

U.S. DEPARTMENT OF COMMERCE

Performance Progress Report

2. Award Or Grant Number

36-50-M09010

4. Report Date (MM/DD/YYYY)

04-06-2012

1. Recipient Name

NY State Office of Cyber Security

6. Designated Entity On Behalf Of:

New York State

3. Street Address

Harriman State Office Campus , 1220 Washington Avenue, Bldg. 7A, 4th Fl,

8. Final Report?

Yes

No

9. Report Frequency

Quarterly

Semi Annual

Annual

Final

5. City, State, Zip Code

Albany, NY 12226-1800

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:

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
0	0	0	0	0	0

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

While our most recent outreach efforts did result in three new fixed wireless providers joining the program, we continue to encounter challenges with a small number of providers we would like to have participate. Most of those are fixed wireless providers. The details of those challenges are:

- Intellifiber Networks – Believed to be fiber backbone infrastructure/middle mile only, non-responsive; Status: NY will continue to seek participation as we are interested in mapping fiber backbone/fiber rings to answer economic development questions being asked within our state government.
- Blue Wireless – Remains non-responsive; Status: fixed wireless company, NY will continue to seek participation.
- Lightlink – Remains non-responsive; Status: fixed wireless company, NY will continue to seek participation.
- Logical Net – Non-responsive to requests in R5. Status: fixed wireless company, NY will continue to seek participation.
- Plexicomm – Continued to promise data for R5 but has not delivered to date. Status: fixed wireless company, NY will continue to seek participation.
- Metro PCS - Continues to be non-responsive; Status: small mobile wireless company, NY will continue to seek participation.
- Simtronics/Airxcess – Continues to be non-responsive; Status: fixed wireless company, NY will continue to seek participation.
- Wireless LLC/WINC Communications - Continues to be non-responsive; Status: fixed wireless company, NY will continue to seek participation.
- WNY Net – Continues to be non-responsive; Status: fixed wireless company, NY will continue to seek participation.
- New Edge Networks, Inc. - Status: reseller who has opted out of program.
- Telnes Broadband – Declined to participate in the program. Status: reseller, NY has discontinued collecting data from resellers.
- Towerstream Technologies – Declined to participate in the program. Status: reseller, NY has discontinued collecting data from resellers.

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

Since July of 2010, the NYS Broadband Mapping Team has been receiving independently collected speed data through a joint effort with the Center for Technology in Government (CTG). A web-based application uses “crowd sourcing” to survey and collect information regarding NYS users’ access to broadband services. It allows users to run a speed test to identify the actual broadband speeds they experience at the time the test is taken. The speed data, provider name, technology used and the location where the test was taken are being captured. The data is being used to assist with the verification of information received directly from providers. 7475 NYS residents had taken the speed test as of the end of this reporting period.

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

In March of 2012, we were made aware of the fact the NY State Trooper patrol vehicles are all equipped with Automatic Vehicle Location (AVL) equipment. Using Verizon wireless service, this equipment produces millions of data points (one every few seconds) recording where each vehicle is everyday, all day. When the wireless signal is lost, the data points stop. We believe we can use this data source to determine accurate boundaries of the Verizon mobile wireless signal and use that information to refine the polygons Verizon Wireless voluntarily supplies for our broadband mapping program. We plan to explore this possibility in May of 2012 with the objective of refining our Verizon wireless polygons for our October 1, 2012 deliverables.

We were also recently informed that our Public Utilities Commission performs field work to verify compliance with cable franchise agreements. Also in May of 2012, we plan to explore the possibility of the Commission targeting that field work to assist with our need for independent verification of cable service availability. Again, our objective is to refine cable data for our October 1, 2012 deliverables.

NY has also begun to process and evaluate the results returned in the NTIA Assessment Geodatabase. We believe this will provide new insight into provider supplied data that needs further verification. This information will be used to improve future provider outreach activities and potentially steer us in the direction of additional new verification activities.

10g. Have you initiated verification activities? Yes No

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

This information was also supplied in NY's April 1, 2012 Methodology Paper

Verification List:

1. Automated tools
 - a. Domain and topology rules in delivery geodatabase
 - b. Submission scripts
 - c. Feature dataset cross checks
2. Provider website research
3. Crowd-sourced data
 - a. NYS Speed Test data points
 - b. FCC Speed Test records
 - c. NYS Broadband Map feedback
4. Use of government data sources
 - a. FCC Aggregated 477 Data
 - b. NYS DMV data
 - c. NYS Lottery terminal data
 - d. NYS Streets and Address ranges
 - e. NYS Address Points
 - f. NYS Orthoimagery
 - g. NYS Public Service Commission Cable Franchise Agreements data
5. Commercial data sources
 - a. TomTom Data ILEC, CLEC and Rate Center Exchange Boundary data
 - b. Online look up tools for middle mile & central office locations
 - c. NAVTEQ address points
 - d. Pictometry oblique aerial imagery/Google's Street View
 - e. APNIC Whois database (publicly available IP Address search engine)
6. Select Community Anchor Institution (CAI) locations
7. Provider verification maps
8. Clip wireless data to NYS Boundary
9. Removal of 'uninhabited areas'
10. Other Grantee State Broadband Maps and National Broadband Map
11. Broadband Organizations: NYSTA, CTANY, WISPA

For details concerning these verification activities, please refer to the Q1 2012 Supplemental Answers Document.

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

Please see 10.f. for details regarding additional planned verification activities.

Staffing

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

11.64

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

As reported last quarter, lack of full staffing has negatively impacted many aspects of the overall NYS SBI project, but most notably the Broadband Capacity Building project. Funds for that project are budgeted primarily to pay for two new employees to staff the NYS Broadband Program Office (see Q1_2012_Supplemental_Answers_Document.docx, Page 8 for more details about this project). Significant progress was made during this reporting period. A hiring waiver was granted for the Outreach Coordinator position. The candidate was selected and is transitioning from another state government position. She is expected to be fully dedicated to the Broadband Capacity Building project by May 15, 2012. The Program Office Director now plans to contract in order to fill the Project Manager position. Recruitment for that position will begin in Q2 2012 with the expectation that the project will be fully staffed by June 30, 2012.

The Broadband Mapping and the Technical Assistance projects have now been fully staffed for more than a full reporting period and are no longer negatively impacted by staffing issues. The only outstanding hiring planned for is within the Address Point File project. The in-house hiring associated with that project was completed in January of 2012 but a large percentage of the work necessary to complete the file "build" is to be completed by a vendor. Our Address Point File team is currently working on a Request for Proposals (RFP) needed to competitively identify and contract with a qualified vendor. That RFP is scheduled to be released during August of 2012. The timing of the selection and contracting processes are estimated to result in a signed contract in November of 2012. The RFP and contract will clearly identify the need for all work to be completed by September 30, 2014.

Please refer to the Q1 2012 Supplemental Answers Document for additional details.

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

18

10n. Staffing Table

Job Title	FTE %	Date of Hire
Project Director	100	10/26/2009
Mapping Technologist 1	100	12/24/2009
Mapping Technologist 1	100	08/04/2011
Information Technology Specialist 2 - GIS	100	05/25/2010
Information Technology Specialist 2 - Business Analyst	100	02/22/2010
Information Technology Specialist 2 - Infrastructure	7	03/04/2010
Information Technology Specialist 2 - Applications Programming	51	03/04/2010
Mapping Technician 3	100	06/27/2011
Student Assistant	84	10/07/2010
Grants Administrator	41	10/13/2011
Senior GIS Technical Manager	83	01/17/2012
Information Technology Specialist 3	48	02/07/2008
Project Administrator - Digital Literacy Project (contracted)	40	03/12/2012
Project Assistant - Digital Literacy Project (contracted)	60	08/17/2011

Special Projects Coordinator / Instructor - Digital Literacy Project (contracted)	100	09/15/2010
Digital Literacy Curriculum Developer (contracted)	25	10/01/2011
Digital Literacy Project Website Developer (contracted)	25	10/01/2011

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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
Subcontract 1 - MVP Consulting Plus, Inc	GIS Analyst - To provide short-term assistance with GIS data processing and data validation in preparation for the 3/31/2010 initial data delivery and related follow-up activities.	Y	Y	02/17/2010	08/17/2010	49,887	0
Subcontract 2 - Troy Web Consulting, LLC	Application Programmer to develop a project tracking application and other web-based project resources.	Y	Y	01/14/2010	01/13/2011	49,500	0
Subcontract 3 - Computer Technology Services of Albany, Inc	Project Manager responsible for refinement and maintenance of the project plan; development of federal and state status reports; management of subcontracts and tracking of procurements, etc.	Y	Y	03/25/2010	09/25/2011	248,625	0
Subcontract 4 - Center for Technology in Government	Speed Test Web Site - Public outreach and sampling services. Deliverables will include provider, technology and speed data independently sampled.	N	N	07/01/2010	06/01/2014	183,873	0
Subcontract 6 - Center for Technology in Government - State University of New York at Albany	The purpose of this project is to produce the New York State Broadband Adoption Study. The project involves conducting a public survey and developing a report regarding factors affecting the adoption of broadband internet services in New York State.	N	N	11/23/2010	05/31/2011	150,000	0
Subcontract 7 - New York Library Association	The purpose of this subcontract is to conduct the Digital Literacy Project. The New York Library Association will conduct 48 workshops throughout New York State to train 755 librarians to perform Digital Literacy Training.	N	Y	08/01/2011	09/30/2014	791,687	406,057

Subcontract 8 - Center for Technology in Government - State University of New York at Albany NOT YET EXECUTED (as of 03/30/2012)	The purpose of this project is to redesign the Broadband Speed Test Web site and related outreach strategy to attract NYS residents to the NYS Broadband Map site as well as the redesigned NYS Speed Test site.	N	N			0	0
Subcontract 10 - Center for Technology in Government - State University of New York at Albany	The purpose of this project is to add outreach services and development of data collection tools for the collection of broadband service levels available at Community Anchor Institutions.	N	N	04/15/2011	09/30/2014	206,618	0
Subcontract 12 - TBD	These are plug figures. We have yet to release all of our subcontracts. This row exists so that the totals of all subcontracts equal the budgeted amounts for subcontracts.	N	N	10/01/2011	09/30/2014	341,239	299,812

Add Row

Remove Row

Funding

10p. How much Federal funding has been expended as of the end of the last quarter? \$1,715,103 10q. How much Remains? \$7,208,429

10r. How much matching funds have been expended as of the end of last quarter? \$785,441 10s. How much Remains? \$1,444,956

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	\$3,833,658	\$950,052	\$4,783,710	\$688,781	\$191,391	\$880,172
Personnel Fringe Benefits	\$1,894,770	\$381,859	\$2,276,629	\$159,759	\$100,852	\$260,611
Travel	\$140,818	\$7,206	\$148,024	\$9,340	\$0	\$9,340
Equipment	\$551,242	\$184,211	\$735,453	\$33,876	\$0	\$33,876
Materials / Supplies	\$45,015	\$1,200	\$46,215	\$252	\$0	\$252
Subcontracts Total	\$2,058,029	\$705,869	\$2,763,898	\$823,095	\$493,198	\$1,316,293
Subcontract #1	\$49,887	\$0	\$49,887	\$24,012	\$0	\$24,012
Subcontract #2	\$49,500	\$0	\$49,500	\$41,195	\$0	\$41,195
Subcontract #3	\$248,625	\$0	\$248,625	\$231,200	\$0	\$231,200
Subcontract #4	\$183,873	\$0	\$183,873	\$158,393	\$0	\$158,393
Subcontract #5	\$1,526,144	\$705,869	\$2,232,013	\$368,295	\$493,198	\$861,493
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$400,000	\$0	\$400,000	\$0	\$0	\$0
Total Direct Costs	\$8,923,532	\$2,230,397	\$11,153,929	\$1,715,103	\$785,441	\$2,500,544
Total Indirect Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$8,923,532	\$2,230,397	\$11,153,929	\$1,715,103	\$785,441	\$2,500,544

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
% Of Total	80	20	100	69	31	100

Hardware / Software

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

10v. If yes, please list

Software and hardware purchases have been made in prior quarters (the last on June 20, 2011) but there were no new software and hardware purchases this reporting period.

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

The most notable software and hardware purchases not yet made are for the Address File Development project. There will be a public-facing application developed for the creation and maintenance of address point data. Requirements are currently being developed for that application. Hardware and software will be specified after those requirements are complete. Additionally, there will be future software and data license renewal costs and the potential for miscellaneous "utility" software purchases to support day to day operations.

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

10y. If yes, please list

There have been data purchases made in prior quarters but there were no new data purchases this reporting period.

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

10aa. If yes, please list

NYS will use the answer to question 10z to report on progress of additional projects funded under the amended award as measured against the Project Budget, Milestones and Dependent Activities, and Time-line document submitted in response to SAC 15 of our supplemental grant award.

Please see item 10aa in Q1 2012 Supplemental Answers Document.

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

During this reporting period many of the past obstacles have been overcome, and we were able to put more focus on policy implications of the data. New developments in the state have re-energized our state broadband office, and they have been requesting policy-oriented data and maps from us. We are very excited to help support broadband policy in the state with the data we have developed under this grant, but were disappointed when we tried to apply our data to some of the questions. We found that the census block resolution was not granular enough to support policy decisions in some cases. For example, our "no coverage" polygons are just too small. This is for a combination of reasons, mainly an over-reporting bias in our provider data, and the census block granularity of all or nothing coverage. In order to mitigate this we are evaluating a number of actions. We may use the improved address point data from our Address Point File project to equate the no coverage polygon to the housing unit level. Then we may use a variety of means to push back the boundaries based on better data. We have plans to work with the NYS Public Service Commission to direct their field surveys to these areas on the boundaries of the no coverage polygons to see how far broadband coverage really goes. We may use pictometry and Google streetview to examine the poles on the boundaries to see if they have broadband internet plant attached. We will publicize our new "Report an Unserved Address" functionality on our state broadband map site to crowdsource housing unit level data. We anticipate that we will be able to use other innovative means to derive an improved unserved area polygon map.

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

On the PPR Budget Worksheet Attachment, Subcontract 6 is overdrawn on the contract amount, due to a duplicate drawdown. This overdraw is in the process of being returned. In addition, Subcontract 8 is not yet executed, and thus the contract amount has been removed and placed in the Subcontract 12 line, which contains only plug figures used to balance budgeted amounts for the subcontracts.

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

As reported in the Q3 2011 PPR, all remaining planning activities were reassigned to the Broadband Mapping and Broadband Capacity Building projects. The progress for those activities was reported on through our status updates for Broadband Mapping and Broadband Capacity Building elsewhere within this PPR.

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

As reported in the Q3 2011 PPR, all remaining planning activities were reassigned to the Broadband Mapping and Broadband Capacity Building projects. The respective challenges associated with those activities were reported on through our status updates for Broadband Mapping and Broadband Capacity Building elsewhere within this PPR.

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

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?

No.

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

As reported in the Q3 2011 PPR, all remaining planning activities were reassigned to the Broadband Mapping and Broadband Capacity Building projects. The respective challenges associated with those activities were reported on through our status updates for Broadband Mapping and Broadband Capacity Building elsewhere within this PPR.

11l. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

All pertinent status information has been provided elsewhere in this PPR.

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

Michael Heath

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

12d. Email Address

mheath@dhses.ny.gov

12b. Signature of Authorized Certifying Official

Submitted Electronically

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

06-06-2012