

U.S. DEPARTMENT OF COMMERCE

Performance Progress Report

2. Award Or Grant Number

50-50-M09004

4. Report Date (MM/DD/YYYY)

10-24-2011

1. Recipient Name

Vermont Center for Geographic Information, Inc.

6. Designated Entity On Behalf Of:

N/A

3. Street Address

58 South Main Street, Suite 2,

8. Final Report?

Yes

No

9. Report Frequency

Quarterly

Semi Annual

Annual

Final

5. City, State, Zip Code

Waterbury, VT 05676

7. Project / Grant Period
Start Date: (MM/DD/YYYY)

10-01-2009

7a. End Date: (MM/DD/YYYY)

09-30-2014

7b. Reporting Period End Date:

09-30-2011

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
38	38	10	0	38	38

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

Preliminarily, all the providers have given data to the Broadband Mapping Initiative team. At the time of this report, VT has not completed delivery of the October 1, 2011 data delivery. See Section 10bb of this report for an explanation of the reason for this delay. SBDD program management is aware of the need for a delay in delivery of this October Data Release from VT. Data is still being reviewed and processed at this time. We can verify as of the date of this report all of the data provided is usable.

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

Data Development Methodology: A variety of data source and data collection methods are used to identify the characteristics and geographic extent of broadband service in Vermont. Here is a quick breakdown

- Cable: Mapped to street/street-segment level
- DSL: Mapped as polygons (usually Exchange areas) or address points (list of addresses submitted by provider).
- Fiber Optic: Mapped as address points (list of address submitted by provider)
- Fixed Wireless (WISP): Mapped as polygons (propagation maps prepared by independent contractor using data provided by WISPs)
- Mobile Wireless: Mapped as polygons (data submitted by provider)
- Satellite: Mapped as polygons (data submitted by provider). Providers of satellite-based broadband services claimed that they covered the entire state.

The cable, DSL, fiber optic, and fixed wireless (WISP) layers were "intersected" with Vermont's E911 address point layer to determine broadband availability at the address-level. This information was then intersected with Vermont's 2000 Census Block layer to calculate availability at the block level. The April 1st, 2011 deliverable includes Census block-level data for Census Blocks less than or equal to 2 sq miles, and address level data for Census blocks greater than 2 sq miles.

Mobile wireless and satellite-based broadband polygons were submitted by providers to VCGI. They were formatted to match NTIA specification, but otherwise forwarded as-is.

Vermont's broadband providers submitted data which was used to populate a table listing maximum advertised and typical speeds by Metropolitan Statistical & Rural Service Areas (Cellular Market Areas). This information was used to populate the speed information contained in the submitted broadband, including speed information at the census block level. In numerous cases providers did not submit typical speed information.

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

Future drive testing for mobile wireless availability verification is still under consideration for years 3 and 5 of the contract. The actual coverage of drive testing that will be done is dependent upon the strategy we employ to use the funding in the most meaningful manner to improve data quality and the state's understanding of mobile wireless availability. It may be necessary to perform only one more drive testing exercise. A final decision will not be made this year.

The initial list of Community Anchor Institutions (CAIs) was derived from existing data sources including the VT Critical Facilities Database and Public Libraries Survey from the Institute of Museum and Library Services. Community Anchor Institutions include schools, libraries, medical facilities, public safety facilities, universities and colleges, and other community facilities such as town halls/offices. An email and hard-copy mailing was sent to every institution in the list. They were asked to fill out an online survey. Follow-up emails and phone calls were made to increase the response rate. The data delivered to the NTIA includes all CAIs, but only includes broadband information for a subset. Additional broadband institutions will be added as their information becomes available.

The Team has purchased 3rd party data for verification from InfoGroup USA. Based upon our review of the sample data and additional information provided by InfoGroup, we expect this data should add connectivity verification information for up to 114,000 addresses in VT. Delivery of the InfoGroup data was received in July. We may be able to integrate that data into the final version of our delayed October 1 delivery.

Additionally, field verification and public survey methods will continue for the duration of the grant as described in our original and supplemental grant proposals.

10g. Have you initiated verification activities? Yes No

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

Our Team has collected data for mobile wireless broadband test data covering ~3400 miles of Federal Aid roads in VT. The drive testing was completed by a contractor in June of 2010. The data from the drive testing was received in September of 2010. An assessment of fixed wireless provider coverage was also done by the same contractor. A final report from the contractor was received on November 30, 2010. A copy of the report was included with the December 2010 Quarterly Report package. The contractor's wireless broadband report summarizes the results of in-state verification for both mobile and fixed wireless.

Each broadband provider that supplies broadband service data in some manner to the VT broadband data inventory is given the option to view a final version of their data submission as it will be represented in the NTIA delivery. All of the providers that requested to see what was being submitted to NTIA representing their coverage area received either a copy of the data, a hardcopy map or digital map graphic in accordance with their preference.

The VT BB Mapping Team used the data from surveys conducted by the UVM Center for Rural Studies (CRS) as verification for the data. A full report on the CRS spring 2011 verification activity was included as an attachment to the VT Q2 PPR. (CRS_BB_Map_Verification-2-2011).

Additional verification information is available through the BroadbandVT.org website. In May the Team did a public release of the website as part of a press conference with the Governor of VT. The site allows the public to submit unserved or underserved addresses to the Broadband Mapping Team and it locates the submitted address on the map for the public to see. The VT Dept. of Public Service keeps a record of every report submitted to the site and, if the submitter asks for more information, VT DPS will contact them and let them know when Broadband is scheduled to be available at their address based upon scheduled BTOP and RUS plans in the state.

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

N/A

Staffing

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

6.08

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?

When fully staffed this effort should create or retain between 4-8 FTEs depending upon the activities of the quarter.

10n. Staffing Table

Job Title	FTE %	Date of Hire
Senior Project Manager - VCGI - position maintained	59	10/01/2009

Applied Geographics - position maintained	21	06/15/2010
University of VT, Center for Rural Studies - position maintained	45	10/01/2009
Telecommunications Infrastructure Specialist - Dept. of Public Service	100	10/20/2009
Director of Broadband Information and Coordination - VT Telecommunication Authority	100	10/01/2010
Staff Support - VT Telecommunications Authority - position maintained	10	09/28/2010
Northwest Regional Planning Commission - Planner - position maintained	100	12/01/2010
Marketing Partners - Marketing Specialist - position maintained	100	08/02/2010
Northwest Regional Planning Commission - staff support - position maintained	48	12/01/2010
Staff Support - VCGI - position maintained	20	10/01/2009
Pericle - position maintained	5	01/01/2010

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
Pericle Communications	Propagation Mapping and Drive Testing	Y	Y	01/01/2010	12/31/2011	307,240	0
UVM/Center for Rural Studies	Customer Survey and Verification	Y	Y	10/01/2009	09/30/2014	254,445	0
VT Dept. of Public Service	Data Collection from Providers and Content Management of BroadbandVT.org	Y	Y	09/15/2009	09/30/2014	486,255	0
Applied Geographics Inc.	BroadbandVT.org Website Development	Y	Y	06/15/2010	12/30/2012	94,640	0
Marketing Partners Inc.	BroadbandVT.org Marketing Support	Y	Y	08/02/2010	09/30/2012	121,750	0
VT Telecommunications Authority	Employment of the Director of Broadband Outreach and Coordination	Y	Y	09/28/2010	09/30/2014	525,420	132,975
Northwest Regional Planning Commission	Contract Management and Participation in the Regional Broadband Plan Development	Y	Y	12/01/2010	11/30/2012	250,034	62,509

Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$1,152,154 10q. How much Remains? \$2,390,842

10r. How much matching funds have been expended as of the end of last quarter? \$827,761 10s. How much Remains? \$57,989

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	\$342,220	\$0	\$342,220	\$111,217	\$0	\$111,217
Personnel Fringe Benefits	\$252,032	\$0	\$252,032	\$81,867	\$0	\$81,867

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Travel	\$8,000	\$0	\$8,000	\$5,596	\$0	\$5,596
Equipment	\$21,000	\$0	\$21,000	\$3,396	\$0	\$3,396
Materials / Supplies	\$55,275	\$0	\$55,275	\$14,349	\$0	\$14,349
Subcontracts Total	\$2,388,704	\$195,484	\$2,584,188	\$784,730	\$137,495	\$922,225
Subcontract #1	\$307,240	\$0	\$307,240	\$256,120	\$0	\$256,120
Subcontract #2	\$254,445	\$0	\$254,445	\$64,884	\$0	\$64,884
Subcontract #3	\$486,255	\$0	\$486,255	\$167,929	\$0	\$167,929
Subcontract #4	\$94,640	\$0	\$94,640	\$79,990	\$0	\$79,990
Subcontract #5	\$1,246,124	\$195,484	\$1,441,608	\$215,807	\$137,495	\$353,302
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$6,000	\$690,266	\$696,266	\$100	\$690,266	\$690,366
Total Direct Costs	\$3,073,231	\$885,750	\$3,958,981	\$1,001,255	\$827,761	\$1,829,016
Total Indirect Costs	\$469,765	\$0	\$469,765	\$150,899	\$0	\$150,899
Total Costs	\$3,542,996	\$885,750	\$4,428,746	\$1,152,154	\$827,761	\$1,979,915
% 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

1 workstation - Dell T7500 - \$3396.00

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

The Team is negotiating the purchase of Geocortex development software as part of a statewide partnership purchase. Expectations are that we will be making a purchase sometime during year 3 of the project.

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

10y. If yes, please list

Connectivity Data from InfoGroup USA that contains the following information; Contact id, service provider, connection type, update date, address, address2, city, state, zip, zip4, connection isp, IP, Longitude, Latitude. This data has just been ordered and should be received in July 2011.

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

10aa. If yes, please list

N/A

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing
On August 28, 2011, VT received very heavy rains from Tropical Storm Irene. There was extensive local and regional flooding as a result. Damage estimates as a result of the storm are currently at \$1B statewide. This flooding ultimately impacted every member of the VT Broadband Mapping Team.

11i. Planning Worksheet

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?

Additional information about Broadband Planning activities in this quarter are included in the attached Activities Report from the Director of Broadband Outreach and Coordination in MS Word format included as an attachment in this reporting package.

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

N/A

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

David F Brotzman

Executive Director

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

802-882-3003

12d. Email Address

davidb@vcgi.org

12b. Signature of Authorized Certifying Official

Submitted Electronically

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

11-07-2011