$8,760 - (10) Qmapper software

\$759 - printer

\$137.52 - (2) USB flash drives

1st Quarter 2011:

\$43 keyboard

\$318-desktop MS Office software

\$1,495-Ookla software

\$69 - USB flash drive

\$840 - (2) monitors

4th Quarter 2010:

\$11,895-visual studio 2010 application developer software
\$2,475-laptop computer
\$109-blackberry
\$69-keyboard & mouse

2nd Quarter 2010:

\$21,959-virtualization software
\$23,152-servers to host web sites & mapping data
\$6,027-server operating systems

1st Quarter 2010:

\$20,011-ArcGIS license

10w. Please note any software / hardware that has yet to be purchased and explain why it has not been purchased

Additional upcoming purchases may include a couple of iPads (\$1,500), iPhone (\$300), and GPS units (\$4,000) for the address file project.

10x. Has the project team purchased or used any data sets? Yes No

10y. If yes, please list

Data sets were purchased for Year 1 but were not renewed for Year 2. We are continuing to evaluate another source for addressing assistance and verification.

We have purchased a 3rd party data set from Ookla - a 12 month subscription to Speedtest.net Application Mobile Results-All Android/iOS, Cellular/Wifi Results - South Dakota. We also licensed 3 months of historical data, same data set. The cost is \$15,040.

Also, we are working on purchasing Master Street Address Guide (MSAG) from CenturyLink (~\$5,000), per suggestion from a Broadband Advisory Team member. This still won't cover all counties, but it is a text file of addresses of individuals having phones in their homes. An agreement is currently being reviewed by attorneys.

In an effort to validate counties that didn't provide their data - we have obtained a data set from the South Dakota Secretary of State, at no cost, of the physical addresses of 500,000 SD registered voters.

10z. Are there any additional project milestones or information that has not been included? Yes No

10aa. If yes, please list

April Mapping Data Collection Preparation, Submission & Display

Notify Providers (complete)
Gather Data (complete)
Process & Ingest Data (complete)
Provider Verification (complete)
Submission (complete)
Mapping display update (April)

Address Files

33 counties have submitted data
Continue to work with the 911 Governance Board regarding county contacts and their participation
Built web and mobile apps for address validation to be used by interns this summer
Continue to normalize the dataset of South Dakota registered voters from the SD Secretary of State

Broadband Advisory Team (BAT)

BAT quarterly meeting - updated group on all facets of the program
Several timely updates sent to members via e-mail
BAT members providing contacts for Technology Assessments, ideas and contacts for additional videos
Three BAT members providing Public Service Announcements on various cable networks
BAT members frequently providing relevant information to fellow team members
BAT members requesting presentations to their memberships and associations

Technology Planning (formally Technical Assistance) / Computer Ownership Program

Performed 31 Technology Assessments across the state to a wide variety of CAI's
User education and best practice recommendations have been valuable and well received
Statewide press coverage on the program has been continual and very helpful to spread the word
Presentations to CAI's to explain the program continues
Governmental and organizational contacts used to promote the program
Continue to add and update content on program to the state broadband website
SDBI Grant Application and Scoring sheet finalized. Grant application to open up in April.

Community Anchor Institutions (CAI)

Tech Schools, University & K12 tech coordinators, computer teachers and administrators were sent e-mails asking them to have students, faculty and staff take the speed test

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

*Mapping data has been submitted and the verification efforts continue to be refined and improved - yet we continue to struggle with effective methods of comparing and analyzing data. We have employed the efforts of the state demographer for additional perspectives on how to best display and compare the data.

*Struggling to develop more detailed wireless signal radiation maps for internal use that deliver highly localized accuracy. Finding an accepted, repeatable model to develop reliable, locally accurate signal strength maps has been a challenge, and we are seeking vendors capable of assisting with software and/or services.

*Counties have not participated to the extent we expected for submitting address data. We are going to purchase another data set in addition to our own field verification efforts.

*Working on a budget revision proposal for the NTIA. Lessons learned and experiences gained indicate we need to make financial adjustments to improve our success.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project
Data collection with our providers was very successful due to the great participation from the telecommunications providers in supplying their broadband data.

Verification efforts made an enormous improvement over previous submissions as we continue to build upon lessons learned. We were able to extensively scrutinize the accuracy and relevancy of the data collected from the providers as well as speed tests performed in workplaces, homes and on the highways across the state. Several verification analysis processes were used.

A virtual Broadband Advisory Team quarterly meeting was held in January in lieu of asking members to travel across the state in the frigid weather. Turn-out was excellent and it proved to be a successful alternative to consider again next winter.

Technology Assessments with our CAI's is off the ground and running. Assessments have taken place in schools, libraries, city offices, YMCAs and non-profits in large and small communities. CAIs across the state are continuing to register for the technical assessments.

11. Broadband Planning

11a. Please describe progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Be sure to include a description of each major activity / milestone that you plan to complete and your current status

Statewide Broadband Portal - broadband.sd.gov updates:

Publish new and updated static maps

New Javascript (non flash) based interactive broadband map has been published including additional features such as unserved and underserved layers

Advertised speed vs. actual speed test results maps are in progress

Creating high resolution coverage maps to send to each provider to better depict their coverage areas

Continue to make the website more interactive and engaging (broadband stories, WiFi hot spots, Social Media)

Confirm address for speed test participants through address validation changes and improvements for speedtests

Online Mapping Provider Portal is being tested for hosting on state infrastructure. The Provider Portal is currently hosted by our mapping partner BroadMap. We plan to move it to SD data center.

Outreach:

Continue to meet with new groups, trade associations, organizations & conferences - some include SD Telecommunications Association, Governors Office of Economic Development State Conference, East River Electric Rural Electric Economic Development, Inter-Lakes Community Action Partnership, and others

Build promotional videos - additional completed videos include Healthcare / eMedicine and Tribal Relations

Other videos/stories in various stages of completion
 Monitor broadband stories including other states' social media accounts and re-tweet/Facebook meaningful data
 Continue to receive consumer feedback and promote awareness
 Online agriculture, residential and business surveys continue
 Agriculture survey sent to 6,500 Ag producers - on average 35 responses per 66 counties (2300+ responses)
 Appearances on Tech Radio show continue
 Press releases continue to generate statewide coverage on television, radio and in newspapers
 Peer discussions with other states has produced a day long meeting (setup by NTIA) with SBI planners to learn from each other

11b. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

N/A

11c. Does the Project Team anticipate any changes to the project plan for Broadband Planning? Yes No

11d. If yes, please describe these anticipated changes. Please note that NTIA will need to approve changes to the Project Plan before they can be implemented

N/A

Funding

11e. How much Federal funding has been expended as of the end of the last quarter? \$0

11f. How much Remains? \$0

11g. How much matching funds have been expended as of the end of last quarter? \$0

11h. How much Remains? \$0

11i. Planning Worksheet

Personal Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Personnel Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Materials / Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Subcontracts Total	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #1	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #2	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #3	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #4	\$0	\$0	\$0	\$0	\$0	\$0
Subcontract #5	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0
Total Direct Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$0	\$0	\$0	\$0	\$0	\$0
% Of Total	0	0	0	0	0	0

Additional Planning Information

11j. Are there any additional project milestones or information that has not been included?

N/A

11k. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the Project Team is employing

N/A

11l. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project
We continue to have very good response in working with the NTIA office. They are very responsive and we appreciate the high level of cooperation and assistance provided to us.

During the project review process, it was discovered that the federal funds granted and proposed in-kind figure allocations that were utilized in the December 31, 2011 report and prior were incorrect. The total amount figures were correct. This report for the period March 31, 2012 corrects the federal funds granted and proposed in-kind figures to the approved budget figures.

12. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purpose set forth in the award documents.

12a. Typed or Printed Name and Title of Authorized Certifying Official

Deb Larson

12c. Telephone
(area code, number, and extension)

605-677-6411

12d. Email Address

Deb.Larson@state.sd.us

12b. Signature of Authorized Certifying Official

Submitted Electronically

12e. Date Report Submitted
(Month, Day, Year)

06-13-2012