							2. Award Or Grant Number 50-50-M09004		
							4. Report Date (MM/DD/YYYY) 10-24-2011		
1. Recipient Name							6. Designate	ed Entity	On Behalf Of:
Vermont Center fo	r Geographic	Inform	ation, Inc.				N/A		
3. Street Address							8. Final Rep	ort?	9. Report Frequency
58 South Main Str	eet, Suite 2,						Yes		<ul><li>Quarterly</li></ul>
5. City, State, Zip C	ode						No		Semi Annual Annual
Waterbury, VT 056	676								Final
	7. Project / Grant Period 7a. 7b. Start Date: (MM/DD/YYYY) End Date: (MM/DD/YYYY) Reporting Period End Date:				:	9a. If Other, please describe:			
10-01-2009		09-30	-2014	09	9-30-2011		N/A		
10. Broadband	Mapping		10a. Provider Table	!					
Number of Providers Identified	Number of Providers Cor	ntacted	Number of Agreement Reached for Data Sha		Number of Partial Data Sets Received	Number Comple	er of 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									
<ul> <li>Cable: Mapped to street/street-segment level</li> <li>DSL: Mapped as polygons (usually Exchange areas) or address points (list of addresses submitted by provider).</li> <li>Fiber Optic: Mapped as address points (list of address submitted by provider)</li> <li>Fixed Wireless (WISP): Mapped as polygons (propagation maps prepared by independent contractor using data provided by WISPs)</li> <li>Mobile Wireless: Mapped as polygons (data submitted by provider)</li> </ul>									

- 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.

Senior Project Manager - VCGI - position maintained

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

	59	10/01/2009				
Performance Progress Report						

OMB Approval Number: 0660-0034 Expiration Date: 12/31/2013

Date of Hire

FTE %

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

Add Row

Remove Row

### **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	Υ	Υ	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 Commision	Contract Management and Participation inn 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?

Add Row

\$2,390,842

Remove Row

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?	<ul><li>Yes</li></ul>	$\bigcirc$ 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	purchas	ed

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.

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.

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 is still being done. Expectations are that VT will be able to make a full delivery of our data in the November timeframe.

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 has focused on four key areas of activity and communication over the past three months: 1) Outreach to groups who demonstrate and /or have an interest in staying abreast of broadband deployments, Vermont Telecommunications Authority (VTA) activities and initiatives aimed at improving economic development throughout Vermont; 2) Developing website and informational materials for the VTA; 3) Statewide outreach to promote awareness of and participation in the BroadbandVT.org website: 4) Working with Agency of Administration on the development of communications across and between state agencies in support of the statewide database of Web 2.0 applications deployments and uses.

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?
- 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						? \$0
11g. How much matching f	unds have been expen	ided 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

PPR, Page 5 of 7

Performance Progress Report OMB Approval Number: 0660-0034 Expiration Date: 12/31/2013

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

11I. 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	12c. Telephone (area code, number, and extension)					
David F Brotzman	802-882-3003					
Sana i Sioleman	12d. Email Address					
Executive Director	davidb@vcgi.org					
12b. Signature of Authorized Certifying Official	12e. Date Report Submitted (Month, Day, Year)					
Submitted Electronically	11-07-2011					