U.S. DEPARTMENT OF COMMERCE	2. Award Or Grant Number
	50-50-M09004

Performance Progress Report	4. Report Date (MM/DD/YYYY)
	01-24-2012

1. Recipient Name	6. Designated Entity On Behalf Of:
Vermont Center for Geographic Information, Inc.	N/A

3. Street Address	8. Final Report?	9. Report Frequency
58 South Main Street, Suite 2,	◯ Yes ⦿ No	⦿ Quarterly ◯ Semi Annual ◯ Annual ◯ Final

5. City, State, Zip Code		
Waterbury, VT 05676		

7. Project / Grant Period Start Date: (MM/DD/YYYY)	7a. End Date: (MM/DD/YYYY)	7b. Reporting Period End Date:	9a. If Other, please describe:
10-01-2009	09-30-2014	12-31-2011	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

All of the providers with broadband services available in Vermont have given data to the Broadband Mapping Initiative team. Tropical Storm Irene caused a delay in receiving and processing availability submissions from the providers that resulted in VT delivering its data on 12/1/2011. See Section 10bb of this report for an explanation of the reason for the late delivery.

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 one more time before completion of the contract. Current thinking is that we will do drive testing again in the summer of 2014 and the results from that effort will be compared to the drive testing results received in 2010. A final decision will not be made this year.

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?

5.39

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
Pericle Communications - Project Manager - position maintained	0	01/01/2010
VCGI - Director of Enterprise GIS Services - position maintained	58	10/01/2009
VCGI - Support Staff - position maintained	18	10/01/2010
Applied Geographics - position maintained	21	06/15/2010
Univ. of VT/Center for Rural Studies - position maintained	27	10/01/2009
VT Dept. of Public Service - Telecommunications Infrastructure Specialist - position maintained	100	10/20/2009
VT Telecommunications Authority - Director of Broadband Information and Coordination - position maintained	100	10/01/2010
VT Telecommunications Authority - Support Staff - position maintained	10	09/28/2010

Northwest Regional Planning Commission - Planner - position maintained	100	12/01/2010
Northwest Regional Planning Commission - Support Staff - position maintained	5	12/01/2010
Marketing Partners - Marketing Specialist - position maintained	100	08/02/2010

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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	09/30/2014	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	12/31/2012	99,140	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

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Funding

10p. How much Federal funding has been expended as of the end of the last quarter? $1,281,456   10q. How much Remains? $2,261,540

10r. How much matching funds have been expended as of the end of last quarter? $834,693   10s. How much Remains? $51,057

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	$122,912	$0	$122,912
Personnel Fringe Benefits	$252,032	$0	$252,032	$90,558	$0	$90,558
Travel	$8,000	$0	$8,000	$6,031	$0	$6,031
Equipment	$21,000	$0	$21,000	$3,396	$0	$3,396
Materials / Supplies	$55,275	$0	$55,275	$15,740	$0	$15,740
Subcontracts Total	$2,388,704	$195,484	$2,584,188	$877,589	$144,427	$1,022,016
Subcontract #1	$307,240	$0	$307,240	$256,120	$0	$256,120
Subcontract #2	$254,445	$0	$254,445	$74,690	$0	$74,690
Subcontract #3	$486,255	$0	$486,255	$186,379	$0	$186,379
Subcontract #4	$99,140	$0	$99,140	$79,990	$0	$79,990

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Subcontract #5	$1,241,624	$195,484	$1,437,108	$280,410	$144,427	$424,837
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	$1,116,326	$834,693	$1,951,019
Total Indirect Costs	$469,765	$0	$469,765	$165,130	$0	$165,130
Total Costs	$3,542,996	$885,750	$4,428,746	$1,281,456	$834,693	$2,116,149
% Of Total	80	20	100	61	39	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 was 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 that produced widespread localized damages. This flooding ultimately impacted every member of the VT Broadband Mapping Team.

1. The town of Waterbury where the VT Center for Geographic Information is located received extensive flooding and the VCGI offices were flooded and had to be evacuated, cleaned and repaired. No project data was lost but the employees of VCGI had to move to temporary locations, re-establish the state data center and support state flood emergency activities. During the month of September and into October the efforts of the VCGI staff were directed entirely to office recovery and supporting state flood recovery needs. Very little NTIA Broadband Mapping work was done.

Many of the Providers also suffered loses in the flooding and their employees had to focus on recovery efforts for local residents and their businesses. As a result data requests were put on hold and data submissions had to wait.

As of the writing of this report the VCGI staff is back in their offices and the BMI team is able to focus on the Broadband Mapping Project again. Data submissions from providers are all in. But, the data processing for the October 1 delivery was delayed and final delivery of the data did not occur until Dec. 1, 2011.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

N/A

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

The Director of Broadband Outreach and Coordination continues to focus on four key areas of activity and communication. Over the past three months communications have included the following: 1)Outreach to businesses and non-profit leaders 2) Press releases and updates to the Vermont Telecommunications Authority (VTA) and BroadbandVT.org websites and Twitter regarding expansion of broadband and cellular service availability 3)Support to ConnectVT (Governor's office) of statewide Connect-the-Dots conference where all levels of educators and associated organizations, policy-makers and providers discussed modernization of school curriculum and policies that take advantage of mid-mile broadband deployments in Vermont. 4) Working with Regional Tech and innovation teams and Vermont government agencies to identify barriers to entry in broadband services and to promote broadband demand and awareness of issues related to digital literacy and digital divide. More information is contained in the full quarterly report supplied by the Director of Broadband Outreach and Coordination that is included with the quarterly PPR as an attachment.

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

See 10bb.

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

1. Scheduling of the planned State Broadband Conference will need to be revised due to the fact the Governor's Office is looking at a later date to better support awareness of the state's BTOP project implementation plans. When the Governor's Office suggests a new date we will contact NTIA to coordinate the change. As noted in previous reports, the Governor of VT is very actively involved in the development of broadband coverage in the state. Coordination with their office in this matter is critical.

2. The Regional Planning Commissions were also impacted by the flooding in the state. The planning and GIS personnel involved with the Regional Broadband Plans were called into regional and local support for flood recovery efforts. This will necessitate a lengthening of their project milestone schedule, but I do not expect the planning activities to go beyond the existing end date already identified. When those shifted milestone dates are finally determined, VCGI will contact NTIA management to request approval for the changes.

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

11i. Planning Worksheet						
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) 02-21-2012