U.S. DEPARTMENT OF COMMERCE **Performance Progress Report**	**2. Award Or Grant Number** 36-50-M09010 **4. Report Date (MM/DD/YYYY)** 10-07-2011

1. Recipient Name
NY State Office of Cyber Security & Critical Infrastructure

6. Designated Entity On Behalf Of:
New York State

3. Street Address
30 South Pearl Street, P-2,

5. City, State, Zip Code
Albany, NY 12207

8. Final Report?
○ Yes
◉ No

9. Report Frequency
◉ Quarterly
○ Semi Annual
○ Annual
○ Final

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	09-30-2011	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
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

On October 1, the New York State Broadband Team delivered its fourth round of provider data to the NTIA. Round 4 included data from 100% of known facilities-based (wireline) end user providers and all significant wireless service providers in NYS. Nevertheless, there continue to be challenges, most involving resellers and small fixed wireless companies. Four companies that had not participated in the past indicated they would but failed to follow through. Eight companies were non-responsive. Three declined to participate.

For more details, please refer to the Q3 Supplemental Answers Document.

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. 6911 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

Many verification plans have already been implemented; see 10 e. and 10h. Future verification activities planned at this time include the following:

Use of aggregated 477 data: Compare aggregated 477 data to availability data reported by providers to NYS Broadband Team; look for anomalies; contact providers to reconcile differences – Due Date: Data obtained from FCC on October 24, 2011. Work will be conducted on Q4 2011

NYS Lottery terminal locations: There are multiple thousands of lottery terminals (for ticket sales) located throughout NYS. We believe a broadband connection is needed for each to operate. If this is confirmed, we will geocode the locations and use them to verify served and un-served areas as determined by provider reported availability – Due Date: Q4 2011 or Q1 2012.

"Dead Zone" reports: We plan to enhance our State Map to allow pubic reporting of un-served areas. We plan to use this data to verify served and un-served areas as determined by provider reported availability – Due Date: State Map functionality to be added in Q4 2011; validation to begin in Q1 2012.

In-field wireless service verification: We are considering contracting for field verification of wireless service boundaries. – Due Date:

Work to potentially be conducted in 2012.

SBI Program Office identified unexpected values: In October 2011, the SBI Program Office provided information about unexpected max advertised speed values in our Oct 1 deliverable that were valid per the geodatabase domain parameters but were outliers and very unlikely to be valid. We will check for these values during Round 5 data collection and check for other unexpected values if a list or script can be provided by the SBI Program Office. – Due Date: Q1 2012.

10g. Have you initiated verification activities? ⦿Yes ◯No

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

The New York State Broadband Team used many automated and non-automated methods to verify the data received from providers:

Data transfer model business rules: Adhere to rules – Status: Active and successful

NTIA supplied Python scripts: Run scripts, correct errors, re-run scripts – Status: Active and successful

ESRI spatial validation tools: Use 'Check Geometry' and 'Fix Geometry' tools – Status: Active and successful

Provider Website Research: Validate provider reported data by checking their websites – Status: Active and successful

Crowd-sourced data: Use of NYS and FCC speed test data – Status: Active and successful

Publicly available data: Use newly identified data sources for verification– Status: Active and successful

Duplicate records check: Check for duplicate records in geodatabase – Status: Active and successful

Provider feedback verification: Send maps to providers to verify availability changes – Status: Active and successful

Verizon NY data scrubbing: Correct verified errors in Verizon wire-line reported availability – Status: Active and successful

Census block area check: Check the area designation of all census blocks loaded in the geodatabase to insure correct designation of ≤2mi2 and >2mi2 – Status: Active and successful

State boundary clip: Clipping of all data to the NYS boundary file – Status: Active and successful

For more details, please refer to the Q3 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?

8.33

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

The activities approved in our supplemental award includes acquiring additional staff for the creation of a statewide address point file, and to a lesser extent, to assist with the implementation of NTIA recommended leading practices. During the second quarter of 2011, the Office of Cyber Security went to considerable effort toward creating and obtaining approval additional Broadband Mapping Project Team positions. The New York State hiring process is detailed and time consuming. The Q3 status of each position is listed below.
• Information Technologist 5 (Pending but doubtful)
• Information Technologist 2 (Complete, position filled in early July, Q3)
• Mapping Technologist 1 (Complete, position filled in early August, Q3)
• Mapping Technician 3 (Complete, position filled in mid-June)

During the middle of the 4th quarter of 2011, the Project Manager contract will end and this position will also be eliminated.

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

8.33

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	67	8/4/2011
Information Technology Specialist 2 - GIS	100	5/25/2010
Information Technology Specialist 2 - Business Analyst	100	2/22/2010
Information Technology Specialist 2 - Infrastructure	34	3/4/2010
Information Technology Specialist 2 - Applications Programming	55	3/4/2010
Mapping Technician 3	100	6/27/2011
Student Assistant	93	10/7/2010
Project Manager - Subcontract	84	04/05/2010

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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
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	2/17/2010	8/17/2010	24,012	0
Subcontract 2 - Troy Web Consulting, LLC	Application Programmer to develop a project tracking application and other web-based project resources.	Y	Y	1/14/2010	1/13/2011	41,195	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; security reviews, etc.	Y	Y	3/25/2010	9/25/2011	193,843	0
Subcontract 4 - The Center for Technology in Government. See comment in 10cc for reason why there was no RFP.	Speed Test Web Site - Public outreach and sampling services. Deliverables will include provider, technology and speed data independently sampled.	N	N	7/1/2010	6/1/2014	135,616	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. This project was approved in our original award. The project involves conducting a public survey and developing a report regarding factors affecting the adoption of br | N | N | 11/23/2010 | 05/31/2011 | 0 | 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 | N | 08/01/2011 | 09/30/2014 | 0 | 0 |

Add Row	Remove Row

Funding

10p. How much Federal funding has been expended as of the end of the last quarter? $983,948

10q. How much Remains? $7,939,584

10r. How much matching funds have been expended as of the end of last quarter? $657,793

10s. How much Remains? $1,572,604

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	$462,727	$183,032	$645,759
Personnel Fringe Benefits	$1,894,770	$381,859	$2,276,629	$94,071	$96,543	$190,614
Travel	$140,818	$7,206	$148,024	$7,906	$0	$7,906
Equipment	$551,242	$184,211	$735,453	$24,482	$378,218	$402,700
Materials / Supplies	$45,015	$1,200	$46,215	$96	$0	$96
Subcontracts Total	$2,058,029	$705,869	$2,763,898	$394,666	$0	$394,666
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	$193,843	$0	$193,843
Subcontract #4	$183,873	$0	$183,873	$135,616	$0	$135,616
Subcontract #5	$1,393,043	$705,869	$2,098,912	$0	$0	$0
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	$983,948	$657,793	$1,641,741
Total Indirect Costs	$0	$0	$0	$0	$0	$0
Total Costs	$8,923,532	$2,230,397	$11,153,929	$983,948	$657,793	$1,641,741
% Of Total	80	20	100	60	40	100

Hardware / Software

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

10v. If yes, please list

The following were purchased in previous quarters. We had previously reported that all of the items below were purchased with The following were purchased in previous quarters. We had previously reported that all of the items below were purchased with Federal funds. We have since found that reimbursement to the State of New York was not submitted for most items and our financial rules do not permit requesting Federal reimbursement for items purchased more than one State fiscal year previous. Therefore, we plan to request an adjustment to the match calculation in the near future:

Items Purchased with Federal Funds ($19,035):
• Melisa Data License Renewal Mailers +4 - $2,335
• 7 desktop computers - $4,641
• ESRI ArcGIS Data Interoperability Concurrent Use - License Extension - $2,040.
• Oracle basic edition - $1,940.
• SecureFX - $231.
• 3 desktop computers - $7,848

Items purchased with New York State Funds ($176,754):
• Local storage disks - $2,032
• 1 tape drive & data tapes - $7,792
• Melissa Data data quality software tools - $14,800
• Pervasive extract/transform/load software - $51,627
• Oracle database software - 1 enterprise version - $42,597
• Oracle database software - 1 basic version - $1,940
• 1 web application server - $9,558
• 1 database server - $9,558
• Network switches - $20,866
• 1 network firewall - $13,936
• TOAD database development and administration software - $829
• ColdFusion application development software – $838.05
• Dreamweaver web design and development software –$380.54

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

The software and hardware described in our grant application (and above) has been purchased. However, the NYS Broadband Mapping Project team anticipates and has budgeted for additional expenditures during the life of the program to upgrade, maintain and replace computing equipment; for software maintenance; and for software and data license renewals.

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

10y. If yes, please list
The following data sets were purchased in previous quarters:

Data Set Name: Melissa Data Product Suite – Associated Cost: $14,800.

Data Set Name: NAVTEQ Streets and Address Update and Data License – Associated Cost: $678,008, of which $339,004 is attributed to New York State's In-Kind Match.

Data Set Name: TomTom (formerly Tele Atlas) Wire Center Premium Data License – Associated Cost: $4,950.

For more details, please refer to the Q3 Supplemental Answers Document.

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

10aa. If yes, please list
On September 28, 2010, the New York State Office of Cyber Security was awarded supplemental funding by the NTIA to support years 3 through 5 of the project. This expands the scope of the project and therefore additional milestones have been planned. A detailed project plan was submitted to the NTIA in February 2011 which describes all major milestones. Revisions requested by the NTIA were resubmitted beginning in June 2011, and were approved by both the NTIA and NIST in July 2011.

For more details, please refer to the Q3 Supplemental Answers Document.

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing
In addition to challenges described in 10aa above…

Collection of Community Anchor Institution (CAI) information: This has proven to be more difficult than anticipated. Mitigation Strategy: We amended our Memorandum of Understanding with CTG to expand their outreach and data collection activities to include broadband service attributes for schools, libraries, colleges/ universities, medical /healthcare facilities and municipal. CTG successfully used their outreach network to bring the State Education Department (which governs schools, colleges/universities and libraries) to the table and agree to begin a joint broadband data collection effort once per year. This will consolidate three separate survey efforts that collected basically the same information and should result in a very high rate of participation within these sectors of CAIs. This first joint collection is scheduled for October 2011. CTG will also focus on municipal halls and medical/healthcare institutions for the next submission, OCS will focus on the public safety sector. While it took a great deal of time to get this far, this is a significant step in the right direction for this area of focus with collateral benefits for the State Education Department as well as the individual institutions that must complete state surveys.

Collection of middle mile data: Obtaining this information from providers has continued to be difficult. Mitigation Strategy: In a July 13, 2011 informational webinar conducted for NYS broadband service providers, OCS' Broadband Mapping Team emphasized the need for New York to do better in this area of the national broadband mapping program. The Broadband Mapping Team re-emphasized this point during Round 4 data collection outreach activities. Improvement was realized but moderate. NY would like input from SBI Program Office regarding successful collection strategies employ by other grantees and/or the future intended use of this data by the SBI Program Office.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project
In the Subcontracts Table, above, (10.0.), the columns for "RFP Issued", and "Subcontract Executed" for CTG were entered as "N", because CTG is a New York State governmental entity, and therefore, no RFP and no contract are needed. CTG and the Office of Cyber Security are cooperating under the terms of a Memorandum of Understanding.

Also in the Subcontracts Table, the column for "RFP Issued" for NYLA is "N", because we received a single source exemption from the New York State Office of the State Comptroller to engage the New York Library Association to conduct the Technical Assistance – Digital Literacy Project.

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
Broadband Adoption Rate Study: Survey of over 3000 NYS residents which identified their reasons for not adopting broadband available to them at their home - Due Date: Q2 2011. Status: Complete. "The Broadband Internet Service Adoption and Use in New York State Households" study was presented to the New York State Broadband Development and Deployment Council at the May 10 Council meeting. The study's report and data are available for download from our State Broadband website.

Mapping/GIS Activities Required under New York State Executive Order #22: Development of assorted mapping and statistical data products - Due Date: Annually and upon request from the State Broadband Program Office - Status: No new activities this quarter. Changes to the membership and direction of the Council are anticipated. The Broadband Program Office has requested only minor support during this reporting period.

Broadband Stimulus Program Office Operations Support – Support of any kind requested by the Program Office. Due Date: Upon request - Status: We provided detailed broadband related data (summarized at the regional, county and municipal levels) to our state Department of Economic Development in support of our Governor's high profile New York is "Open for Business" regional economic development initiative. We also provided statistics and maps in support of the Program Office director's presentation at Congressman Gibson's Rural Broadband Symposium held at the Queensbury NY high school on 9/29/2011.

Analysis of Business Needs via an Industrial-Level Internet Connectivity: An initiative proposed by the NYS Broadband Development and Deployment Council in 2009. Due Date: There is no specific due date at this time but this objective has been transferred to the State Broadband Development and Deployment Program Office as part of the realignment of original $500,000 planning funds. – Status: This activity has not yet started.

11b. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing
Transitional state of the NYS Broadband Development and Deployment Council: As mentioned above, changes to the membership and direction of the Council are anticipated, but not yet defined. As a result, no new initiatives are being undertaken. Mitigation Strategy: The Council and the NYS Broadband Program Office proactively provided recommendations to the Governor's office. Our Broadband Mapping Team contributed to those recommendations and will continue to provide any support needed.

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
The following projects were funded by the Initial Award under the Planning category. They have now been incorporated within the Broadband Mapping Project. Additional funding for years 3 through 5 was approved for Broadband Mapping as part of the Supplemental Award in the amount of $2,506,894. The combined total is now $2,809,369.

• Mapping/GIS Activities Required under NYS Executive Order #22: Mapping activities to support the NYS Broadband Development and Deployment Council. The amount budgeted is $152,475.

• Broadband Adoption Rate Study: A study of availability of factors affecting decisions by households and individuals to subscribe to broadband services. The cost of this project is $150,000.

The following projects were funded by the Initial Award under the Planning category. They have now been incorporated within the Capacity Building Project, which was approved as part of the Supplemental Award. The value of the Capacity Building Project is $1,083,274. The combined total is now $1,281,612.
• Broadband Stimulus Program Office Operations: The Program Office is partially staffed and is conducting the day-to-day business of the New York State Broadband Council. The amount budgeted for this activity is $140,025.

• Analysis of Business Needs for Industrial-Level Internet Connectivity: This activity will be substantially accomplished through a business leader summit or a series of meetings with the New York State Business Council, National Federation of Independent Business, New York State Retail Council, and other industry sectors such as the movie and financial services industry to allow New York State to create a Connectivity Roadmap for the next ten years. The amount budgeted for this activity is $57,500.

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

No new activity since Q1 2011

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

While NY has performed extremely well in seeking to meet all of the goals identified in our original grant proposal, we have drawn down less than 50% of its original award. This slow draw down rated is due primarily to the following factors:

1. Our plan has always been to "in-source" most of the work, and this strategy hinges upon our ability to hire staff under the grant to perform the work in-house. We currently have a very challenging environment for establishing and filling new state positions, even when they are grant-funded. Over the past year the hardly any new positions have been approved due to budget issues and a stalemate with labor unions over new contacts with threatened layoffs. As a result, our project team continues to be under-resourced with corresponding levels of spending for staff. Nearly all of the issues detailed elsewhere in this report have as their root cause an inadequate level of staffing resources to successfully undertake all of these activities. We expect to have additional staffing approvals shortly, and if not, we will shift towards use of contracted resources.

2. Significant hardware and software purchases made in NYS fiscal year '09-'10 that were incorrectly charged against NYS general operating funds. Because the mistake was not discovered until the '10-'11 fiscal year, we are unable to correct this mistake. We plan to request that the SBI Program Office and NIST approve the addition of these expenditures as part of revised 20% match formula.

3. Significant personnel costs were incorrectly charged against NYS general operating funds. We are currently working to identify the full extent of this mistake and where possible (occurred in current fiscal year), we will act to correct the mistake. We plan to request that the SBI Program Office and NIST approve the addition of any uncorrectable mistaken expenditures as part of revised 20% match formula.

Also see Supplemental Answers Document.

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 Carl Schell	12c. Telephone (area code, number, and extension)
	12d. Email Address carl.schell@cscic.state.ny.us
12b. Signature of Authorized Certifying Official Submitted Electronically	12e. Date Report Submitted (Month, Day, Year) 11-16-2011